

Assessing Pupils' Progress

Putting the learner at the heart of assessment



The latest APP information and in-class case studies

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SecEd

Getting started with APP

Introducing this supplement, **Dr Sue Horner** offers some advice for those starting out on the road to APP

Many teachers and curriculum leaders are taking a fresh look at assessment by planning and implementing the use of the Assessing Pupils' Progress (APP) approach and materials – currently available for reading, writing and mathematics, with other subjects on the way.

The Qualifications and Curriculum Authority's (QCA) pilots have found that over time, using APP has developed teachers' confidence and expertise in assessment by providing a common framework for sharing and discussing the evidence they have of learners' progress.

However, for those who may be considering using APP for the first time, we recognise that being faced with a new way of thinking about assessment can be daunting, so here are some easy ways to familiarise yourself with the ideas and principles underpinning APP.

Assessment focuses (AFs)

The APP approach gives detailed information about how pupils are achieving by providing success criteria for the assessment focuses across each level.

APP will help you to generate evidence of learning for each AF. To get a feel for this, try the following:

- Have the AFs in your head over the next few weeks as you are teaching.
- Afterwards reflect on your own or with colleagues about how well they are represented in your teaching, and

Mick Waters focuses on why good assessment is vital to effective teaching and learning

The Qualifications and Curriculum Authority (QCA) seeks to develop a modern world-class curriculum and assessment that will inspire and challenge all learners and prepare them for the future.

Assessment is at the heart of an effective curriculum and is a fundamental part of good teaching and learning.

Assessment enables learners to recognise achievement and make progress, and teachers to shape and adapt their teaching to individual needs and aspirations.

This supplement will help provide secondary school leaders with an idea of the opportunities to develop really effective



whether the progression outlined in the assessment guidelines for a particular AF mirrored what you saw.

Assessment guidelines

The assessment guideline sheets are a simple recording format used periodically to review evidence of pupils' achievement. To get used to how they work, you could have one of the guideline sheets covering two levels with you as you are teaching and keep an eye open in class for evidence of those levels in what pupils say and do.

The best assessment draws on a wide range of evidence, so using the assessment guidelines in this way can help you to become more aware of the wealth of assessment evidence that emerges from learning while it happens.

Standards

While APP provides you with a range of diagnostic information to support Assessment for Learning, it will also help you to make

assessment to support high quality teaching and learning.

The schools highlighted in this supplement are already using the APP tools effectively and provide a flavour of the new opportunities to develop effective practice.

APP is just one aspect of the transformation to personalised learning being led by the Department for Children, Schools and Families through the Assessment for Learning strategy.

The introduction of the programmes of study over the next two years provides a real opportunity for a fundamental review of schools' teaching, learning and assessment practice.

What your school does is very much for you to decide, but you have a responsibility to support every child in reaching their potential.

All over the country there are examples of schools that are ensuring the best life chances for the young people they teach through the learning they offer.

Let's acknowledge them and learn from

reliable periodic judgements about how pupils are doing related to national standards. To get a feel for where you are now with the assessment judgements, you could:

- Meet with another teacher to share examples of one or two pupils and discuss why you think they are working at that particular level.
- Look at the guidelines and see how they help to clarify the expectations.
- Refer to the standards files to help you get a clear sense of what achievement looks like, and to support you and your colleagues in reaching consistent judgements about national curriculum levels.

When you have tried some of these ideas and feel you are ready to start using APP more systematically, you will need to think about the best way to introduce it in your classroom or department.

For APP to be effective it must be manageable, so many teachers have found the best way to begin is to start small and gradually grow it over time.

This will give you detailed diagnostic information on the pupils selected, but will also allow you to generalise about other pupils who are working at a similar level or have comparable characteristics.

While APP is not a quick fix, over time the investment you make will have a significant impact on pupil progress, make the assessment process much more transparent for pupils and parents, and put the learner at the heart of assessment.

• *Dr Sue Horner is head of curriculum standards and assessment policy with the QCA.*

Further information

www.qca.org.uk/assessment



each other. Thanks for all that you do to bring learning alive.

• *Mick Waters is director of curriculum with the QCA.*

Assessment can be broken down into three aspects – day-to-day, periodic review, and transitional

APP is founded on the notion of supporting teachers to make evidence-based, periodic assessments of how children are doing at school – without simply relying on testing.

As Stephen Anwyll, programme manager of the Qualifications and Curriculum Authority's (QCA) Curriculum Division, puts it: "We are saying to teachers, 'you teach these children, you know them well, and you have a lot of evidence available to you. How can we help you to make sense of it – without you having to collect great warehouses full of evidence?'"

After talking to a wide range of teachers and heads up and down the country, the QCA has devised and is using a presentation, inspired by Leonardo Da Vinci's celebrated portrait of Mona Lisa, to highlight the three key aspects of assessment – day-to-day, periodic, and transitional – which is being used by a growing number of teachers.

Aspects of assessment

The first Mona Lisa image shows a "close-up" section of the canvas, signifying the day-to-day interaction that takes place between teachers and learners on a particular topic or piece of work.

"Here you are looking at the detailed brushwork," explained Mr Anwyll.

"These are the interactions, conversations and observations teachers make on a day-to-day basis to reflect on learning as it is happening and to help move children on to the next step."

The second image shows the whole portrait, when you stand back, review the evidence, and realise that the little bit of canvas you were looking at is part of the broader picture.

"If, as a teacher, you have been working on a particular aspect of mathematics, you have got a sense of whether pupils have got hold of it, but when you stand back you can see how they are able to apply this knowledge in the context of the whole subject."

The third image shows the public viewing it – they stand much further back and view the portrait collectively.

"This represents the point where teachers make public their judgement," said Mr Anwyll. "It might typically be at the end of a year, to parents or carers at a parents' evening, or when children are moving on to another class or school."

These three distinctive views equate to day-to-day assessment in the classroom, periodic assessment, and transitional assessment.

"We have worked closely with the Primary and Secondary National Strategies, and this terminology is beginning to be widely used," Mr Anwyll added.

There is no doubt that day-to-day assessment and transitional

assessment are already well established in most schools, but up until the introduction of APP, the concept of periodic assessment has been less well developed.

Periodic assessment gives teachers and students a far broader view of progress. By encouraging teachers to review the evidence they have gathered, they can determine how well pupils are doing as a whole, see where there are gaps in students' learning, and also gain insights which directly inform future planning, teaching, and learning during the academic year.

"Periodic assessment is the point where you draw on all the day-to-day accumulated knowledge to get a broader view of pupils' progress," said Mr Anwyll. "It uses national standards so it gives comparable information and, very importantly, it can lead to improvements to teachers' curriculum planning."

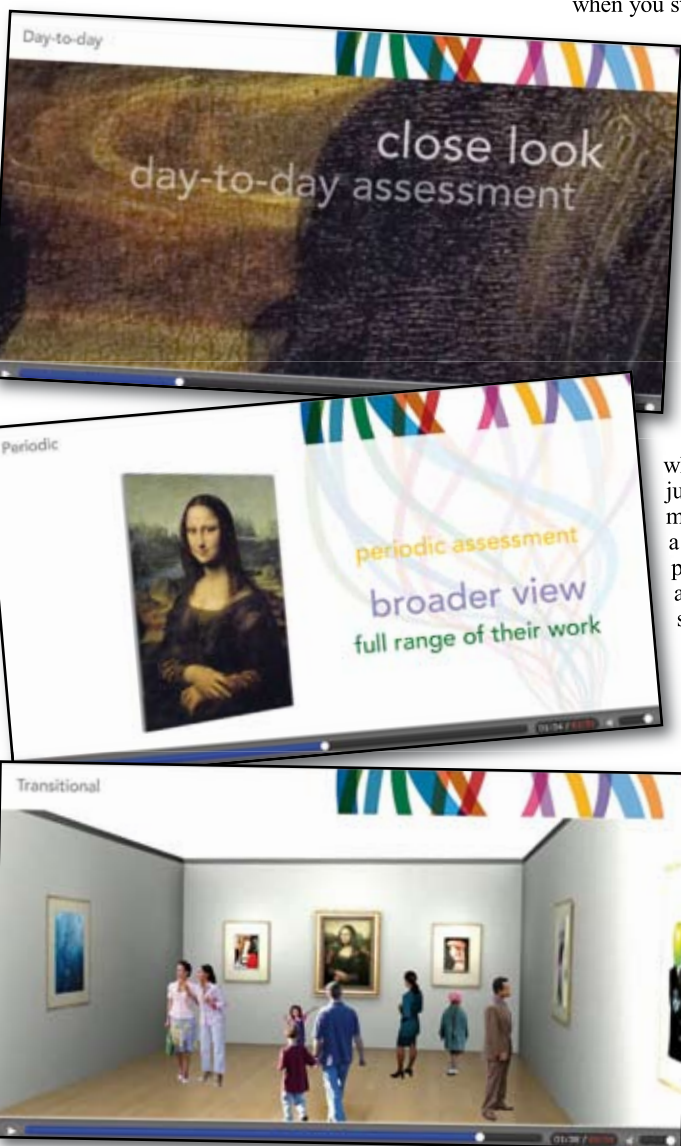
Periodic assessment, however, does not require teachers to stop what they are doing in the classroom and devise completely different assessment activities.

"By teaching a broad curriculum, teachers get lots of evidence about how well children are doing and don't need to do separate assessment activities," Mr Anwyll explained.

"The fact that you can assess pupils based on the evidence you have got, rather than needing to do something else or simply rely on tests is a key mindset shift for many teachers," he added.

"The key thing is not to get swamped – but periodically to say 'let me review what I know and what I have seen and heard', then make broad judgements on how children have moved on and progressed.

"In this way teachers get a fuller picture of pupils' strengths and weaknesses, gain insights into how to improve, and help to raise attainment."



Model assessment: The Mona Lisa model of assessment. Day-to-day or close look (top), the periodical or broader view (middle), and the transitional or public view

Supplement contents

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We look at how APP will be standardised, both between teachers in the same school, and between schools

As more and more schools introduce APP, new structures are being proposed and considered to ensure that standards are kept consistent throughout the country.

When schools secretary Ed Balls announced an end to compulsory national tests for 14-year-olds in October 2008, he set up an expert group to advise on a wide range of assessment issues, including how best to support teachers in tracking pupils' progress without adding unnecessarily to their workload.

Schools have asked what sort of evidence they need to generate and how to ensure standardisation. That is why the Qualifications

and Curriculum Authority (QCA) has worked with the National Strategies and the Department for Children, Schools and Families to pilot a range of new APP materials for schools. These are now being launched nationally across key stage 3 subjects.

The main element of the APP materials is the assessment guidelines (criteria for making periodic judgements grouped by assessment focus). There are other helpful materials available, including the new APP handbook and standards files.

Gathering evidence for APP, as set out by the QCA, is a straightforward process. Teachers first identify pupils and after a suitable period, perhaps once a term, review the full range of written, spoken and observed evidence for each assessment focus.

They then select the appropriate level boundary and, using the assessment guidelines sheet, work out their judgements for each pupil. The assessment guidelines enable teachers to see a pupil's "profile of attainment"

and progress within a particular level. They also help when discussing improvement targets with pupils and their parents or carers.

Using annotated examples of pupils' work (standards files) as reference points and benchmarks, teachers undertake regular moderation with colleagues, both within their department, with senior managers, and beyond their school.

They are then able to ensure that there is consistency between different teachers and schools, as well as robustness and credibility.

Local authorities are also playing a key role in supporting collaboration between schools, both primary and secondary, using APP.

Stephen Anwyll, programme manager of the QCA's Curriculum Division, explained: "All our experience is that teachers find meeting to compare their judgements, moderate, and standardise enormously helpful professionally.

"These nationally-agreed standards files and criteria give teachers opportunities to build a much more reliable form of assessment, and one that is far more likely to provide benefits for teaching and learning, build professional skills, and make a real difference to teachers' pedagogy."

Naomi Hursthouse, key stage 3 English team leader at Bishop Luffa School in Chichester, took part in the QCA's APP moderation pilot. After undergoing QCA training, Ms Hursthouse helped to get the pilot underway at county level. She and teachers from other West Sussex schools attended a series of meetings to moderate sample assessment folders and make sure that teachers were marking to the same standard.

The nine full-time English teachers at Bishop Luffa all now use APP in the classroom for assessment at key stage 3 and meet once a term to discuss standards. They look at two folders of pupils' work each time, one for reading and the other for writing, and review the range of evidence for each assessment focus.

"We find it very helpful for our professional development, as well as checking our marking standards," said Ms Hursthouse. "We are using the assessment focuses in our lessons everyday and they have helped us to be very reflective in our task-setting."

to make AfL learning "more widespread, systematic and consistent".

The DCSF wants to ensure that children get the support they need to be motivated, independent learners, and that teachers are equipped to make well-founded judgements about pupils' attainment.

Not only that, it is determined that in future, all schools should have structured and systematic assessment systems in place so teachers can make "regular, useful, manageable and accurate" assessments of their pupils, as well as be able to track their progress. The government also want parents and carers to know how their children are doing, what they need to improve, and how they can support youngsters and their teachers.

The latest AfL e-bulletin can be found at <http://nationalstrategies.standards.dcsf.gov.uk/assessment/ebulletin>

The government has invested £150 million to support assessment CPD

The government is clear that it makes a real difference when pupils and teachers have "a really good understanding" of where youngsters are in their learning and where they need to progress to next.

With this in mind, the Department for Children, Schools and Families (DCSF) has invested £150 million over three years (2008/2011) to support CPD for teachers in Assessment for Learning (AfL) and to extend good practice. It believes that AfL is a powerful way to raise pupils' achievement.

Chief advisor on school standards, Sue

Hackman, said: "We know that schools which have robust tracking systems in place achieve the best rates of progress and are well placed to help pupils when they fall off trajectory.

"These schools know where their pupils are, where they need to be, and how to get there. They have taken steps to personalise the learning of their pupils and are realising the benefits."

The AfL strategy, a joint DCSF initiative with the National Strategies, the Qualifications and Curriculum Authority, and the Chartered Institute of Educational Assessors, was published in May 2008.

Aimed primarily at teachers and heads, it sets out the government's strategy for AfL and highlights the ways in which it is helping schools to improve the quality of the assessment process.

The primary objective of the strategy is



The challenges ahead

With the role of teacher assessment greater than ever, a whole-school approach is vital

The publication of the Department for Children, Schools and Families' Assessment for Learning (AfL) strategy and the end of national testing at key stage 3 now mean there is a greater role for teacher assessment than ever before.

That is why many secondary schools, mindful of the importance of feedback and assessment in helping to develop pupils' motivation and self-esteem, are taking a long, hard look at their assessment systems.

As the subject pages of this supplement illustrate, schools are not only starting to embed assessment within the curriculum, but are also making sure that assessment concentrates more on the individual needs of each pupil. In the past, assessment has often been treated as an "add-on" that occurs at the end of a topic or module and simply produces a series of data that youngsters struggle to make sense of.

Over the last 18 months, the Qualifications and Curriculum Authority (QCA) has worked with schools across the country to change the focus of assessment and develop a whole-school approach.

The QCA's Articulating Assessment project has helped schools to review and develop their assessment practice and make connections between different types of assessment.

Acknowledging that getting assessment systems right in schools "is not an easy task", the QCA has highlighted some key challenges for schools as they set about developing their assessment practice.

These include making sure that the key dimensions of knowledge, understanding and skills in the national curriculum are covered, checking that the school's assessment practice is understood by everyone involved – and

that means pupils and parents as well as staff – and building consistency so teachers of the same subject interpret national standards in the same way.

Supported by the National Strategies and the QCA, a growing number of schools are assessing learners in ways that as well as being engaging and motivating, also give teachers a far broader picture of what pupils can actually do.

Rather than pupils feeling detached from the process of assessment or muddled about what they need to do to improve – a familiar refrain in the past – schools are encouraging learners to see assessment as a "dialogue" with their teachers. Many teachers, for instance, are changing their classroom practice and making greater use of strategies like open-ended questioning to probe exactly how much students understand and whether there are gaps in their learning.

The QCA is well aware that changes like these are not a quick fix, but more and more schools are using the opportunities provided by the new secondary curriculum to reflect on how assessment fits into the bigger picture of the curriculum. Not only that, teachers are making the most of the opportunities offered by APP to develop their skills and expertise in assessment and build up a shared understanding of pupils' progress and achievements.

Involving schools' leadership teams and determining the role of senior leaders is a crucial part of the process. At Hazelwick School in West Sussex, the leadership team was fully behind the work on developing assessment, and deputy head Andy Crofts took a lead at the set-up phase.

"APP is important at a whole-school level

for three reasons," Mr Crofts told *SecEd*.

"First it provides rigour and a measure of standardisation to teacher assessments, and that in turn provides a continuous series of 'checkpoints' for measuring student progress against their targets.

"Second, the assessment information can be used to co-ordinate intervention to tackle potential underachievement across the range of subjects.

"The third significant benefit is that it can be used by departments as a diagnostic tool for formative assessment and for setting individual improvement targets for a student's work. This consistency of expectation helps students to make faster progress. In essence it is a helpful addition to the whole school assessment framework and a great way to use assessment information to identify the next steps students need to take in their work."

Three Hazelwick science teachers began their development work on assessment in 2007, focusing on a mixed-ability year 7 science group. A year on, the project has been rolled out across the whole of year 7 science, and there is interest from other departments, including creative arts and ICT, in using similar assessment methods.

Simon Tasker, strategic curriculum leader for science at Hazelwick, said: "My main advice to teachers would be to write the assessment of skills into your scheme of work.

"Teachers have found it very useful in helping them to re-evaluate the way they teach and the feedback from students has been very good. But it is important to appreciate that it takes time for students to get used to it and it cannot be bolted on to an assessment routine already in place."

Teachers piloting APP in English reading and writing have been very enthusiastic about its impact so far

APP has had a huge impact on teaching and learning at Ivybridge Community College in Devon.

“Even pupils who don’t believe they are particularly good at English feel better when they achieve a new level in one of the assessment focuses and it motivates them to do better in all areas,” explained Belinda Whittleworth, acting team leader in English.

“They are gaining in confidence the longer it goes on because they can see the progress they are making. Students are using it as part of their learning objectives, and understand what is being asked of them.”

APP for reading and writing, which is being disseminated by the National Strategies, began being developed in English at key stage 3 five years ago as a system for teacher assessment that would provide information about pupils’ strengths and weaknesses in order to improve teaching, learning, and pupils’ progress, and allow teachers to make reliable judgements linked to national standards.

The pilots for English involved more than 100 schools and 1,000 students. The Qualifications and Curriculum Authority (QCA) collected data which showed that pupils involved in APP made faster progress than those who were not using it.

Ivybridge was one of the pilot schools to try out APP in English, and is now taking the process a step further by being one of the secondaries trialling systems for moderation.

The school is also working with one of its feeder primaries on introducing APP, which, according to Ms Whittleworth, will allow continuity of pupil assessment as they transfer from primary to secondary, and will give teachers a better idea of a pupil’s ability than simply using key stage 2 scores.

Ivybridge has now rolled out APP across the whole of the English department and it has become “quite robust” as a method of assessment to support teaching.

She explained: “At the start there was a feeling that there was a lot of paperwork, but at a recent departmental meeting there was a real sense from the staff that we are growing in confidence.

“Recently we had our first meeting about moderation and how this should be done,

and while there were some questions for clarification, the judgement from staff was that it is something everyone can embrace.”

Sue Horner, the QCA’s head of standards and assessment policy, told *SecEd*: “Teachers like APP because of the ways they have found to work with it. Teachers should use it in a way that suits them and in the best way that they can.

“What we found is that the whole process is one where teachers can work together and support each other, and develop a shared understanding of national standards.

“At the same time, all the criteria are understandable by pupils so it is not a mystery – it encourages a broad and exciting curriculum.”

Schools taking part in the early pilots were advised to carry out APP on a sample of children of different abilities, rather than the whole class, so they could get to grips with the criteria and the processes.

The assessment guidelines are basically grids that provide a simple recording format, providing assessment criteria for each of the assessment focuses in the subject. These guidelines are used to support periodic assessment. The criteria are related to different levels so everyone can see the progress being made as learning happens.

Ms Horner continued: “What is of real importance for teachers and pupils is to recognise evidence for learning as it is happening. They do not need to provide evidence for everything. Teachers already know their pupils and won’t need to prove every bit of the profile.”

Steve Anwyll, who is responsible for developing APP at the QCA, said that it was as much about improving pedagogy as it was about improving teachers’ assessment skills.

He said: “Where assessment is concerned, APP sharpens teachers’ abilities to ask questions as they become familiar with the assessment criteria and to observing more carefully what pupils are doing in lessons.

“It also helps them to distinguish the different things they are looking for when carrying out assessment. It improves subject knowledge in terms of aspects of reading and writing, where they need to look for evidence, asking the right questions and looking for the relevant things underneath children’s learning. It helps teachers to look across the whole subject and ask themselves what the pupil does well and what they need to concentrate on.”

Mr Anwyll also stressed the importance of APP in helping parents to understand at what level their children are working, and what progress they are making.

He added: “If you tell parents that their child has reached level 5 it can mean very little, but showing them a grid of what the pupil has achieved and what they have yet to do is far more meaningful.”



Case study

At Bishop Luffa School in Chichester, APP is being used to involve pupils more directly in their own learning.

Naomi Hursthouse, team leader for key stage 3 English at the school, explained: “We set benchmarks at the beginning of every year, and pitch questions based on the assessment focuses (AFs).

Teachers like APP because of the ways they have found to work with it. Teachers should use it in a way that suits them and in the best way that they can



Charting progress

“One of the strengths of the system is that you can adapt it and it is easy to find pupils’ strengths and weaknesses, and so act upon them.

“We use a lot of group work in the class, and have developed a series of cards for each AF, with the assessment criteria for each level written on them, from Levels 3 to 8.

“Pupils are given the cards at the beginning of the lessons, which shows them what it means to be working towards each level. They can concentrate on one aspect at a time and it helps them to become familiar with what they are working on.

“APP is good because it helps pupils to become more reflective about their own work and more independent,

which is what we want with the move towards personalised learning.

“It gives them ownership of their learning and informs them of their strengths and weaknesses. It also makes lessons more focused, helping teachers to plan lessons and highlighting what aspects of classwork need to be improved.”

It is early days, but teachers using APP in mathematics believe it is having a positive impact on teaching and learning in their schools

Instead of relying almost exclusively on testing or what pupils have written in their exercise books, a growing number of teachers are now drawing on a far broader range of evidence to assess students' strengths and weaknesses.

They say APP is helping them to make reliable judgements linked to national standards, thereby improving teaching, learning and pupils' progress.

Not only that, teachers are also planning opportunities in their schemes of work to help students make links between different areas of mathematics, as well as between mathematics and other subjects, such as science, design and technology and even modern foreign languages.

By means of day-to-day observations, interactions, and ongoing assessment, teachers

Case study 1

The 10-strong mathematics department at Warden Park School, an 11 to 16 comprehensive in Cuckfield, West Sussex, has been piloting APP mathematics with 100 year 7, 8 and 9 pupils since September 2008.

Led by Chrissy Mingay, the department's assistant director, the teachers agree that APP is helping them to gain a real understanding of their pupils' progress.

The department has made APP a priority this year, with the team's monthly meetings focusing on nothing else.

"The big thing is that APP makes a real difference to teachers' understanding of where their students are at," explained Ms Mingay, whose local authority funded her to go on a four-day APP training course last year.

"We are finding that it is helping less experienced teachers in particular to gain a real understanding of who is struggling and who isn't. I must admit I was a bit wary at the beginning and it seemed like quite a workload, but I have been completely converted."



using APP are seeing clear evidence of what learners understand and are able to do.

Assessment evidence used in mathematics is now more likely to include oral work, information from different curriculum areas, and practical tasks.

In the past, for instance, youngsters might have been given a train timetable, asked to calculate how long it takes to get from A to B, and record it on paper.

Now teachers are introducing more "meaningful" tasks to assess pupils' understanding – such as organising a school trip to the National Science Museum in London and asking pupils to plan how they will get there. Activities like these not only

have a real purpose, but also require students to compare journey times and costs, make decisions, and justify their findings.

The Qualifications and Curriculum Authority (QCA) has been working with the National Strategies and the Department for Children, Schools and Families (DCSF) to pilot APP materials for schools and then make them available nationally.

APP materials and guidance for key stage 3 mathematics were first published in 2006 by the Secondary National Strategies.

These have recently been updated to include new mathematics standards files (collections of evidence from pupils' day-to-day work that exemplify national standards at different levels),



Logical gression

a new APP handbook, and amended assessment guidelines.

Once teachers have gathered enough evidence of what pupils are able to do independently in different contexts, they can then apply the APP guidelines to make a periodic assessment of students' progress.

It is estimated that around 200 of the 3,400 secondary schools in England have started using APP mathematics. Many of these schools have been involved in the DCSF's Making Good Progress pilot, which was launched in 2007 to improve the rate of progress children make year-by-year, as well as between key stages.

Smith's Wood Sports College in Solihull is

one of the schools involved in the DCSF pilot. There, the eight teachers in the mathematics department began using APP with a small number of year 9 pupils in September 2007.

But as Joanne Young, head of key stage 3 mathematics at the 1,200-pupil school, said: "We have really got our teeth into it this year. We are finding this extremely positive in terms of planning and seeing where our pupils are in their learning."

Ms Young, who has been teaching at the school for four years, continued: "I definitely think that periodic assessment is crucial. It is so useful for spotting possible weaknesses. Just because a child is strong in algebra, for example, doesn't mean that they are strong on

Case study 2

Chatsmore Catholic High School in Worthing, West Sussex, began using APP mathematics in September 2007.

As a "relatively small" school, with 120 students per year group, the five key stage 3 mathematics teachers decided to focus on all year 7, 8 and 9 pupils rather than just a handful of individuals.

"It is a big project to take on board and we are in the very early stages of trialling, but APP is becoming really ingrained in what we do," said Mary O'Keefe, the mathematics teacher with responsibility for APP.

"The head of department and I decided to start by focusing on the development of probing questions. It was something manageable we could take on board and we realised that getting quality dialogue going on in the classroom was crucial."

The teachers quickly saw an impact from using probing questions to initiate more dialogue – both between themselves and pupils and between pupils and their peers.

Students became more willing to make oral contributions, while receiving more immediate feedback enhanced their confidence and self-esteem.

shape. It is helpful for pupils to have a realistic look at where they are in terms of progress, and especially useful in planning for our lower attainers as you can see where the barriers to their learning are."

All the members of the mathematics department engage in regular dialogue to ensure standards are kept consistent between teachers.

"Assessment is only effective if it is reliable and consistent," said Ms Young. "But there's no doubt that APP is encouraging discussion and has really taken off here."

After introducing APP mathematics, schools across the country have enthused about its benefits.

Some teachers say APP has encouraged them to think more about giving pupils different opportunities to select the mathematics that is appropriate for a particular problem, while others welcome the chance to use oral work as evidence of pupils' understanding and knowledge.

The key to this, however, as many schools have found, is to start off small, using APP initially with a few pupils in a class. Once teachers are adept and confident at using APP, they can then start to use it for all key stage 3 pupils.

Once APP is well established in a school, the QCA believes that it saves time, makes assessment more efficient, and helps to build up trust in teachers' judgements.

We now look at science, in which APP is just beginning to take effect

As well as giving teachers an overview of pupil progress across the key strands of the subject, APP science is designed to help practitioners fine-tune their understanding of learners' needs and tailor their planning and teaching accordingly.

APP science is just beginning and the National Strategies are offering training nationally from January 2009.

After a small-scale trial carried out in Cornwall and Cheshire from 2006 to 2007, the Qualifications and Curriculum Authority ran a full APP science pilot with 40 schools in Devon, Cornwall, Kirklees, Redcar and Cleveland, Cheshire, Wigan, Bexley, and Camden from 2007 to 2008.

The National Advisors and Inspectors Group for Science identified the eight local authorities involved and two science teachers from each school underwent training in the APP approach.

Back at their schools, the teachers were asked to work with a sample of between six and 10 pupils in each of the key stage 3 year groups.

The curriculum content remained the same for everyone in the year, but teachers began to draw on a diverse range of evidence to assess pupils using the APP approach.

Science has traditionally been a subject where teachers have relied heavily on end-of-topic testing. APP, however, encourages teachers to look for robust evidence of students' progress from a range of different sources – from making notes of things they had observed or heard during science lessons, to video and oral recordings and even models produced by pupils.

The 80 teachers involved in the pilot also tested out the APP science assessment guidelines and provided material for the 10 sets of standards files compiled during the course of the pilot – two each for levels 3, 4, 5 and 6, and one each for levels 7 and 8. The National Strategies are launching these materials from January 2009.

South Camden Community School in north London was one of the schools taking part in the APP science pilot. Fiona Philippou, a science advanced skills teacher (AST) and the school's acting assistant head, and two science teacher colleagues trialled the approach with pupils in years 7, 8 and 9.

Ms Philippou explained: "One of the problems is that there has always been a lot of literature, courses and guidance on how to consistently mark work at key stage 4, but not at key stage 3.

"APP is a really good way to mark consistently across key stage 3. The make-up of our department at the moment is that we have got some teachers who are training, some who are newly-qualified and also advanced skills teachers like myself. We go from one end of the spectrum to the other in terms of experience and you therefore get inconsistencies. When you are new to teaching you need as much experience and guidance as



you can possibly get to help you mark and we have not had that at key stage 3 before."

She also liked the way APP enables teachers to use a variety of different evidence for assessment.

"We have a huge number of EAL (English as an additional language) learners and you often know that the child understands the scientific concepts but finds it hard to explain on paper," she said.

"With APP you can video students doing work, keep photographs, presentations and electronic work, and also question students. I got students to make podcasts about the use of parabens in deodorants and it was great because they found the work exciting and I could use it as assessment evidence rather than setting a test.

"With APP, we have changed the way we deliver science. Students are much more excited about coming into science lessons and as a department it has certainly made our marking more consistent across the board."

Teachers at Helston Community College in Cornwall are equally enthusiastic about APP science. They have been involved in both pilots, trialling APP with year 7, 8 and 9 groups and are so pleased with the approach

that they are now using APP with their entire year 7 cohort of 250 pupils. The teachers meet every half-term to cross-moderate and ensure that judgements are consistent.

Science AST Sarah Glinski explained: "We started off within our comfort zone and used paper-based resources, asking pupils to do things like writing stories.

"But we very quickly found that it felt too cumbersome and clunky, so this year we are making models and videos, producing presentations and doing role plays. Year 7s studying oceans have made models of sea creatures, while year 8s looking at food and digestion have acted out the process of digestion and videoed it.

"We now show the video to other classes to motivate them. We say 'this is the standard you can produce and this is how exciting and different you can make it'. It is a good motivational tool as well as helping them to learn.

"APP has made a massive difference to teaching and learning here. Lessons are dynamic, pacy and so much fun. Teachers get a much better understanding of pupils' progress and pupils are much prouder of their work and keen to do better."

Focus on technology

With the integral role played by ICT in modern education, ways have had to be found that allow teachers to assess how pupils use technology and what they know

APP in ICT follows the same principle as in English, mathematics and science, that of using periodic review of a wide range of evidence to build a rounded picture of a learner's strengths and areas for development, according to Margaret Wright, the Qualifications and Curriculum Authority's (QCA) curriculum advisor with responsibility for ICT.

She continued: "The curriculum aims to develop capability in ICT and that is one of the key concepts being assessed in APP in ICT – showing that you are able to use a range of ICT tools in a purposeful way to solve problems, develop and communicate ideas, handle information and so on.

The guidelines for assessing ICT draw on a number of key processes which include finding information, developing ideas and manipulating information; communicating and presenting information; and evaluating information, as well as reviewing and reflecting on what you have done.

"In short, it is about planning what data or information you need to solve a problem, how to find or create it, how to develop it, and then how to communicate what you have found," Ms Wright explained.

Assessment focus 1 of ICT assessment is about planning, developing and evaluating. Pupils are expected to think about how they plan and apply ICT-based solutions to problems and whether this has been done effectively.

Focus 2 deals with handling data, sequencing instructions, and modelling. "This one is about developing ideas and manipulating information, which may include testing predictions or hypotheses, using models or simulations," Ms Wright added.

The third assessment focus tackles the finding and communication of information. Pupils will have to demonstrate how they use technology to find what they need and then how they select what to use, evaluate it for effectiveness, and whether it is biased, accurate and relevant.

Ms Wright said: "We are trying to get away from learners applying technical skills without thought – for example just copying and pasting information from the internet – and get them thinking about the wider implications of technology use.

"For example, once you have found what you are looking for, we want pupils to evaluate its relevance, usefulness and accuracy, develop it for a purpose and think how best to communicate it.

"Pupils will need to show that they are applying their knowledge and using it in context. It is also important that pupils use ICT safely and responsibly, and consider things such as the dangers of giving out your personal details on the internet."

City of Norwich School in Norfolk, has been trialling APP in ICT at key stage 3.

Mark Merrywest, the head of ICT, said lessons were organised around six to eight week projects, which are themed around specific elements of the key stage 3 curriculum.

"When the students have done the project we mark off where they are in that criteria," he explained.

At the end of the process, students have produced a range of evidence which informs their discussions with their teacher about strengths and areas for development. The process is effective because at the end of year 7 they have a clear understanding of where they are.

Year 7 pupils, for example, did a project on endangered species, and worked on forming and promoting an Endangered Species Society in school.

"Pupils had to plan it out, use graphics to design a logo, and research on the internet what information they wanted to use," Mr Merrywest explained. "They collected information they thought would be useful, and then trimmed that down for use in the leaflet and chose the appropriate images.

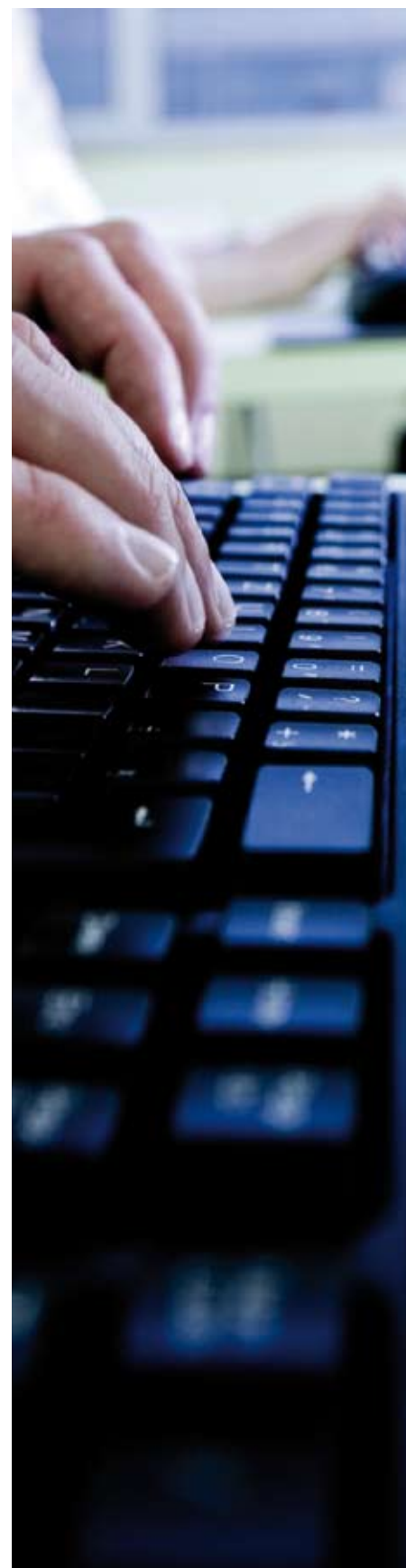
"Part of their homework was to make a PowerPoint presentation aimed at four to six-year-olds, so they had to adapt the language to make it simpler and find different images, cartoons for example, that were more appealing and appropriate for the age group.

"This exercise allowed them to meet the requirement to change information and adapt it for a different use.

"We use APP to ensure that ICT is used in different, logical and structured ways."

Mr Merrywest said that the school had earlier been looking at approaches similar to APP so trialling the scheme "put into words and structures what we were already trying to do".

He added: "APP has had two big impacts at the school. Teaching staff are able to demonstrate that they can assess work consistently, while students are no longer looking at individual pieces of work, but at the whole, and they know where extra work is required and what they have yet to do."



Solid foundations

We update you on APP in foundation subjects, which is in its early stages

Introducing APP into foundation subjects at key stage 3 means building on the work done earlier in the core areas of the curriculum, according to Jerome Freeman, curriculum advisor at the Qualifications and Curriculum Authority (QCA).

The QCA has been working very closely with more than 200 teachers on this, as well as partners such as Ofsted and the subject associations.

Mr Freeman told *SecEd*: “We have begun the process of expanding APP to foundation subjects. We are developing assessment criteria along with standards files of students’ work for all the foundation subjects at key stage 3.

“This will be done for levels 3 to 8 to exemplify national standards and show how teachers can draw on a wide range and variety of evidence to reach periodic judgements about pupil progress.”

Mr Freeman said the process was still in its early stages, with APP in the foundation subjects due to be rolled out to secondary schools in 2010.

He said that the trials had revealed that APP was helping teachers to gain a better understanding of the new school curriculum.

“Teachers have been saying that the pilot has got them thinking hard about how they teach and how they plan the new secondary curriculum in the classroom,” Mr Freeman said.

“It has shown up gaps in the teaching and they have been finding that they are not covering all the assessment criteria.

“So APP seems to have been effective at getting teachers to deconstruct the new curriculum and in recalibrating their plans,” he added.

It has made us look long and hard at what we should take into account when assessing pupils’ progress

Case study

Sue Carter, assistant head of Bishops Hatfield School in Hatfield, Hertfordshire, has been trialling APP for use in key stage 3 citizenship.

She told *SecEd* that she wanted to make sure the exercise did not just become about ticking boxes.

“We needed to be sure that APP was being used to show skills and understanding in a variety of ways, and not just about content,” she added.

The school was asked to use the APP assessment criteria initially on six pupils in year 8 of varying academic abilities to carry out a periodic assessment of their progress in citizenship.

“It was not particularly difficult to gather the written and spoken evidence, and I did this simply by observing the pupils and listening during lessons, and also from marking their work,” she explained. “Having the assessment criteria allowed me to begin to identify individual pupil’s strengths and weaknesses, and what I needed to do when planning lessons.”

Ms Carter said it was probably too soon to use APP as a means of engaging in dialogue with students and helping them to gauge their own progress and plan ahead with their work.

“It remains very useful in the assessment process generally, however, and for use in target-setting. We will keep this under review,” she added.

While organising activities that involved pupils in year 8 liaising with the local council, Ms Carter saw the impact APP could have.

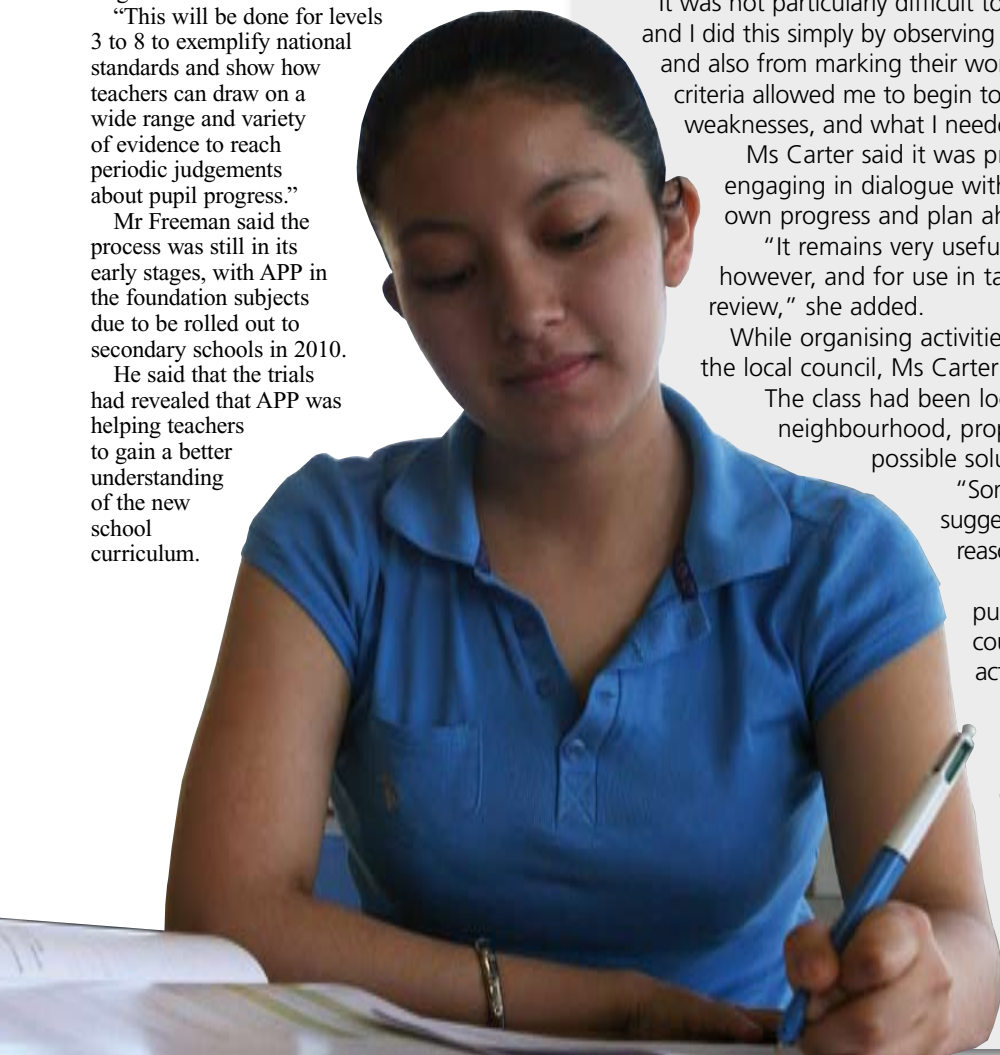
The class had been looking at ways to improve their neighbourhood, proposing various actions and suggesting possible solutions to problems.

“Some of the actions and solutions they had suggested were not possible for a variety of reasons, such as a lack of funding,” she explained.

“So I had to consider whether the action of pupils contacting and communicating with the council was an end in itself, or whether their actions and resolutions should be considered.

She continued: “If the council said that they cannot do something the students had proposed due to a lack of funding, can we say that the action done by the students has failed, or is it enough that they have developed an understanding that the council works under certain budgetary constraints?

“It has made us look long and hard at what we should take into account when assessing pupils’ progress.”





It's good to talk

Developing an assessment process for speaking and listening was always going to be a challenge, because the evidence can be so elusive

Unlike subjects such as mathematics, and writing in English, it is more difficult to assess pupils' work that is not written down.

Ros Hicks, curriculum advisor at the Qualifications and Curriculum Authority (QCA), explained: "This is one of the huge challenges that has always surrounded the assessment of speaking and listening, and how to move children on.

"We have lots of evidence that there is a lot of good speaking and listening going on in the classroom, but teachers lack confidence in making an assessment. Most teachers would say there is a lot of opportunity for talking in their classroom, but it is not always very structured," Ms Hicks said.

"The QCA and the schools taking part in the recent pilot of APP speaking and listening have been grappling with ways in which evidence of achievement can be captured to build a picture of what pupils can do in a wide range of contexts.

"However, in the pilot, teachers found that in planning activities to give evidence of the assessment focuses for speaking and listening, they are using talk in much more

focused and purposeful ways. This gives them the confidence to make well-informed assessments."

The pilot programme ended last summer and the QCA is now evaluating the results and working on producing materials to support teachers.

Ms Hicks continued: "Talk is dynamic and ever-changing. The assessment focuses are interwoven, and that of course adds to the complexity of making judgements."

Schools from 12 local authorities took part in the pilot, and the response was "very positive".

Ms Hicks said: "Many of the teachers and schools taking part had already placed speaking and listening high on their agendas. They were quick to see the usefulness of the assessment focuses and how they supported planning in a more systematic way. Almost all the teachers involved reported the positive impact that increased attention to speaking and listening had on reading and writing."

Teachers involved in the pilot also reported other positive changes to their classroom practice. For example, they paid much more attention to the way pupils were grouped so that all pupils had the opportunity to take on different roles. They were also more explicit in sharing with their pupils the ways that speaking changes according to context.

The local authorities involved in the pilot

were asked to work with schools in at least two key stages and the training materials were not differentiated by stage.

Ms Hicks continued: "At first we were a bit uncertain about how teachers would react to this. There can be an inclination to assume that what children can do at one key stage is not of interest to teachers beyond that key stage. However, we were really pleased to find that teachers welcomed opportunities to see what progression looked like across key stages and many realised that they underestimated pupils' abilities.

"Of course any pilot throws up issues and one of the key challenges is capturing the evidence. It wouldn't be possible or even appropriate for teachers to film or tape all speaking and listening activities.

"We are looking closely at how best to collect evidence of what teachers observe in sensible ways that are manageable in the context of day-to-day classroom activity. We also need to look at how speaking and listening might be moderated in ways which are straightforward and manageable."

Ms Hicks added: "Future work will involve looking closely at how schools might tackle some of these challenges, exemplifying the standards and producing advice and guidance for teachers. Full materials should be available to schools in 2010."

Talk is dynamic and ever-changing. The assessment focuses are interwoven, and that of course adds to the complexity of making judgements



In the frame

The National Strategies is working to fit APP and AfL into the Secondary Frameworks

When the original Secondary Frameworks were drawn up in 2001 as part of the key stage 3 strategies in English and mathematics, they were contained in little more than ring-binders.

National Strategies senior director Alan Howe explained: “They contained teaching objectives for years 7, 8 and 9, and at the time the focus was on setting up a framework of high expectations for pupil progress and getting the teaching just right.”

With the introduction of the new secondary curriculum and programmes of study, the time was right to review the Frameworks and recommended approaches.

He continued: “We have learned a lot in the intervening years about pupil progress and learning, and we wanted to use this to refresh the Frameworks to ensure that they are in keeping with current thinking.

“So what the National Strategies team has done is turn the new Secondary Frameworks into an online resource which is far more flexible and which makes good use of available technology. It also gives teachers more control over the selection of appropriate learning objectives to use in their planning so that all pupils in their class make good progress.”

The onus is placed on teachers to identify

the focus of what they are teaching and to use the Frameworks to plan for good learning and pupil progress.

“The renewed Frameworks offer lines of progression from years 7 to 11 in key areas of subjects, which are important in a personalised curriculum. We call these “strands”, for example speaking and listening in English and number and algebra in maths and so on.”

APP fits into these strands because in developing the renewed Frameworks and after discussion with teachers, the National Strategies identified four aspects of improvement that teachers need to work on to make sure pupils are making good progress.

These are planning for progression; strengthening classroom pedagogy, which includes finding engaging and motivating ways to help pupils learn effectively; periodic tracking of pupil progress; and personalised intervention for those pupils for whom progression is not on track.

“With these elements in place you have a better idea of the achievement of pupils and can identify more effectively those who are failing to make progress,” Mr Howe added.

“If you are a subject leader or a teacher and are planning units of work, you can use the Framework of learning objectives to focus your planning on the needs of the pupils you are teaching.

“The teacher can then easily link these objectives that drive the planning to the appropriate elements of APP in the subject, to establish an idea of possible pupil outcomes. The emphasis is on securing the learning first, through good teaching, then using APP to assess the progress that pupils are making.

“What we encourage schools to do is to

have a view of the range of evidence that pupils would need to be able to demonstrate in order for APP to work.”

Mr Howe said that APP strengthened the work already being done in schools on Assessment for Learning (AfL) in two ways.

“APP is part of good assessment practice in schools, but AfL is the driver for the whole thing. The periodic nature of assessment under APP allows the teacher and pupils to have an overview of where they are, and it also gives teachers and their department a much greater sense of what they need to do to adjust their teaching and make changes where necessary,” he explained.

“When planning, it is helpful to have a sense of positive outcomes and over the course of a term to build up evidence in order for APP to be a strong and reliable judge of attainment. The APP resources are extremely accessible within the Frameworks on the website and all these elements – planning, pedagogy, strategy – are built in so teachers have somewhere to go for guidance to support their teaching.”

Mr Howe said it had been a “major and significant piece of work to get to the point where schools have such a powerful set of resources in terms of planning for progression”.

“Teachers tell us that you do have to get your head around it at first, but it is not complicated, and they have appreciated the support that our Secondary Frameworks have offered them in planning for the changes in the secondary curriculum,” he added.

To find the National Strategies Frameworks, go to <http://nationalstrategies.standards.dcsf.gov.uk/secondary/secondaryframeworks>

The QCA has been exploring new approaches to the assessment of personal, learning and thinking skills

When staff at Pool Business and Enterprise College were asked to explore assessment in personal, learning and thinking skills (PLTS), they turned to a group of gifted and talented students to help them.

“We were one of 13 schools asked by the Qualifications and Curriculum Authority (QCA) to pilot this, and we focused on the independent inquiry section,” said Howard Stuttard, head of design and technology.

“We decided to run the idea past some of our gifted and talented students to find out what they thought we should do, and how they believed we should go about it.

“They really thought outside the box and came to the conclusion that thinking skills were not just about what happened in school, but something they did in all aspects of their lives.

“They were particularly interested in including all the activities that they did outside of school – such as sea cadets, scouts and participation in sport – which were pertinent and which demonstrated their abilities.”

The collection of evidence has proved to be one of the challenges of developing assessment for PLTS, according to Paul Wright, a QCA advisor.

He said: “Teachers and pupils will have to think creatively and find innovative ways of gathering all of this together, and working across different curriculum areas.

“One way would certainly be to look beyond school at the other activities students participate in, as some schools are doing, and looking at ways that parents and other relevant adults can contribute to the process.”

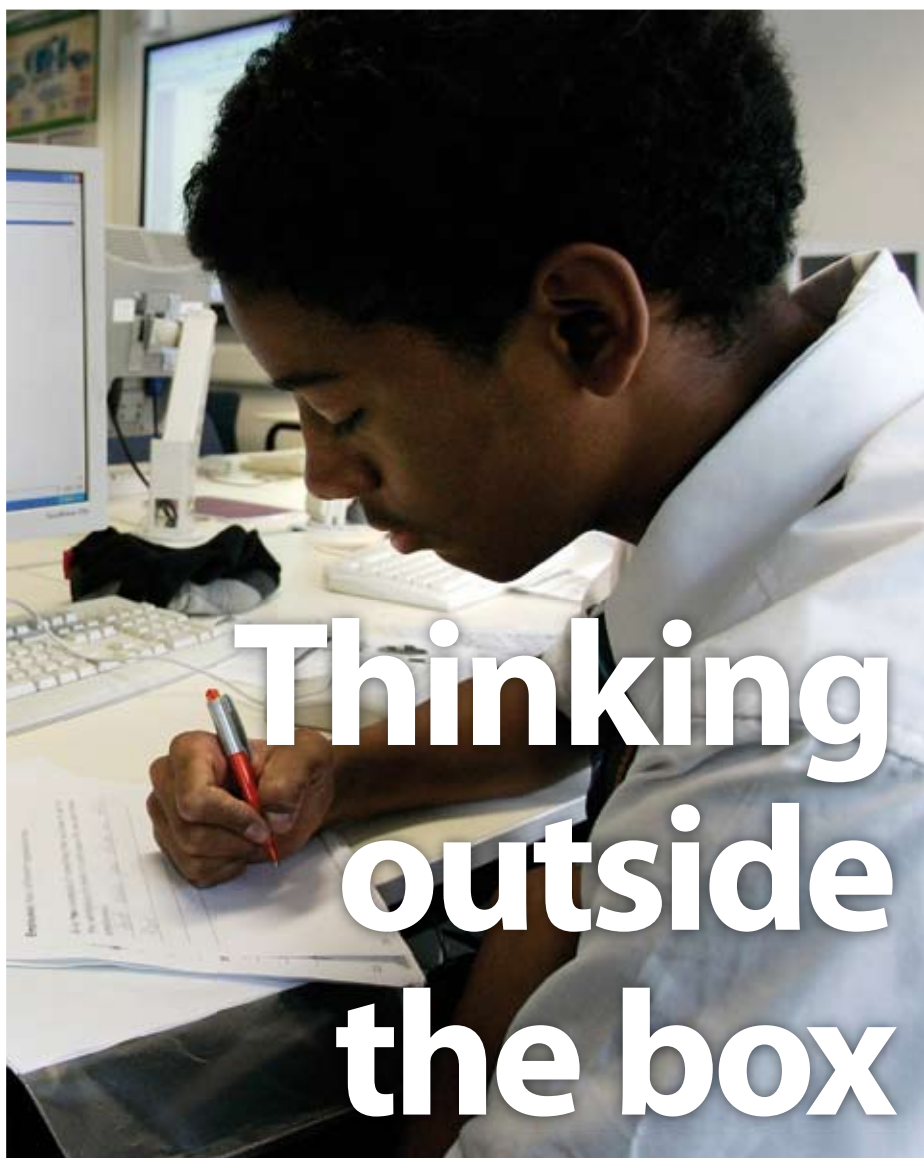
The Pool pupils decided to create an assessment booklet which would contain evidence of what they could do, and which parents, employers, sports coaches and others could sign or stamp as confirmation of their achievements. There are also sections for teachers to record observations and completed tasks during lessons.

At the same time, the school, based in Redruth, Cornwall, created a website where those people involved with pupils in their out-of-school activities could store and record evidence of their work.

“We had football coaches sending in letters detailing the contributions that students made in coaching sessions,” Mr Stuttard added.

The process made pupils aware of how much they relied on initiative and independent inquiry.

“The nearest city to us is Plymouth, so to get there at the weekend pupils have to



negotiate a timetable and plan their journey. They realised that even everyday necessary activities like this counted towards their assessment,” he said.

Students also decided that ticking off the criteria having completed it once was not enough. So there is an expectation that each assessment area will have to be demonstrated a number of times to show that some proficiency has been achieved. The school has also introduced three levels of assessment – bronze, silver and gold, similar to the Duke of Edinburgh awards – with the highest level taking all of the pupil’s school life, from years 7 to 11, to complete.

The pilot was tested over a period of 10 weeks on a cohort of year 7 pupils, and has now been introduced across the whole year in design and technology. It will be rolled out across all subjects later.

Mr Stuttard said there were some time constraints with collecting all of the information, but the benefits had far outweighed any difficulties.

“The penny is starting to drop with children that so much of what they do contributes to the development of life skills,” he added.

“They realise that education does not just take place in the classroom.”

At Halewood College in Knowsley, staff are developing a model of assessing PLTS based upon a system they call PACES, which is the process used in developing any skill – Practice, Acquiring (the skill), becoming Competent, advancing to Expertise in the task, and finally being proficient enough to Support or coach others.

PLTS already plays a major part in teaching at the school, said Drew Rowlands, the assistant headteacher.

Two afternoons a week, normal year 7 lessons are suspended in favour of “hybrid” teaching, where pupils explore topics and themes with a focus on PLTS.

This teaching is further backed with a virtual learning environment, known as the “Pacebook”, where students are able to upload a range of evidence from a variety of sources, keep blogs and wikis, and carry out self-assessment based on their evidence, which will measure their progress.

“These will then be verified by a teacher, who can set targets for progression,” said Mr Rowlands.

“We have a number of schools and local authorities who want to help us test this system, and we are looking to use it within our Diploma in creative arts and media and at key stage 3.”

What others say

"Assessment for learning is 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."

Assessment Reform Group (University of Cambridge School of Education)

"Across the curriculum, in the minority of schools in the survey where inspectors saw good practice in assessment, teachers had understood and applied carefully the key principles of Assessment for Learning. In the majority of schools, however, assessment remained an area of relative weakness. The best teaching challenges and engages pupils, making regular use of assessment to match activities to their needs and abilities."

The Ofsted chief inspector's annual report 2007/08

"The research indicates that improving learning through assessment depends on five, deceptively simple, key factors:

- The provision of effective feedback to pupils.*
- The active involvement of pupils in their own learning.*
- Adjusting teaching to take account of the results of assessment.*
- A recognition of the profound influence assessment has on the motivation and self-esteem of pupils, both of which are crucial influences on learning.*
- The need for pupils to be able to assess themselves and understand how to improve."*

Assessment for Learning: Beyond the Black Box, Assessment Reform Group (University of Cambridge School of Education)

"Whatever the political imperatives, it is always important for the educator to remember that assessment starts with learning, it supports learning, and it reports attainment resulting from learning."

Dr Mary Bousted, general secretary of the Association of Teachers and Lecturers

APP resources

Qualifications and Curriculum Authority online – Assessment:
www.qca.org.uk/assessment

Key stage 3 APP materials:
<http://nationalstrategies.standards.dcsf.gov.uk/secondary/assessment/assessingpupilsprogressapp>

Teachers TV:
Key Stage 3 English – APP reading:

www.teachers.tv/video/28206
Key Stage 3 English – APP writing:
www.teachers.tv/video/28200
Primary assessment for APP:
www.teachers.tv/video/29809

APP – Assessment at the Heart of Learning (booklet):
www.qca.org.uk/qca_19890.aspx

National Curriculum online – Assessment: <http://curriculum.qca.org.uk/key-stages-3-and-4/assessment/index.aspx>

The Standards Site – Assessment for Learning and personalisation:
<http://nationalstrategies.standards.dcsf.gov.uk/personalisedlearning/five/af/>

National Strategies Assessment newsletter: <http://nationalstrategies.standards.dcsf.gov.uk/assessment/ebulletin>

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