



Rhagoriaeth i bawb – Excellence for all

Arolygiaeth Ei Mawrhydi dros Addysg
a Hyfforddiant yng Nghymru

Her Majesty's Inspectorate
for Education and Training in Wales

Summary of findings from our national thematic reviews

2013

The purpose of Estyn is to inspect quality and standards in education and training in Wales. Estyn is responsible for inspecting:

- ▲ nursery schools and settings that are maintained by, or receive funding from, local authorities;
- ▲ primary schools;
- ▲ secondary schools;
- ▲ special schools;
- ▲ pupil referral units;
- ▲ independent schools;
- ▲ further education;
- ▲ independent specialist colleges;
- ▲ adult community learning;
- ▲ local authority education services for children and young people;
- ▲ teacher education and training;
- ▲ Welsh for adults;
- ▲ work-based learning; and
- ▲ learning in the justice sector.

Estyn also:

- ▲ provides advice on quality and standards in education and training in Wales to the National Assembly for Wales and others; and
- ▲ makes public good practice based on inspection evidence.

Every possible care has been taken to ensure that the information in this document is accurate at the time of going to press. Any enquiries or comments regarding this document/publication should be addressed to:

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Foreword

I hope that you find this compendium, and the full set of reports on which it is based, informative and relevant to your own work if you are part of the education system in Wales. It represents a collation of evidence on standards and sets out specific recommendations for how to improve. Schools and providers should want to know what Estyn expects to find on inspections: this collation sums up those expectations in relation to the aspects covered.

Estyn's thematic reports in 2013 cover a range of important aspects of education and training in Wales. They report on standards and provision for the youngest and oldest members of our society, from evaluating Welsh language development in the Foundation Phase to reviewing the effectiveness of learner-involvement strategies in Welsh for adult centres. We have reported on a range of subject areas too, both in schools and in post-16 education and training, ranging from construction in post-16 to religious education in secondary schools. I am pleased that we have been able to collaborate with the Wales Audit Office on our report into the impact of teacher absence.

Estyn works closely with Welsh Government officials to formulate the programme of thematic reports that is requested in annual remit letter to Estyn from the Minister for Education and Skills. This programme takes into account the key priorities of the Welsh Government and this year included reports about standards of literacy and numeracy as well as reducing the impact of deprivation on educational improvement.

Estyn's thematic reports in 2013 address matters that are of central concern to policy makers. Our reports are also intended to contribute to the wider thinking and debate about policy development in areas such as the review of assessment and curriculum. The forthcoming programme of thematic reports for 2014 promises to be equally informative and influential with reviews underway in relation to topics as diverse as bullying, school attendance and regional support for school improvement, as well as the next reports in our series on literacy and numeracy.

We hope that our thematic reports are being used widely by providers to help to improve their practice in order to enhance outcomes for learners in Wales. This compendium of all the thematic reports published so far this year brings together detailed analyses and recommendations from each report for easy reference. The full reports, including case studies, are available on our website: <http://www.estyn.gov.uk/english/thematic-reports/recent-reports/>.

Ann Keane

Her Majesty's Chief Inspector of Education and Training in Wales

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Title: A review of standards and the quality of provision for engineering in further education colleges and work-based learning providers in Wales – January 2013

Main findings

- 1 Further education (FE) colleges and work-based learning (WBL) providers have many examples of good and sometimes excellent practice. This includes examples of work with industry to develop advancing technology, the provision of novel engineering training opportunities for learners and companies, and the development of more effective links with schools to introduce pupils to engineering technologies.
- 2 The rate at which engineering learners in FE colleges and WBL providers complete and attain their qualifications is close to the average for all learning areas within the FE sector and above average within the WBL sector. The rate of improvement over recent years is similar to the improvement in all learning areas during the same period.
- 3 In 2009-2010, FE engineering programmes were ranked joint 11th of the 20 learning areas in terms of learners' success rates. In WBL, engineering programmes were ranked 3rd of the 11 learning areas in terms of learners' framework success rates¹.
- 4 In the lessons and sessions observed during the survey, the quality of teaching and learning was generally of good quality and sometimes excellent. Learners study in accommodation of good quality and mostly have enough materials and equipment.
- 5 The majority of engineering learners progress well from one level of study to the next. Most learners progress onto programmes at a higher level, and gain apprenticeships or employment of an engineering or technical nature. However, the proportion of engineering learners who leave programmes to unknown destinations, at 30% for FE and 21% for WBL, is too high, although this is generally consistent with other learning areas. Because of this, it is difficult to judge how successful the outcomes of engineering programmes are in terms of the career paths of all learners after they have finished their courses.
- 6 The curriculum offered by engineering providers mainly reflects a balance between the aspirations of learners and the needs of local and regional industry. Courses in motor vehicle maintenance attract learners into engineering in schools and colleges, with many progressing onto other engineering programmes.
- 7 In the majority of providers, learners are able to progress onto specialist HE programmes at level 4 through franchise arrangements with the university sector. However, many of the franchise arrangements for these programmes are overly bureaucratic and restrictive.

¹ In WBL, the framework qualification consists of learners NVQ and key skills at the appropriate level and their technical certificate. All parts of the framework have to be achieved for the learner to gain framework success.

- 8 Providers have extended their full-time programmes and often include the Welsh Baccalaureate Qualification (WBQ). The pathway to apprenticeship programme (PtA) is becoming a successful programme in preparing learners for apprenticeship programmes. The principal learning programme, in partnership with the schools' WBQ programme, is improving the opportunities for learners and forging better links between providers and schools.
- 9 FE colleges have started to provide engineering programmes that embrace a number of the emerging, newer technologies, such as photonics, composite materials and technologies associated with the energy industry. However, the extent of this involvement is small overall.
- 10 Not enough colleges and WBL providers challenge their learners to take part in external competitions such as regional and national skills competitions. Although there have been some improvements, Wales remains under-represented in the UK team for the Skills Olympics.
- 11 Engineering learners benefit from their provider's links with the engineering industry. They benefit from teaching and assessing staff's contribution to 'live' industrial projects, particularly when they see the practical application of the latest technologies. With only 5% of enrolments in FE colleges, engineering contributes around 23% of commercial activity. The engineering route in work-based engineering contributes well in relation to the total provider activity. Courses represent only 16% of leavers, with engineering contributing 44% of the total business activity normally.
- 12 Engineering learners generally express a strong degree of satisfaction with their programme of study, particularly the practical sessions. They express lower levels of satisfaction with formal theory classes, particularly those that require more advanced levels of mathematics, literacy and science. Too many underestimate the importance of skills in these areas to success in their engineering programmes.
- 13 There is increased competition for places on some engineering programmes by learners. This is particularly the case when the provider has good links with employers. Although the performance of local area networks and the schools/colleges/WBL provider links are generally improving, not all providers are able to attract enough school leavers with the right skills into engineering careers. Too often an engineering career is seen by schools as an option for the less able pupils, mainly boys.
- 14 Despite various projects over the years, such as Women into Science and Engineering (WISE), female learners remain under-represented on engineering programmes, where they typically make up less than 10% of learners.
- 15 The links between FE colleges and WBL providers and industry are a particular strength. However, both FE and WBL sectors are mindful of competition from other providers in terms of their business activity and their ability to retain technical staff, teachers and assessors of high quality. This can have a negative impact on the extent of collaboration.

Recommendations

In order to continue to improve standards and the quality of provision for engineering education and training in FE colleges and WBL providers:

the Welsh Government should:

- R1 review arrangements to allow colleges and other providers to offer HNC (D) programmes in their specialist areas without the need to enter franchising arrangements with the university sector; and
- R2 consider subsuming the various Wales-wide engineering-based initiatives and projects within an overall national engineering education and training strategy for Wales, which can be supported by the engineering industry and all other stakeholders.

Further education colleges and work-based learning providers should:

- R3 improve the rate at which learners complete and attain their qualifications;
- R4 monitor more closely the destinations of all learners when they leave their programmes;
- R5 improve partnership arrangements with schools so that all pupils can:
- have better access to information on education, training and career opportunities in engineering; and
 - understand that, to succeed in engineering, pupils need numeracy, literacy and physical science skills at an appropriate level;
- R6 continue to develop the curriculum to ensure that all learners, including females, who are interested in engineering-based careers can enter programmes at a level that are most appropriate for them;
- R7 develop strategies to enable a quicker, more appropriate response to the needs of industry for bespoke training and employer-led consultancy; and
- R8 encourage more learners to enter regional and national competitions of their engineering skills and improve the Welsh representation in the UK team for the Skills Olympics.

Title: Initial review of the effectiveness of the Welsh Government's Traineeships and Steps to Employment programmes – January 2013

Main findings

- 1 The referral process to the programmes is not robust and where it is effective it relies on personal relationships rather than efficient systems. The quality of the information that learners and providers receive from referral agencies is often incomplete and does not help providers to match learners to appropriate programmes.
- 2 Eligibility rules and the short length of the programmes often restrict the levels of learning and the progression that learners can realistically make. The achievement of target outcomes both for learners and for providers is hampered by the lack of work experience and sustainable employment opportunities. Employers often do not fully understand the programmes.
- 3 Overall, contract targets are not being met and learners are taught in groups that are too small to be educationally or economically viable. Providers, DfES and the National Training Federation for Wales (NTfW) are working together to resolve these difficulties.
- 4 Welsh government data shows that, overall, standards and progression rates on all programmes are at best adequate. The numbers of learners progressing into other training or employment are higher from the Traineeship programmes than from the Steps to Employment programmes.
- 5 The majority of providers identify and record the needs of learners, address barriers to learning and do their best to address these needs. Providers work well with partners to secure a variety of support for learners. However, in a minority of providers, serious client barriers are not identified early enough.
- 6 Overall, the standard of basic skills and literacy support provided is too variable. In the best cases, individual client needs are identified and learning support is delivered early in their training programmes. However, in too many cases, the starting point and progress made by learners in developing their literacy skills are not identified or tracked respectively. Improvement in literacy is limited as a result.
- 7 Most providers have adapted their working practices to accommodate learners referred to the Traineeships and Steps to Employment programmes. Providers work well within their consortium and with external partners including employers to develop the programmes.
- 8 All providers have sophisticated management information systems in place to record high-level outcomes for learners. Most disseminate this information across the consortium but not all monitor the detail of learner progress well enough to help individual learners to succeed.

Recommendations

In order to improve the provision of Traineeships and Steps to Employment training programmes:

the Welsh Government should:

- R1 make sure that referral agencies have a clear understanding of what the available training programmes provide and which programmes are suitable for individual learners;
- R2 work closely with providers to address issues that affect the take-up of Traineeship and Steps to employment programmes; and
- R3 make sure that employers have a better understanding of the programmes.

Training providers should:

- R4 check that all learners are placed on appropriate training pathways;
- R5 encourage all learners to disclose any information that may adversely affect the identification of learning and employment barriers;
- R6 improve progression rates on all programmes;
- R7 make Individual Learning Plans sufficiently detailed and challenging for learners;
- R8 improve basic skills testing and the tracking of progress;
- R9 work with employers to provide suitable work and community placements; and
- R10 ensure that employers are fully informed about learners' off-the-job training requirements.

All referral agencies should:

- R11 improve the quality of the initial information given to training providers about learners in the referral process;
- R12 encourage all learners to disclose any information that may adversely affect the identification of learning or employment barriers; and
- R13 improve information-sharing between the different agencies that work with young people.

**Title: Welsh Language Development in the Foundation Phase –
January 2013**

Main findings

- 1 In the majority of English-medium schools inspected during 2010-2012, most children make suitable progress in speaking and listening to Welsh in the Foundation Phase, particularly during whole-group sessions. Children have a positive attitude towards learning Welsh. Their speaking and listening skills are developing well but reading and writing are generally underdeveloped in the Foundation Phase. In one-in-ten schools, children make excellent progress in acquiring Welsh language skills. In these few schools, nearly all children have a good understanding of their Welsh work across the curriculum. They use a wide range of words and sentence patterns correctly and by the end of key stage 2 can read accurately and with expression.
- 2 While standards have also improved overall in English-medium non-maintained settings during 2010-2012, children's progress in Welsh is a concern in over a third of these settings. In these settings, children generally lack confidence in using Welsh outside short whole-group sessions, such as registration periods or singing sessions. They do not use Welsh in their play or learning without prompts from adults.
- 3 Welsh Language Development is good in the majority of the schools and settings visited during this survey. In most of these schools and settings, Welsh is an integral part of daily routines. Nearly all children enjoy learning Welsh and learn to use a variety of Welsh words and phrases with each other. The most effective schools and settings develop children's Welsh by improving their confidence, self-belief and attitudes to learning Welsh. Practitioners (teachers and other support staff) plan a range of opportunities for all children to learn Welsh in class and outdoors. The most effective work draws on opportunities to introduce Welsh in the other six areas of learning of the Foundation Phase curriculum.
- 4 Children make the best progress in speaking and listening to Welsh. At best, they ask and answer simple questions accurately and confidently, but they do not often use Welsh in their play activities outdoors. Children generally make less progress in reading and writing Welsh. This is partly due to the appropriate focus on developing good oral skills in early Welsh language learning. A minority of schools visited are introducing systematically planned Welsh reading and writing activities, which often mirror the children's progress in reading and writing in English. When children write for 'real reasons', such as making shopping lists before they go to the shops or inviting friends to their party, they are highly engaged and make good progress in writing Welsh.
- 5 In most schools inspected in 2010-2012, provision for Welsh second language in the Foundation Phase is good. However, in a minority of schools staff do not devote enough time to teaching Welsh. In a few of schools and settings visited, staff are not devoting enough direct teaching time to deliver Welsh Language Development effectively. Practitioners do not practise and repeat new Welsh words regularly or offer children enough opportunities to practise their Welsh. In sessions where the

quality of Welsh teaching is excellent, teachers fire children's imagination, activities are stimulating, and children respond enthusiastically, extend their vocabulary and become more confident in using Welsh.

- 6 Generally, when practitioners' own Welsh is fluent, children's progress in learning Welsh is better. These practitioners use Welsh consistently across all areas of learning. Where there are no confident Welsh-speaking practitioners in a school or setting, the use of Welsh by staff is usually more limited. This means that children hear less Welsh and have less opportunity to practise it. Where there are gaps in practitioners' knowledge, particularly in the grammar, intonation and pronunciation of Welsh, children can learn to speak or pronounce incorrectly. In a few cases, practitioners cannot sustain using Welsh long enough and use a very limited amount of incidental Welsh² with the children. Most settings and schools have very few fluent Welsh-speaking practitioners and many use Welsh television programmes or DVDs to try to compensate for this, so that children can hear more spoken Welsh. However, this approach does not secure sustained progress in learning.
- 7 Schools are not required to record individual children's progress in Welsh Language Development and there is no formal assessment data available at school, local authority or national level. This means that there is no way to track children's progress in Welsh from the beginning of their education to the end of the Foundation Phase and onwards to key stage 2.
- 8 The quality of leadership and management is at least good in most of the settings and schools we visited. Effective leaders implement Welsh Language Development thoroughly in the Foundation Phase. A minority of schools and settings visited use a consistent approach to teaching Welsh. Practitioners are fully engaged in ensuring that all children learn to speak, read and write Welsh confidently.
- 9 Leaders do not receive enough support and training on how to evaluate the effectiveness of Welsh Language Development teaching and learning. Very few local authorities offer training for headteachers and senior leaders to evaluate standards and provision in Welsh in the Foundation Phase.
- 10 Where practitioners in schools receive regular training and support, they are more confident in teaching Welsh. However, there is a wide variation in the amount of training available to practitioners in different authorities. In the best cases, practitioners receive regular update training and support, but many have received only limited training to develop their Welsh during the past few years. Welsh training opportunities for practitioners in most settings are very limited, often due to difficulties in releasing staff to attend training and the cost of paying for staff to attend training outside their normal working hours. Not all local authorities share good practice in Welsh Language Development well enough with schools and settings.

² Incidental Welsh refers to interactions between adults and children that arise naturally in an unstructured situation where adults transmit new information or give children practice in developing a communication skill.

Recommendations

Schools and settings should:

- R1 ensure that enough time is devoted to the direct teaching of Welsh;
- R2 plan good opportunities for pupils to use Welsh in other areas of learning and in outdoor activities;
- R3 increase the level of skills input to develop pupils' writing in Welsh;
- R4 monitor provision and progress in Welsh Language Development; and
- R5 provide practitioners with opportunities to improve their Welsh language skills and language teaching skills.

Local authorities should:

- R6 provide support and training in Welsh Language Development for headteachers, Foundation Phase leaders and lead practitioners;
- R7 provide better access to Welsh language support and training for practitioners, especially in non-maintained settings; and
- R8 share good practice in Welsh Language Development.

The Welsh Government should:

- R9 review whether the Foundation Phase Outcomes Indicator should capture children's progress in Welsh Language Development;
- R10 develop additional Welsh language and pedagogy training for practitioners in non-maintained settings; and
- R11 provide more exemplar materials of good practice in Welsh Language Development.

Title: Numeracy in key stages 2 and 3: a baseline study – June 2013

Main findings

- 1 This report is the first in a series to look at standards in numeracy at key stages 2 and 3 and at how schools are developing pupils' numeracy skills across the curriculum. It provides a baseline for later reports, which will focus on the impact of the numeracy component of the Literacy and Numeracy Framework.
- 2 In 2012, about four-fifths of pupils achieved the expected level in National Curriculum teacher assessments of mathematics at the end of key stages 2 and 3. This was a slight improvement on previous years. At both key stages, girls generally outperform boys.
- 3 In the 2009 PISA mathematical literacy tests for 15-year-olds, 20% did not reach the level 2 PISA baseline in the UK overall. Level 2 in PISA means being able to answer straightforward questions involving familiar contexts. In Wales, 26% of pupils did not reach this level. Wales also had the lowest percentage of high-achieving pupils in mathematical literacy compared with other UK countries.
- 4 In about two-fifths of the primary schools and a half of the secondary schools inspected in 2010-2012, many pupils have weak numeracy skills or do not apply them well enough across the curriculum. There has been little progress in pupils' numeracy over recent years.
- 5 A majority of pupils in the schools surveyed have sound measuring and data skills, but around half of the pupils do not have a secure grasp of basic number skills and do not recall key number facts readily.
- 6 In many of the surveyed schools, there is limited evidence of pupils applying numeracy skills at a high level. Too often, pupils have difficulty recalling basic number facts and do not have effective strategies to help them with mental calculations. Difficulty in recalling number facts slows pupils' ability to perform basic calculations. Many of the schools move too quickly to introduce a written technique for solving number problems before pupils have developed a sound understanding of number and place value. Many pupils have difficulty working with decimals, fractions and percentages and do not understand the relationship between, for example, $\frac{2}{5}$ ths, 0.4 and 40%. Pupils' lack of understanding of key numerical facts and relationships means that they struggle to apply numerical reasoning skills to solve written problems, especially problems that involve more than one process.
- 7 Overall, a significant minority of pupils in the surveyed schools either do not have or do not apply their numeracy skills in line with the expectations of the numeracy component of the Literacy and Numeracy Framework. Too often, numeracy co-ordinators focus on developing pupils' measuring and data skills, but do not pay enough attention to how the school develops pupils' number skills and numerical reasoning in mathematics lessons and across the curriculum.

- 8 Around half of the secondary schools visited do not enter key stage 3 pupils for Essential Skills Wales (ESW) Application of Number qualifications or only enter Year 9 pupils for level 1. This means that pupils do not always study at a level that is suitable to their individual needs. In a majority of schools, too much time is spent on completing the paperwork for these qualifications rather than on improving pupils' actual skills.
- 9 Many schools do not have a clear policy on how to develop pupils' numeracy skills in mathematics and across the curriculum. Too often, there is no agreed, whole-school approach to building pupils' numeracy skills or to performing basic calculations. This leads to a lack of consistency in using numeracy skills across classes and departments that confuses pupils. A very few schools have stand-alone, detailed numeracy development plans that show how specific initiatives and strategies are co-ordinated in a whole-school approach.
- 10 In a very few of the primary schools surveyed, provision for numeracy is highly effective and teachers offer well-planned and imaginative opportunities to apply and develop pupils' skills across the curriculum. In these schools, numeracy skills are taught systematically in mathematics and pupils are given enough opportunities to apply their skills in meaningful contexts in subjects other than mathematics. In the other primary schools surveyed, pupils tend to repeat skills at the same level year-on-year. This is often because schemes of work do not link well enough to the expectations of the mathematics curriculum or to a progressive numeracy framework.
- 11 Only a few of the secondary schools visited give numeracy a high enough priority in their school improvement plans. These schools have usually carried out a thorough audit of provision, leading to comprehensive plans for developing numeracy across the curriculum. In these schools, there is an agreed, co-ordinated approach to teaching and learning numeracy. However, most secondary schools are only starting to plan for numeracy across the curriculum. While the majority of mathematics departments provide a suitable range of experiences for pupils to develop numeracy skills, the opportunities for pupils to apply these skills in other subjects, such as science and geography, are often too narrow and mainly involve simple graphical or data work.
- 12 In very few schools are teachers' assessment and marking of pupils' work of a consistently high standard, where an agreed policy is followed by all staff. In these schools, staff assess work against an agreed numeracy mark scheme and provide appropriate suggestions on how to improve work further. Only a minority of primary schools and a few secondary schools have effective systems to track and record pupils' numeracy skills across the curriculum beyond mathematics. Where schools have effective systems, teachers are clear about the skills each pupil has or has not mastered and use this information well to plan further reinforcement activities. A few local authorities produce high-quality materials to support their schools to assess and track pupils' numeracy skills across the curriculum.
- 13 Most schools have well-established links with their partner primary or secondary schools. Many primary and secondary schools have common, transitional units of work, but only a minority focus on numeracy and only a very few arrange joint

development activities that focus on a coherent approach to developing pupils' numeracy skills. Very few primary schools pass on information about pupils' standards in numeracy to secondary schools, although they generally transfer information about standards in mathematics.

- 14 Nearly all of the secondary schools but only around half of the primary schools visited provide effective numeracy intervention programmes for pupils who find mathematics a challenge. Most of the schools that have an intervention programme track pupils' progress well over the course of the programme and a majority continue to monitor pupil progress after the end of the intervention and provide top-up support if necessary.
- 15 In a minority of primary and secondary school improvement plans, there is a focus on building the capacity of staff and leaders to support numeracy. A significant minority of teachers need training and support to deliver the numeracy component of the Literacy and Numeracy Framework. Overall, there has been less training for teachers to develop pupils' numeracy than for literacy. Most schools have not carried out a formal audit of staff confidence and competence in teaching numeracy.
- 16 Most primary pupils and many secondary pupils believe that numeracy and literacy skills are equally as important to succeed in their next stage of education or employment. A few key stage 3 pupils say that they find it difficult to apply their numeracy skills in other subjects because, although they learn skills in mathematics lessons, their understanding is not secure enough to apply them in unfamiliar contexts. A majority of pupils struggle to give examples of how numeracy is relevant to their everyday lives.

Recommendations

Schools should:

- R1 make sure that pupils master basic number skills thoroughly in mathematics lessons and have effective strategies to recall essential number facts quickly and accurately;
- R2 agree whole-school approaches to performing simple calculations;
- R3 provide more opportunities for pupils to use numeracy skills, particularly number skills and numerical reasoning, in subjects across the curriculum;
- R4 make sure that numeracy activities stretch pupils appropriately, including the more able;
- R5 assess and track pupils' progress in numeracy skills across the curriculum and use assessment information to plan better numeracy activities;
- R6 design transitional primary/secondary school activities to support consistency and progression in pupils' numeracy skills;
- R7 provide opportunities for numeracy co-ordinators and mathematics departments

to work together with other teachers to improve their knowledge, skills and confidence to develop pupils' numeracy skills; and

R8 monitor and evaluate the impact of strategies for improving numeracy.

Local authorities and regional consortia should:

R9 support schools to help staff to improve their knowledge, skills and confidence to develop pupils' numeracy through their subjects; and

R10 share best practice between schools.

Title: Science in key stages 2 and 3 – June 2013

Main findings

- 1 In the majority of lessons observed as part of this survey, standards in science were good or better in key stages 2 and 3. Pupils achieved excellent standards in only a few lessons. In a minority of lessons, pupils are making too little progress in their knowledge and understanding of science or in their writing and numeracy skills.
- 2 Teaching is good or better in the majority of lessons in key stages 2 and 3. In the few excellent lessons, teachers have high expectations of their pupils including the more able. These teachers plan a wide range of stimulating activities that capture pupils' imagination and promote a sense of excitement about learning science. In a minority of lessons, over-direction by the teacher limits opportunities for pupils to explore their own ideas and pupils are given tasks that are too easy, such copying information from websites, which limit the development of their scientific understanding. In the majority of lessons, more able pupils are not stretched enough. Only in a very few cases do pupils get the opportunity to pursue their own scientific interests. In a few lessons in key stage 2, teachers do not have a secure understanding of science and pass on their misunderstandings to pupils.
- 3 There are shortcomings in the assessment of science in nearly all the primary schools and in half of the secondary schools visited. In most of the schools, teachers set pupils tasks in science to provide evidence for teacher assessment at the end of key stages 2 and 3. Teachers undertake moderation procedures, including working across primary and secondary schools. Even so, the reliability and validity of teacher assessment in science are doubtful because of the lack of external verification and of clear assessment criteria.
- 4 Since 2005, the proportion of key stage 2 pupils attaining the expected level (level 4) or above in teacher assessments has been higher in science than in the other core subjects, but there has been a decline in the proportion of pupils achieving the higher levels (level 5 or above). Since 2005, the proportion of key stage 3 pupils attaining the expected level (level 5) or above has improved. Since 2007, science has performed above English and mathematics, but below Welsh first language. The performance of boys is below that of girls at both key stages.

- 5 Curriculum planning in science lacks challenge and structure in a minority of primary and secondary schools. The emphasis on investigative skills in the current science National Curriculum orders introduced in 2008 does not help schools to plan progression in scientific knowledge and understanding. Most schools have not developed new schemes of work in line with the changes made to the National Curriculum in 2008. The few secondary schools that have developed such schemes of work do not prepare pupils well enough for GCSE science syllabuses. Many schools have retained a focus on content in the curriculum that is helpful in providing progression in understanding even though the content is not specified in the current National Curriculum subject orders for science.
- 6 In key stage 2, the time devoted to teaching science varies between one and three hours a week. In primary schools that only provide an hour of science a week, there is not enough time to cover all aspects of the science National Curriculum effectively. The time allocated to science at key stage 3 is sufficient in all schools.
- 7 A majority of primary and secondary schools have suitable plans to develop pupils' science investigation skills within interesting contexts. However, a minority of schools do not plan or provide opportunities for pupils to apply their scientific knowledge or understanding well enough.
- 8 In key stage 3, the range of numeracy techniques developed through science investigations is too narrow and many departments limit the development of pupils' understanding of mathematical techniques by offering shortcuts to solving problems. Only a few schools provide suitable opportunities for pupils to answer PISA-type questions that develop pupils' thinking skills and ability to apply subject knowledge.
- 9 The majority of secondary science departments visited are led effectively by teachers who are enthusiastic about science. However, only about half the primary leaders have a clear vision for developing science in their schools. Only a minority of secondary schools support their partner primary schools to develop science.
- 10 A majority of schools have suitable arrangements for gathering first-hand evidence for the self-evaluation of science and produce suitably self-critical reviews of performance. A minority of schools do not assess the impact of teaching on standards in science thoroughly enough.
- 11 Most schools have suitable opportunities to share good science teaching and learning within the school. In a few schools, teachers observe other teachers and science department meetings focus on the impact of teaching methods on standards. However, very few secondary schools and no primary schools in this survey have made links with other schools to share ideas for teaching science. Only a very few teachers attend courses to widen or develop their understanding of how to teach science. There is too little support for science teaching from local authorities or regional consortia.

Recommendations

Primary and secondary schools should:

- R1 provide challenging science opportunities to stretch all pupils, particularly the more able, and eliminate tasks that are too easy;
- R2 provide more opportunities for pupils to pursue their own scientific interests;
- R3 ensure that assessment and marking practices provide pupils with meaningful advice on how to improve their scientific understanding and skills; and
- R4 work with other schools to share effective approaches to teaching and assessing science.

In addition, primary schools should:

- R5 make sure that pupils are taught science for at least two hours a week; and
- R6 provide training for teachers with weak science subject knowledge.

In addition, secondary schools should:

- R7 plan to use a wider range of numeracy skills in science lessons.

Local authorities should:

- R8 provide more professional development, support and advice to schools on science teaching and learning; and
- R9 support schools to share best practice in science education.

The Welsh Government should:

- R10 improve the reliability and validity of teacher assessment by reviewing assessment criteria and introducing an element of external moderation; and
- R11 review the National Curriculum subject orders for science to include essential content.

Title: Religious education in secondary schools – June 2013

Main findings

- 1 GCSE courses in religious studies have gained in popularity over recent years. More pupils gain a qualification in religious education than in any other non-core subject in Wales. The number of pupils taking the full GCSE course in religious studies has risen significantly over the last five years, with just over a quarter of the pupils in Year 11 entered in 2012. The number of pupils taking the short GCSE course in religious studies has also risen steadily over the last five years, with just over half of the pupils in Year 11 entered in 2012. For both courses, more girls than boys are entered, though the difference is greater with the full course.
- 2 Attainment in the full GCSE course in religious studies has risen steadily over the last five years. The percentage of pupils attaining grades A* to C in religious studies is well above the average for other subjects. While attainment in Wales is broadly similar to that for the UK as a whole, a higher proportion of pupils attain grade A* in Wales.
- 3 Attainment in the short GCSE course in religious studies has fallen over the last five years, although it recovered slightly in 2012. In spite of this fall, the percentage of pupils attaining grades A* to C in Wales has remained consistently better than for the UK as a whole, and a higher proportion of pupils attain grade A* in Wales.
- 4 A significantly higher percentage of girls attain grades A* to C than boys in both the full course and short GCSE courses in religious studies. The gap between this percentage for girls and boys is wider in Wales for both courses than it is across the UK as a whole.
- 5 Teacher assessment of pupils' performance in religious education at the end of key stage 3 is not included in the Welsh Government core data sets that cover other National Curriculum subjects and not published nationally in any other way that would enable an analysis of standards at key stage 3 or progress between key stages.
- 6 In the schools visited for this survey, lesson observations and pupils' work show that standards are good in a majority of schools at key stage 3. Standards are not excellent in any of the schools visited, but they are unsatisfactory in a few schools where pupils do not make enough progress. More able and talented pupils constitute the group that is the most likely to underachieve and this is usually because the tasks set by teachers do not challenge them to demonstrate the level of skill and understanding required for level 7 or above.
- 7 Most pupils following the full GCSE course in religious studies at key stage 4 make good progress and a slightly lower proportion of pupils studying the short course also make good progress. Where pupils are not following an examination course at key stage 4, standards in lessons are rarely better than adequate. In these lessons, a minority of pupils misbehave. This suggests that they do not value the lessons and this may be because they do not lead to a qualification.

- 8 Almost all pupils in the lessons observed showed respect for the opinions and beliefs of others. Many pupils value what they learn in religious education and understand how it contributes to their personal and social development. In particular, pupils enjoy engaging with fundamental questions, such as 'is there life after death?', 'what is evil?' and 'what is truth?'. Pupils enjoy learning about different religious responses to questions like these and why people live their lives in different ways as a result of their beliefs. They enjoy considering their own views, and discussing them with peers. They are prepared to talk about a variety of issues relating to religion and ethics and take part in lessons enthusiastically.
- 9 Teaching was good or better in just over two-thirds of the lessons observed for this survey. Teaching was excellent in nearly one-fifth of lessons and unsatisfactory in a very few lessons. These findings suggest that teaching in religious education is better than average for teaching across all subjects in secondary schools inspected since 2010.
- 10 In many schools, at both key stages, religious education teachers:
- have good subject knowledge;
 - teach enthusiastically;
 - use a range of teaching strategies to support learning, particularly through discussion in pairs and groups;
 - use artefacts and audio-visual resources creatively;
 - prepare pupils thoroughly for GCSE examinations;
 - promote pupils' thinking skills effectively; and
 - promote literacy appropriately, particularly oracy and writing skills.
- 11 Many secondary schools use non-specialist teachers to teach religious education and the short GCSE course in religious studies, although they are rarely used to teach the full GCSE course. Non-specialist teachers do not have a negative impact on standards in the majority of schools.
- 12 In the majority of schools, teachers provide pupils with useful feedback, both oral and written, that enables them to understand their progress and how to improve their work.
- 13 Teachers generally have a very good understanding of GCSE requirements, but few have an accurate understanding of the levels of pupil performance at key stage 3 set out in the national exemplar framework.
- 14 The local agreed syllabuses across Wales are very similar, being based on the national exemplar framework for religious education for 3 to 19-year olds in Wales. Almost all schools meet the requirements of their local agreed syllabus. However, a very few schools do not meet the requirements at key stage 4 either because they do not give enough time to cover the syllabus or because, occasionally, lessons are used predominantly to help pupils gain a non-subject qualification such as an Essential Skills Wales qualification.
- 15 In the majority of schools, effective subject leaders set high expectations within the department, monitor other religious education teachers closely, provide appropriate

support and challenge, and delegate aspects of leadership and management amongst colleagues to encourage a collegiate approach. Self-evaluation is good or better in only a minority of religious education departments. The paucity of national data on religious education and religious studies makes it difficult for schools to compare standards with other schools, but only a minority of departments analyse internal examination data thoroughly in order to plan for improvement.

- 16 The lack of opportunities for professional development and learning networks means that good practice is not shared enough and challenges, such as raising boys' attainment, the accuracy of assessing levels of performance at key stage 3, planning for the development of skills and improving self-evaluation, are not addressed effectively.

Recommendations

Schools should:

- R1 develop strategies to raise the attainment of boys at key stage 4;
- R2 improve standards at key stage 4 for pupils who are not entered for a qualification and consider giving all pupils the opportunity to gain an appropriate qualification;
- R3 improve the accuracy of teacher assessment of pupils' levels at key stage 3;
- R4 ensure that tasks are challenging enough to enable more able pupils to reach higher levels at key stage 3;
- R5 ensure that the curriculum, staffing and timetabling arrangements enable all pupils to make good progress through key stages 3 and 4; and
- R6 strengthen self-evaluation and use data in religious education departments to identify where and what to improve.

The Welsh Government should:

- R7 collect, analyse and publish attainment data for religious education and religious studies in the same way as for non-core subjects; and
- R8 work with local authorities and SACREs to improve the opportunities for professional development and support learning networks for teachers of religious education.

Title: Statutory INSET in schools – June 2013

Main findings

- 1 In the most effective schools, the five statutory INSET days are an integral part of a larger strategy for staff development, which involves other strands such as focused task groups, professional learning communities and the production of guidance for wider dissemination among teachers and cluster schools.
- 2 The five statutory INSET days are themselves a valuable period of time that schools dedicate to the professional development of staff. Schools use statutory INSET days to offer training which mostly contributes to school improvement but managers do not monitor systemically its impact on teaching and learning.
- 3 In many of the schools scrutinised in the survey, we found strong links between the focus of the INSET activities and the priorities identified in school self-evaluation reports, improvement plans, and from performance management arrangements.
- 4 INSET programmes cover a wide range of topics, such as assessment and moderation, curriculum development and safeguarding. Over the past five years, literacy has received the most attention during INSET and many schools have focused on improving the teaching and learning of reading and writing.
- 5 In 2012-2013, the Welsh Government expects schools to focus on literacy, numeracy and reducing the impact of poverty on attainment during their INSET days. Almost all schools intend to use at least one INSET day to focus on literacy. A majority of schools have identified numeracy in their INSET plans. Only a minority of schools have plans to focus on reducing the impact of poverty on attainment in 2012-2013.
- 6 A small minority of schools do not use INSET effectively enough or gain the maximum benefit from the training. In these schools, INSET does not contribute fully to school improvement because it is not linked clearly enough to staff, school or national priorities. Often, there is not enough dissemination of successful INSET practice within and beyond the school. In a very few schools, INSET time is not spent on training, but on inappropriate activities, such as organising classrooms and displays. In the schools where this is the case, INSET days contribute little to the professional development of staff or to school improvement.
- 7 Generally, schools consider carefully which days they choose for INSET, so that they provide suitable opportunities for staff training while also minimising disruption to pupils' learning. Most schools hold an INSET day at the beginning of the school year. It is increasingly common for schools to plan a series of after-school or 'twilight' sessions for staff in lieu of one or two INSET days. These days are then identified as closure days for staff and pupils, often at the end of the summer term.
- 8 In many schools, effective organisation and delivery of INSET contribute well to the professional development of staff. Fewer schools are using external training providers or educational experts to provide INSET than previously. More and more

schools make use of in-house provision. This approach makes good use of the expertise of the teaching and support staff and helps to sustain and build capacity for improvement. Many schools also collaborate with other schools to share good practice and the costs of training.

- 9 The leadership and management of INSET itself are good in many schools. In these schools, leaders ensure a coherent approach by linking the INSET to priorities from performance management, self-evaluation and the school improvement plan. As a result, the training makes an effective contribution to the professional development of staff and to school improvement.
- 10 The conditions of pay and service of learning support staff often vary between schools. As a result, not all of these staff attend INSET sessions with teachers. Only in a minority of schools are learning support staff included. In a few schools, support staff are involved in planning and leading INSET, which further develops and makes good use of their professional skills.
- 11 In many schools, there is too little evaluation of the impact of INSET. Often, while some evaluation occurs at the end of the training day, there is no further monitoring of its impact on teaching and learning over time. Few evaluations analyse the impact of the training on pupils' progress and achievement.
- 12 Many local authorities make a good contribution to schools' INSET. They generally provide training of good quality and help schools to network and collaborate with others. Along with schools, a majority of local authorities do not know enough about the impact of INSET. They do not collate enough information about whether INSET leads to improvements in staff knowledge and skills, pupil outcomes, organisational changes or provides value for money.

Recommendations

Schools should:

- R1 focus more on national priorities in INSET activities, such as tackling the impact of poverty on achievement;
- R2 make sure that INSET is linked closely to the priorities identified for school improvement;
- R3 seek ways of involving learning support staff in INSET so that they can contribute fully to school improvement; and
- R4 improve the evaluation of INSET by monitoring its impact on staff performance and pupil outcomes.

Local authorities should:

- R5 support schools in monitoring and evaluating the impact of INSET; and
- R6 collate information about effective INSET and disseminate to all schools.

The Welsh Government should:

R7 provide guidance to help schools monitor and evaluate the impact of INSET on pupils' performance.

Title: The effectiveness of learner-involvement strategies in further education institutions and Welsh for adults centres – July 2013

Main findings

- 1 The Welsh Government's Learner Involvement Strategy guidance for post-16 learners and the National Union of Students learner representation project have helped further education institutions (FEIs) and Welsh for adults centres to improve how learners shape their learning experience.
- 2 Providers in both sectors have moved considerably beyond using learner surveys as the main ways of collecting and analysing learners' views and opinions. They involve learners well in activities that help them shape the curriculum, influence improvements in the quality of teaching, offer advice to providers regarding the quality of facilities and contribute to self-assessment and quality development planning. As a result, learners play an important role in improving provision.
- 3 Providers in both sectors have difficulty in measuring the impact of learner-involvement on learner attainment or skills. Providers are only beginning to implement formal systems for recording and recognising these outcomes for learners. In both sectors it is clear that learners' involvement in shaping their learning experience helps them to improve their personal and social skills and their wellbeing.
- 4 In the Welsh for adults sector, providers and learners consider that learners improve their Welsh language skills by using Welsh in a different context during their learner-involvement activities.
- 5 Providers in both sectors make good use of a wide range of learner-involvement activities. These include the use of class representatives, talking to learners as part of observations of teaching and learning, panels involving staff and learners, focus groups and formal discussions with individuals and enrichment activities that extend learners' skills. Importantly, providers adapt activities well to suit the needs of their own organisation and learners in order to maximise the benefits of learner involvement.
- 6 Learners have a positive view of the way that FEIs and Welsh for adults centres involve them in shaping their learning experience. They consider that providers listen to their views and opinions and take them seriously.
- 7 All providers in both sectors have appropriate arrangements in place to report back to learners what has happened as a result of their involvement. Generally, learners have a good understanding of how providers have responded to their views.

- 8 However, in many cases, Welsh for adults centres do not provide feedback about what learners in individual classes have said in surveys. As a result, tutors are unaware of what they could do to improve the quality of the learning experience for their learners. Similarly, learners do not know how their views have influenced improvements to their class or course.
- 9 Many Welsh for adults tutors are open to discussion with learners about how they can improve what they offer to learners. However, not all tutors understand the importance of canvassing the views and opinions of learners on an ongoing basis in order to make changes as courses progress.
- 10 Learners in FEIs consider that taking part in learner-involvement activities fosters skills that help them in their studies, for example the extra responsibilities they take on motivate them to work harder; or they improve their time management skills in order to complete all their activities successfully. However, learners in FEIs caution that acting as a class representative often takes time away from their studies and this can have a negative impact on their course outcomes.
- 11 Welsh for adults learners consider that taking part in focus groups or learner panels, or acting as a class representative, helps them to use all four language skills in a different context and thus contributes to improving their achievement. However, learners who undertake the role of class representatives consider that they would benefit from a more comprehensive briefing about the role of the class representative. Learners who take part in learner panels raise concerns about their capacity to attend panels in terms of time, care arrangements and travel costs.
- 12 The National Union of Students Student Representation Project helps learners to contribute their views and opinions on the shape of courses and the delivery of the curriculum. Class representatives work well with learners to discuss issues and ideas and to gain feedback for tutors. They work well with tutors and course managers to try and resolve issues, such as the timing of assignments. The project has been successful in improving how tutors consult with young people and encourages tutors to review how and what they teach.
- 13 Overall, effective learner-involvement strategies:
 - deploy a wide range of different involvement activities that move beyond learner questionnaires and surveys to help learners shape their learning experience;
 - improve the personal and social skills of learners and contribute to improving their subject skills;
 - encourage staff to listen to learners and take their views seriously; and
 - provide feedback to learners that help them to understand what action has been taken as a result of their involvement.

Recommendations

Further education institutions should:

- R1 put formal systems in place to record and recognise the range of personal and social outcomes achieved by learners as a result of taking part in learner-involvement activities; and
- R2 make sure that their arrangements for involving learners help learners to shape decisions that affect:
- learner outcomes;
 - teaching and assessment;
 - the curriculum;
 - resources, facilities and venues;
 - support for learners;
 - quality improvement; and
 - overall leadership and management of provision.

The National Union of Students should:

- R3 record and recognise the impact of class representatives or student governors on teaching and learning and the management and development of further education institutions.

Welsh for adults centres should:

- R4 put formal systems in place to record and recognise the range of personal and social outcomes achieved by learners as a result of taking part in learner-involvement activities;
- R5 improve their use of learner voice surveys or questionnaires to:
- improve the course for current learners;
 - provide feedback at class level; and
 - help learners to understand how their views and opinions have contributed to changes made to their course, the quality of teaching and assessment and the quality of provision;
- R6 improve class representatives' understanding of their role and what is expected of them;
- R7 improve arrangements for supporting learners to act as class representatives or take part in learner panels; and
- R8 improve tutors' understanding of their role in helping learners contribute to improving their course and learning experiences.

Title: The impact of ICT on pupils' learning in primary schools – July 2013

Main findings

Standards

- 1 Standards in ICT are good or excellent in around half of the primary schools visited for this survey. Standards in ICT are better in the Foundation Phase, relative to age, than in key stage 2. Where standards are not good pupils generally do not develop the full range of ICT skills that they should in key stage 2. Over half of the schools do not use ICT well enough to stretch more able and talented pupils.
- 2 Pupils' skills in using ICT for presenting information are good in most primary schools and nearly all pupils use ICT well to research information in different subjects. However, pupils in key stage 2 do not generally develop their data-handling or modelling skills well enough. This hinders the development of their thinking and problem-solving skills, and their application of higher-order number skills.
- 3 The areas that are weak within ICT as a subject are also weak in the use of ICT skills in other subjects. Pupils do not apply ICT skills learned in ICT subject sessions well enough in other subjects and not all schools teach pupils these skills in the first instance.
- 4 The impact of ICT on standards in literacy is good or better in the majority of schools. In these schools, boys who are reluctant readers and writers are motivated by ICT to improve their literacy skills. In a few schools, pupils' oracy, presentation, research and writing skills, as well as their collaborative and thinking skills, improve significantly through working on video-filming, editing and animation.
- 5 The majority of schools use ICT to support numeracy interventions and a minority do so well and can show a link between the use of ICT and an improvement in standards.

Teaching and learning

- 6 In nearly all the primary schools, ICT has a positive impact on teaching and learning, mainly by motivating and engaging pupils. With a few exceptions, practitioners (teachers and support staff) make good use of ICT to engage and enthuse pupils.
- 7 The quality of teaching in ICT is better in the Foundation Phase than in key stage 2. Generally, practitioners in the Foundation Phase are competent enough in ICT to support pupils appropriately. Practitioners are generally less competent in delivering the full range of the ICT programme of study in key stage 2.
- 8 Most schools have a current scheme of work for ICT that sets out progression and continuity in all aspects of the subject. However, the implementation of these schemes of work is adequate or worse in over half the schools surveyed. Neither do schools use the Skills Framework well for planning progression in pupils' ICT skills.

- 9 The assessment and tracking of pupils' skills in ICT are only adequate or unsatisfactory in the majority of schools visited. As a result, many pupils are not making enough progress in using ICT. Only in just over a half of the schools do teachers assess pupils' work against the National Curriculum levels at the end of key stage 2 and a few have yet to develop any assessment procedures at all in ICT.
- 10 Primary and secondary schools do not always share a common understanding of standards in ICT. For example, in response to Estyn's questionnaire survey, 60% of primary schools in our survey said that pupils' skills in the use of spreadsheets are good or better compared with none of the secondary schools.

Leadership and management

- 11 Around half of the primary schools visited are successful in raising standards in and through the use of ICT. The leaders in these schools have a clear vision and a determination to improve staff capacity, planning and provision for ICT. They ensure that all staff have the competence and confidence to use ICT well. In around a half of schools, however, leaders have not ensured that professional development in ICT enables practitioners to meet the ICT learning needs of pupils.
- 12 A third of the schools visited do not have an ICT plan that prioritises key developments, such as the introduction of portable technologies (tablet computers and mobile phones). Often schools do not consider planning for new technologies a priority because they do not feature clearly in National Curriculum orders or guidance.
- 13 Many leaders do not evaluate the effectiveness of their ICT plans with enough rigour to judge the impact on pupils' ICT or literacy and numeracy skills. In particular, too few leaders in schools make a baseline assessment of pupils' ICT skills before implementing a project or initiative to measure its impact.
- 14 There are too few educational Welsh-medium applications for portable technologies. Few leaders of Welsh-medium schools take the option to change the interface language of key computer software into Welsh. These issues can give pupils the impression that Welsh is not relevant in ICT.
- 15 Local authorities provide nearly all schools with an internet connection. Around a half of the schools surveyed say that the poor quality of the connection hinders their ICT work. This is mainly due to slow connections, which make internet searches for a whole class difficult. The level of filtering and blocking of internet sites by local authorities also hinders classwork unnecessarily in the majority of schools.
- 16 Local authorities provide only limited advice on ICT to schools. Local authority ICT advisory teams are very small and most schools are unsure about ICT support arrangements under the new regional consortia school improvement services.

Recommendations

Schools should:

- R1 develop the full range of pupils' ICT skills at key stage 2 especially in data-handling, modelling and numeracy;
- R2 assess and track pupils' ICT subject knowledge and skills rigorously;
- R3 plan the introduction of portable technologies;
- R4 implement and evaluate a development plan to improve standards in ICT; and
- R5 train teachers so that they are competent to deliver the full range of the IT programme of study in key stage 2.

Local authorities and regional consortia should:

- R6 support schools to improve standards and in all elements of ICT at key stage 2;
- R7 help secondary schools to plan to meet the needs of pupils who were regular users of tablets in primary schools and find themselves in secondary schools where the use of tablets is less frequent;
- R8 assist primary and secondary schools to gain a common understanding of standards in ICT;
- R9 disseminate good practice in ICT in schools;
- R10 support schools' safeguarding arrangements while maximising their access to a range of online digital technologies and services; and
- R11 explain to schools the levels of ICT support that they can expect from the new regional consortia.

The Welsh Government should:

- R12 review the National Curriculum orders and non-statutory Skills framework for ICT to make sure that they remain relevant in light of new technologies;
- R13 support the development of Welsh-medium educational applications for portable devices; and
- R14 provide adequate broadband connectivity for all schools in Wales.

Title: The impact of teacher absence – September 2013

Main findings

- 1 Teachers should cover the absence of colleagues only under unforeseeable circumstances. One outcome of this 'rarely cover' agreement has been an increasing involvement of support and cover staff in the delivery of pupils' education. It is estimated that just under 10% of all lessons are now covered by staff who are not the usual class teacher.
- 2 In primary and secondary schools, learners make less progress in developing their skills, knowledge and understanding when the usual class teacher is absent, and learners' behaviour is often worse, particularly in secondary schools. Teacher absence impacts on pupils across the ability range. Less able pupils are less likely to receive the support they need, and middle ability and more able pupils make less progress than they should because the work set is not challenging enough.
- 3 In most schools visited, the teaching by supply staff not employed by the school is often ineffective, mainly because they do not know enough about the needs of the pupils they teach. It is difficult for these staff to match the work and the level of support to the individual needs and abilities of pupils. Even when cover supervisors are employed directly by the school, the pace of lessons is often too slow and expectations are too low. Much of the work can be time filling activity that is not marked or included in normal work books.
- 4 In most primary schools, the adverse effects of short-term teacher absence on pupils' learning are reduced mainly through providing cover by staff who are employed at the school and are familiar with the learners and with school processes. Pupils in primary schools normally see only one 'cover' staff member in a day, because the staff member is covering for a class teacher who would normally spend their time with the class, which also limits the disruption to their learning. Primary pupils are generally positive about the progress they make in 'covered' lessons.
- 5 The greatest negative impact of teacher absence on pupils' learning occurs in secondary schools. Supply staff who do not normally work at the school do not know the needs of the learners as well as their usual classroom teachers and the work set is often too undemanding and does not engage learners. This is particularly the case in key stage 3, as schools often make an effort to secure better arrangements for examination classes. Secondary schools often do not cover sixth form lessons for short-term absences, but make up missed work later. They may also re-deploy subject teachers from key stage 3 classes to cover key stage 4, leaving supply staff to cover a disproportionate number of key stage 3 lessons.
- 6 Due to the short-term nature of their work, it is difficult for supply staff to establish effective working relationships with learners. Learners often do not have the same regard for supply staff as they do for their usual teachers. Most learners in secondary schools feel that they make little progress when they do not know the person who is covering lessons. Learners in secondary schools tend to misbehave or engage in low-level disruption when taught by supply staff. In the majority of

schools, supply staff receive information from the school about behaviour management and get assistance to deal with challenging behaviour when it occurs. However, in the majority of instances, classroom misbehaviour or low-level disruption remains an issue.

- 7 In primary schools where there are two or more classes in each year group, joint planning helps to reduce the impact of teacher absence further. Staff covering for teacher absence normally work well alongside the other staff from the year group and benefit from their support and guidance. However, progress in learning is slow, because cover staff do not have enough time to take account of information about pupils when covering lessons or do not pay sufficient attention to this information.
- 8 The greatest disruption in primary schools occurs as a result of not having a strategy to minimise the impact of unplanned, but potentially long-term, teacher absences. In complex situations, such as those arising from staff suspensions or frequent but non-continuous staff illness, schools do not manage or evaluate the impact of having multiple staff cover for the same year group. Too often, this affects pupils' behaviour as well as their learning.
- 9 Most schools have suitable arrangements to provide cover for absent teachers by using internal cover staff (higher-level teaching assistants (HLTAs) or cover supervisors employed by the school) or by sourcing external supply teachers.
- 10 Many primary and secondary schools have appropriate administrative arrangements to support cover staff. The majority of schools provide supply staff new to the school with a guidance handbook or document. However, supply staff do not always receive the necessary information regarding health and safety or safeguarding, including contact details for the named child protection officer at the school.
- 11 A few schools, particularly Welsh-medium schools and those located in rural or economically deprived areas, have difficulty finding suitable supply teachers. The majority of secondary schools have difficulty sourcing teachers of shortage subjects, such as mathematics and physics.
- 12 Most schools do not give enough priority to managing the effect of teacher absences or to evaluating its impact on the quality of learners' experiences. Only a few schools analyse teacher absence or compare patterns of absence with other schools. Many schools monitor the work of supply staff informally, but few formally observe lessons, scrutinise the work learners have produced, or ask learners' opinions, to evaluate the impact of cover arrangements.
- 13 Most schools and teaching agencies provide limited feedback to supply staff about their performance and little information is recorded. Feedback is more detailed when there are concerns about teaching or classroom management. Nearly all schools have on occasion raised concerns about the quality of a few supply teachers. A few agencies ask for feedback on placements, although in many instances the collection of this information is not robust. Local authorities who provide lists of supply teachers do not usually request feedback on performance.
- 14 In the majority of schools, headteachers and other senior leaders now spend more

time covering classes than previously. This is because they sometimes nominate themselves as cover, as they have difficulty sourcing supply staff. This is an inefficient use of their time, although there was the benefit that pupils tend not to misbehave in these circumstances. This arrangement also conflicts with 'rarely cover' provisions which should also apply to headteachers and senior staff.

- 15 Generally, morale among supply staff working through recruitment agencies is low. They work in challenging circumstances and in many cases are not paid in line with the teachers' main pay scale. A minority of schools say that cost is the most important factor when covering for teacher absence. They compare prices between recruitment agencies and negotiate a price where the supply teacher may earn less than half the equivalent teachers' daily rate. In a few secondary schools, cover supervisors are recruited to cover short-term absence rather than supply teachers, as this is cheaper.
- 16 Most cover supervisors and HLTAs employed permanently by schools have access to appropriate training as part of their school's in-service training programme. But other supply staff do not have access to a wide range of professional development opportunities. In most cases, arranging their own training or accessing courses offered by private companies would result in losing a day's pay. Supply staff seeking a permanent post are badly affected by the lack of appropriate professional development. Their knowledge and understanding of national policies and priorities can decline over time, making it harder for them to secure a permanent post.

Recommendations

Schools should:

- R1 manage teacher absence more efficiently;
- R2 improve the quality of teaching and learning in covered lessons by making sure that the work set is at an appropriate level and staff receive enough information on the individual needs of learners;
- R3 support supply and cover staff to improve their classroom behaviour management techniques;
- R4 evaluate the impact of teacher absence on learners, especially more able pupils and those in key stage 3, and monitor the quality of teaching and learning when teachers are absent;
- R5 ensure that supply staff are included in performance management arrangements;
- R6 provide more professional development opportunities for supply staff; and
- R7 make sure that supply staff receive essential information on health and safety and safeguarding, including the contact details of the named child-protection officer at the school.

Local authorities and supply agencies should:

- R8 provide schools with comparative data on teacher absence rates; and
- R9 seek feedback on and record the quality of supply staff they register and use the information for quality control.

The Welsh Government should:

- R10 provide better access for supply staff to those national training programmes that are available to permanently-employed teachers.

Title: Good practice in mathematics at key stage 4 – September 2013

Main findings

- 1 The percentage of pupils achieving a grade C or above in GCSE mathematics has increased by eight percentage points since 2007. However, mathematics remains the lowest performing core subject at key stage 4 in Wales. Progress from key stage 3 to end of key stage 4 is weaker in mathematics than in the other core subjects, despite the fact that attainment at level 6 and above and at level 7 and above is stronger in mathematics at key stage 3.
- 2 Attainment in mathematics at grade C and above in Wales is the lowest in the UK. Last year there was an 11 percentage point gap between England and Wales in this respect. The proportion of pupils attaining higher grades and levels at key stage 3 and 4 in Wales is lower than those attained by pupils in both England and Northern Ireland.
- 3 The schools visited for this survey have strong results in mathematics. Standards are good or better in many of the lessons observed. In about a quarter of lessons, standards are excellent. In these lessons, pupils demonstrate fluent number and algebraic skills and make links between different areas of mathematics. They apply their skills well to solve real-life open-ended problems and demonstrate very good thinking skills and articulate their thoughts clearly. They provide good explanations and justifications when questioned.
- 4 Standards are adequate or lower in only a few of the lessons observed in this survey. In these lessons, many pupils struggle to recall key number and algebraic skills quickly and accurately. This hinders their learning in new areas of mathematics. In a very few lessons, pupils work at extremely low levels due to the lesson content. These lessons contain a lot of previously taught work from earlier key stages.

- 5 In most schools visited pupils' attitudes to learning are very good. In many lessons, pupils are well motivated, participate willingly and apply themselves conscientiously to learning activities.
- 6 Teaching is good or better in many of the lessons observed. Most teachers display secure subject knowledge and have good teaching expertise. In lessons judged good or better, teachers have high expectations and set challenging tasks. Lessons are well planned and move at pace through a range of well-constructed activities, which skilfully cater for the ability range. In these lessons, pupils have many opportunities to revisit, develop and apply key mathematical skills in a variety of situations. Furthermore, beneficial activities identify common mistakes and misconceptions. This assists pupils in their learning.
- 7 In a few lessons observed, there are important areas for improvement in teaching. In these lessons, work is not sufficiently challenging and planning does not build sufficiently on pupils' previous experiences. These lessons contain a significant proportion of previously taught work, for example able Year 11 pupils working on topics such as symmetry, properties of simple shapes and basic volume, which are appropriate for much younger pupils.
- 8 The majority of schools use assessment well to inform pupils' learning and to monitor their progress. In these schools, assessment procedures are regular and robust, with information being recorded frequently and shared with teachers, pupils and parents or guardians. In a few schools, there are important shortcomings in assessment. Pupils in these schools are not sufficiently aware of how well they are doing and what they need to do to improve.
- 9 Pupils who gain level 5 in teacher assessment in mathematics at the end of key stage 3 are not prepared well enough in number and algebraic skills to gain a grade C at GCSE.
- 10 An increasing number of schools are entering pupils early for GCSE mathematics examinations. Most of these pupils enter the foundation tier. Pupils capable of achieving above a C grade are disadvantaged by this practice. Lesson observations, book scrutiny and analysis of early entry figures show that a minority of schools focus more on maximising school performance than on delivering the sustained quality of mathematical education that pupils deserve.
- 11 In the majority of schools visited, leadership of mathematics departments is good at middle and senior levels, and in a few cases it is excellent. In the schools where the leadership of mathematics is strong, middle and senior leaders play key roles in setting high expectations for staff and pupils. These schools have well-developed self-evaluation processes that teachers understand well.
- 12 In the majority of schools, leaders ensure that teachers have opportunities to share best practice and learn from each other. Peer observation promotes good practice and professional dialogue between teachers. Middle leaders ensure that well-planned schemes of work exhibit strong continuity and progression, building and consolidating on previously-learned skills, while extending learning into new areas.

- 13 In a few schools, there are important areas for improvement in leadership. Self-evaluation activities lack a sufficient focus on the standards of pupils' work in lessons and books. In addition, a few middle leaders do not take on the responsibility of ensuring high standards across their departments, and a few senior leaders do not challenge middle leaders effectively to make improvements.
- 14 In only a few schools do mathematics departments have strong links with their regional consortium advisers. Teachers in these schools benefit from appropriate professional development, external reviews and regular network opportunities. However, this degree of support is not consistent across the regional consortia. Furthermore, very few schools have made successful links with other schools to improve the quality of mathematics teaching. Overall, there is too little support for the professional development of teachers of mathematics whether it be from other schools, local authorities or regional consortia.

Recommendations

To improve standards of mathematics at key stage 4:

mathematics departments should:

- R1 make sure that pupils develop secure number, algebraic and problem-solving skills at key stage 3;
- R2 improve the quality of teaching and learning in mathematics lessons by making sure that:
- lessons are well structured, engaging and challenging, and link to other topics and subjects; and
 - number and algebraic skills are developed and applied in new contexts;
- R3 use assessment to inform pupils about how they are doing and what they need to do to improve;
- R4 minimise early entry for GCSE in mathematics and ensure that pupils follow courses of study that allow them to achieve the highest grades;
- R5 base self-evaluation and improvement planning on evidence from observing pupils' standards in mathematics lessons and scrutiny of their work; and
- R6 share best practice within and between schools and use it to support teachers' professional development.

Local authorities and regional consortia should:

- R7 provide support, advice and professional development opportunities for mathematics teachers, including facilitating professional networks to share best practice.

The Welsh Government should:

R8 support schools and regional consortia in raising standards in mathematics for all pupils; and

R9 review National Curriculum level descriptors at key stage 3 with the view to raising levels of expectation at level 5 in number and algebraic skills.

Title: Training for construction, planning and the built environment – October 2013

Main findings

- 1 All FEIs and WBL providers that deliver construction, planning and the built environment programmes also continue to deliver the core traditional construction skills qualifications that have been available and in demand for many years. However, whilst there have been recent changes in the content of construction, planning and built environment qualifications they do not always fully meet learners' and local employers' needs. For example, many plumbing learners do not routinely gain experience and assessment opportunities in working on central heating boiler and heating controls. FEIs and WBL providers routinely duplicate provision in the same geographical area and do not take enough account of local labour market information.
- 2 Regardless of the availability of work, construction continues to be a popular choice for training amongst learners. Overall, the rates at which learners achieve their training frameworks and other qualifications have improved over the period from 2009 to 2011. However, performance is only average when compared with that in other learning areas. In the period 2010 to 2011, construction, planning and the built environment programmes in FEIs ranked twelfth out of 19 learning areas for successful learner completion rates. In work-based learning they were ranked in ninth place out of the 11 learning areas for the proportion of learners completing their full qualification framework.
- 3 Overall, the rate at which learners progress from level 1 to level 2 programmes and level 2 to level 3 programmes is similar to that in other vocational craft based programmes. To complete level 3 programmes, learners need to be employed or have substantial workplace experience. However, not all full-time learners in FEIs are guaranteed work experience, and often have to organise their own placements. Too often learners either do not benefit from work-experience or access ad-hoc work experiences that are not always well matched to their training and assessment needs. Learners who do not access work-experience do not develop a comprehensive understanding of the demands and practices of working on-site to industry standards. This includes level 2 full-time learners who are very concerned that they will not have the opportunity to progress to level 3 programmes due to the lack of appropriate work experience. The downturn in the economy and the construction sector has also contributed to fewer work placements being available.

- 4 Too many learners undertaking and completing programmes in FEIs do not go on to gain employment in the construction industry. However, the rate at which apprentices remain employed in the construction sector is good.
- 5 A few learners progress to higher education (HE) programmes. These programmes are generally at level 4 and delivered by FEIs through franchise arrangements with the HE institutions. Currently Wales has the lowest proportion of learners undertaking these programmes in the United Kingdom (UK). This reflects the small number of job opportunities that are available in Wales.
- 6 The majority of FEIs have developed and deliver programmes associated with new environmental technologies. In most cases, these programmes are set-up with good levels of sponsorship from manufacturers and suppliers.
- 7 A minority of FEIs and WBL providers work well in partnership with local secondary schools to deliver construction programmes. These programmes provide vocationally relevant education and training to young people from local schools. These courses provide a good range of introductory programmes that offer progression to craft training and qualifications. However, not all schools use the expertise and resources available in their local FEIs and WBL providers to help deliver these programmes.
- 8 Most learners benefit from trade-related practical sessions, which provide good opportunities for them to develop their basic practical skills in appropriate environments. However, the majority of learners are not effectively challenged by teachers, trainers and assessors to develop higher standards of practical competence. In these cases, learners develop only the practical skills and theory knowledge that will allow them to pass assessments.
- 9 Overall, there is too much variation in the quality of support that FEIs and WBL providers give learners to develop their literacy and numeracy skills. In FEIs and WBL a minority of construction staff do not recognise the benefits of supporting learners to improve their literacy and numeracy. In these cases the majority of learners do not recognise the importance of literacy and numeracy. Learners do not always benefit from constructive written feedback on their work from teachers, trainers and assessors that would enable them to improve their performance. Literacy and numeracy support is not effectively integrated into all programmes.
- 10 Careers guidance is often unclear and often misdirected. In too many cases, school career advisers refer learners, mostly less-able boys, to construction craft training as a suitable career choice. This is often the case with learners who are disruptive in class, have poor attendance records and are generally disillusioned with school. In reality construction may not always be the most appropriate route for these learners. The better schools ensure that there are tasters in other sectors for these individuals so they can have a better informed choice about their future training.
- 11 Providers generally do not do enough to develop and sustain effective links with local industry. Too few providers benefit from effective employer engagement via steering or advisory groups. In FEIs teachers and other staff do not consistently do enough

to make sure employer links are maintained to ensure that all learners benefit from programmed, well-organised and structured work experience.

- 12 The majority of teachers, trainers and assessors have not worked in the industry for many years and do not have up-to-date industrial experience.

Recommendations

The Welsh Government should:

- R1 negotiate with providers to fund programmes that match labour market needs; and
- R2 make the qualifications framework for the construction sector in Wales more relevant to the needs of industry by providing greater choice of optional units in addition to the core elements of the programme and ensure that the framework contains a focus on literacy and numeracy.

Education and training providers should:

- R3 improve the quality of their networks and relationships with local employers;
- R4 improve the rate at which learners complete and attain their qualifications and frameworks;
- R5 fully integrate literacy and numeracy into all programmes and make sure that teachers, trainers and assessors are equipped to support the literacy and numeracy needs of learners;
- R6 challenge learners to develop and achieve higher-level practical skills and theory knowledge;
- R7 programme and organise industrial work experience placements for all full-time FEI learners;
- R8 use labour market intelligence more effectively to match the provision to local employment opportunities, managing learner demand by the use of effective advice and guidance; and
- R9 regularly update the industrial experience and knowledge of teachers, trainers and assessors.

Title: Working together to tackle the impact of poverty on educational achievement – December 2013

Main findings

- 1 Although many schools have recently become more focused on the importance of improving the standards and wellbeing of disadvantaged pupils, tackling poverty is still not a high enough priority for all schools. For example, only a minority of schools had specific plans for in-service training on reducing the impact of poverty on attainment in 2012-2013.
- 2 The few schools that succeed in raising the standards and wellbeing of disadvantaged learners focus on the needs of each individual learner. Where learners have complex needs that the school cannot meet on its own, these schools work with agencies to provide broad family-related services to meet those needs or they may work with specialist services to meet specific health or wellbeing needs. For example, a few schools host clinics and drop-in centres for health, counselling and social services on the school site.
- 3 Some schools with vulnerable new pupils, such as those who do not speak English or Welsh, engage families by creating an environment that is welcoming. These schools establish family or nurture rooms where children can learn with their families for a period. Working in these rooms can provide the social and emotional support that the children and their families need when settling into a new school or community.
- 4 Pupils in schools that are involved in 'Team around the family'³ approaches benefit from multi-agency working. The pool of skills within the team means that the health, domestic and social welfare concerns of learners and their families can be addressed. Many schools identify positive outcomes for learners who have been supported through this initiative. A minority of schools we visited identified shortcomings in the implementation of this model, including failing to ensure that all agencies are represented at meetings to discuss progress and agree strategies.
- 5 It is a challenge for schools to co-ordinate and manage the work of several external partners. The few schools that raise the standards and wellbeing of disadvantaged learners significantly identify a senior member of staff to co-ordinate the work with partners. These schools know about and understand the support that the pupil receives from an external partner and staff monitor progress carefully.
- 6 Some schools pool their resources in joint strategies and training to address disadvantage, but few 'professional learning communities' of teachers from a cluster of schools focus on poverty directly. A few schools have designed approaches to improving outcomes for disadvantaged learners across phases through their cluster work. This has helped the pupils to make the transition from primary to secondary school by supporting them, for instance in their social and emotional learning, and in literacy.

³ Team around the Family (TAF) is a multi-disciplinary team of practitioners established on a case-by-case basis to support a child, young person or family.

- 7 In a few clusters, pooling resources, such as funding from the Pupil Deprivation Grant, has helped teachers from secondary and primary schools to understand each other's issues. A few secondary school headteachers in our survey commented that this arrangement had raised their awareness of the importance of interventions in the early years.
- 8 In the best cases, schools evaluate their own work and that of external agencies against clear measures of learner performance. These schools use data to evaluate the impact of new initiatives and share performance information with partners to help to join up the school's approaches with other interventions.
- 9 The introduction of the Pupil Deprivation Grant has widened the range of strategies to raise the standards and wellbeing of disadvantaged learners. However, in many schools, the grant is used to raise the achievement of all lower-ability learners and is not specifically directed towards disadvantaged learners, although the spend will still benefit them if they are low-achieving. In these schools, there are shortcomings in how the Pupil Deprivation Grant is spent that are similar to those that Estyn identified in relation to RAISE funding in the past⁴⁵⁶.
- 10 Although local authorities have a focus on tackling the impact of poverty, only a few have significantly improved the standards and wellbeing of disadvantaged learners. The few local authorities that do raise the standards and wellbeing of disadvantaged learners take a preventative approach to tackling the impact of poverty. They start with a thorough needs-analysis to identify the impact of deprivation on local families. Mapping the needs of disadvantaged families means that the local authority can share intelligence with schools and partners and provide a baseline from which to measure the impact of new initiatives.
- 11 Local authorities do not always share information about disadvantaged learners with other agencies and services. Different services compile their own lists of disadvantaged children and young people. A few local authorities are planning a single, comprehensive database of information on learners and groups of learners. Such a database would enable staff to gain a fuller picture of the needs of individual learners and could be used to underpin a common approach.
- 12 A few local authorities have been successful in bringing together service plans for education, youth, and social services to develop a comprehensive strategy for tackling poverty. They have produced an integrated plan to co-ordinate services and avoid duplication. Generally, however, different services in a local authority or consortia do not align their plans or use common performance indicators for tackling poverty. This means that it is difficult to measure progress jointly.
- 13 A minority of local authorities have specific targets and performance indicators related to closing the gap in outcomes between advantaged and disadvantaged learners. These local authorities measure progress against these targets. However, many local authorities do not have such specific objectives or measurable targets. They do not use the information they collect well enough to challenge schools to improve outcomes for disadvantaged learners.

⁴ The impact of RAISE 2008-2009: evaluation of the impact of RAISE funding on raising the levels of performance of disadvantaged pupils, Estyn, 2009

⁵ Tackling child poverty and disadvantage in schools, Estyn, 2010

⁶ Tackling poverty and disadvantage in schools: working with the community and other services, Estyn, 2011

A majority of local authorities provide some training to schools on how to address poverty and disadvantage and other guidance on how to use grant funding. However, only a few local authorities give good advice to schools about how to use their Pupil Deprivation Grant money. There are too few training opportunities for school leaders to learn about strategic approaches to tackling the impact of poverty, including how to plan and evaluate different approaches and how well they work.

Recommendations

Schools should:

- R1 adopt clear systems for working with outside agencies to support disadvantaged learners, for example the 'Team around the family' approach;
- R2 work with other agencies to engage disadvantaged families more in school life;
- R3 work more closely with partner schools to develop a common approach to tackling poverty and to support pupils' transition from primary to secondary school;
- R4 identify a senior member of staff to co-ordinate work with external services and agencies;
- R5 make sure that staff know how to raise the achievement of disadvantaged learners;
- R6 use systems to track pupils' progress in order to evaluate initiatives that seek to improve wellbeing and standards; and
- R7 use the Pupil Deprivation Grant to target the needs of disadvantaged pupils specifically, whatever their ability.

Local authorities and consortia should:

- R8 work with relevant services and agencies to map the specific needs of disadvantaged pupils and their families and share this information with schools and other agencies on the basis of an agreed protocol;
- R9 take a preventative approach to tackling poverty and use 'Team around the family' approaches in co-ordinating services for disadvantaged families;
- R10 make sure that strategic plans to tackle poverty are aligned to include internal services and external partners and have specific and measurable objectives;
- R11 provide training and support to develop the skills of school leaders to manage partnership working to tackle poverty; and
- R12 provide or broker better advice to schools on practical ways to tackle the impact of poverty.

Title: Welsh in the Foundation Phase – Developing Welsh as a first language in primary schools and the non-maintained sector – December 2013

Main findings

Standards and progress in Welsh across the Foundation Phase

- 1 According to assessments at the end of the Foundation Phase in 2011-2012, approximately 86% of pupils in Welsh-medium schools across Wales achieve in line with expectations (outcome 5 or above) in the language, literacy and communication skills (Welsh) learning area. This compares well with results in language, literacy and communication skills (English) in English-medium schools (84.3%). Although results at the higher than expected levels (outcome 6) are similar for language, literacy and communication skills (Welsh), language, literacy and communication skills (English) and mathematical development, they are significantly higher in the personal and social development and wellbeing learning area.
- 2 In the majority of Welsh-medium schools and settings that were inspected, the standards of speaking and listening among three to four-year-old pupils are developing well. They can converse increasingly effectively with each other and with their teachers when taking part in activities. Many children enjoy reading and take pleasure in listening to stories. They like handling books and talking about what they are reading or what is being read to them. A few children can read familiar words successfully, such as their names or labels on equipment and furniture. Many of these children apply themselves successfully to initial mark making and creating patterns as a basis for developing their writing skills.
- 3 The overall standards of four to seven-year-old pupils in Welsh are good. Most pupils develop an effective spoken vocabulary in a wide range of contexts in the areas of learning, and develop an increasing ability to converse and discuss confidently with their teachers and with each other. Most pupils can select and use various reading sources and they develop their reading skills in a good variety of contexts. However, pupils' writing skills are not developing as well. In a minority of schools, pupils at the end of the Foundation Phase are over-reliant on support and guidance from teachers. Their written work across the areas of learning is not correct or neat enough.
- 4 Children's linguistic backgrounds and skills in Welsh vary on entry to schools and non-maintained settings. In those schools and settings which cater for pupils from similar linguistic backgrounds, pupils' linguistic skills develop consistently. However, in a few schools and settings where the children come from mixed backgrounds in terms of their home language, the progress of too many children from non-Welsh speaking homes is too slow, and the progress of some children from Welsh-speaking homes is hindered.
- 5 In a few schools, children do not make the expected progress in their speaking, reading, listening and writing skills. In these schools, although focus sessions

concentrate firmly on developing language skills, pupils are not given enough opportunities to apply these successfully across a range of learning activities and in different activity areas.

Educational provision and the learning environment

- 6 Most settings and many schools succeed in creating a good balance between first-hand experience, of an informal nature, and focused activities which concentrate specifically on developing language, literacy and communication skills.
- 7 In many schools and settings, the learning environment is attractive and varied. These settings and schools provide activity areas to immerse children in language experiences and activities, both indoors and outdoors. As a result, pupils succeed in acquiring language to a standard which is appropriate to their age and ability while undertaking activities in a number of areas of learning. This also promotes their reading and writing skills.
- 8 In a few schools, there is not an effective balance between focused activities and more informal activities, particularly in Years 1 and 2. There is a great emphasis on developing language skills in formal sessions, but in general activity areas do not provide enough opportunities for pupils to practise their language skills in various contexts. Teachers focus on developing pupils' literacy skills without giving enough consideration to the central philosophy of the Foundation Phase.
- 9 In many settings, practitioners plan carefully and ensure that the experiences and resources that are available to pupils set firm foundations on which children can develop their language skills. This is also the case in the majority of schools.
- 10 In these schools and settings, activity areas provide specific opportunities for pupils to undertake tasks which develop their language skills specifically. Continuous provision challenges children to build effectively on their previous learning. The majority of teachers and assistants support pupils' learning through skilful intervention to introduce rich vocabulary and language syntax and provide excellent language models to pupils. In a minority of these schools and settings where this support is not available, pupils' language skills are not developing appropriately.
- 11 In most schools and settings alike, teachers provide children with specific language tasks and challenges. They give a strong priority to developing children's Welsh language skills, and do so in activities across the areas of learning. Only a few schools set specific language challenges for pupils aged four to seven across the activity areas. Where this is the case, many pupils respond positively to them and practise and develop their speaking, reading and writing skills in a very effective manner.
- 12 In most schools and settings, focused activities for developing the language skills of groups of pupils are targeted appropriately so that children get the most benefit from them. The majority of teachers, practitioners and assistants provide good language models that motivate children to acquire sophisticated and correct language. However, in a minority of non-maintained settings, most particularly in areas where not many people speak Welsh, the standard and accuracy of practitioners' language is not good enough to provide children with a correct model.

- 13 Where there are children from Welsh-speaking and non-Welsh speaking homes in the same setting, in the best practice, teachers plan to offer effective motivation and support to develop all pupils' language. They provide challenges and activities that are well targeted to respond to pupils' linguistic needs. However, in too many of these schools, teachers do not plan effectively enough to ensure that pupils from different linguistic backgrounds make appropriate progress from their starting point.
- 14 In a few schools and settings, teachers and practitioners do not have a sound understanding of the principles of the immersion method of teaching. As a result, they do not introduce and model the Welsh language robustly enough for pupils, and their expectations are not high enough. In a very few cases, learning assistants do not stick to using Welsh with pupils from non-Welsh speaking homes and this hinders their progress.
- 15 In smaller schools, there are pupils of a wide age range in the teacher's care. Due to the differences in the pupil to adult ratio as pupils get older, there are a limited number of assistants available. In this situation, too often, activities are not targeted well enough to meet the needs of all pupils, and pupils' language skills do not develop appropriately.
- 16 Settings with purpose-built buildings that are allocated for early education have developed good outdoor areas to promote children's progress. However, where settings meet in temporary rooms or buildings, such as village halls, the majority have not succeeded in developing effective areas. However, a few make good arrangements to work with schools to promote this aspect.

Leadership and planning for improvement

- 17 In a few schools, leaders and teachers do not show enough understanding of the central philosophy of the Foundation Phase. Because of the current national priority to develop literacy, they see tension between the philosophy of the Foundation Phase and the need to plan purposefully to develop language and literacy skills. As a result, pupils are unable to apply their language skills successfully across a range of contexts. This is more apparent in Years 1 and 2.
- 18 Most schools and settings succeed in ensuring that they have suitably trained staff to operate according to the philosophy and methodology of the Foundation Phase. On the whole, practitioners in settings and also with children aged three to four in schools, give a high priority to developing children's language, communication and literacy. Only a minority of schools, and a very few settings, track pupils' linguistic progress and monitor provision continuously in order to evaluate whether it leads to progress in learning.
- 19 The majority of schools have succeeded in adapting the outdoor learning environment to ensure a variety of contexts and learning experiences which promote pupils' language and communication skills. In a minority of schools, the outdoor area has not been planned carefully enough to provide activities which motivate children to develop their language and literacy skills. In these schools, there is a tendency not to give older children in the Foundation Phase enough opportunities to take advantage of development opportunities in the outdoor area.

- 20 Voluntary organisations which manage settings, such as Mudiad Meithrin, ensure that leaders and management committees of most non-maintained settings understand and implement the Foundation Phase requirements well, and they plan effectively to improve provision.
- 21 In schools, leaders' commitment and understanding are more varied. In the best practice, self-evaluation and improvement plans give clear attention to developing the Welsh language within the philosophy of the Foundation Phase. In the few settings and schools where leadership is not as good, leaders do not give enough attention to ensuring an effective relationship between developing the Welsh language and the philosophy of the Foundation Phase.
- 22 Local authorities and organisations that manage non-maintained settings provide effective support to schools and settings in most cases. However, a minority of local authorities do not provide that support through the medium of Welsh.

Recommendations

Schools should:

Schools and settings should:

- R1 ensure specific opportunities for pupils to develop and use their speaking, reading and writing skills across areas of learning and in different activity areas;
- R2 ensure an effective balance between formal sessions to teach and reinforce language skills and informal opportunities to use them;
- R3 develop learning activities and experiences which ensure that pupils from different linguistic backgrounds make appropriate progress from their starting point;
- R4 set clear expectations which will ensure that pupils from all backgrounds use the Welsh language as they pursue informal activities, particularly at the beginning of the Foundation Phase;
- R5 set clear expectations for practitioners with regards to using the Welsh language in the Foundation Phase so as they introduce and model a good standard of Welsh to their pupils across areas of learning;
- R6 track progress in pupils' speaking, reading and writing skills consistently throughout the Foundation Phase; and
- R7 give appropriate attention to quality of provision and standards in the Foundation Phase as part of self-evaluation processes and improvement planning in schools and settings.

Local authorities and organisations which manage non-maintained settings should:

- R8 provide support and training for practitioners on immersion methods of language learning and provide guidance on how language, literacy and

communication skills (Welsh) can be developed in a way which is compatible with the philosophy and methodology of the Foundation Phase;

R9 provide training and support for practitioners, including assistants, to improve their Welsh, where necessary;

R10 share good practice in terms of developing language, literacy and communication skills (Welsh) across areas of learning and activity areas in the Foundation Phase; and

R11 ensure that local authority support provision for Welsh-medium non-maintained settings is available in Welsh.

The Welsh Government should:

R12 ensure that authorities and schools understand the relationship between the methodology and philosophy of the Foundation Phase and the Literacy and Numeracy Framework.

Title: School size and educational effectiveness – December 2013

Main findings

- 1 The report identifies differences in the performance of small, medium-sized and large schools in terms of inspection judgements, and examination and assessment results. The differences are generally small and represent trends that do not determine the performance of all individual schools. Schools of all sizes can perform well or badly.
- 2 The report shows that large primary and secondary schools tend to perform better than small and medium-sized schools. There is strong evidence⁷ that secondary schools in advantaged areas tend to perform better than schools in disadvantaged areas, but the impact of disadvantage is weaker for primary schools. Statistical analysis of inspection, examination and assessment data suggests that the reason why large secondary schools perform better on average than small and medium-sized secondary schools is because they tend to be more advantaged. Factors relating to disadvantage do not explain why large primary schools perform better than small and medium-sized primary schools.
- 3 A common feature of successful schools is good leadership. All schools, irrespective of size, can perform well where the quality of leadership is good or excellent. Where schools' overall performance is adequate or unsatisfactory, there are nearly always weaknesses in the quality of leadership.

⁷ Tackling poverty and disadvantage in schools: working with the community and other services, Estyn, 2011
Tackling child poverty and disadvantage in schools, Estyn, 2010
Academic Achievement and Entitlement to Free School Meals in Wales, 2012, SB 32/2013, Welsh Government

Primary schools

- 4 Large primary schools tend to need less follow-up activity after inspection than small or medium-sized schools. The proportion of primary schools in the two most serious categories of follow-up (significant improvement and special measures) is similar for small and medium-sized primary schools, but it is lower for large primary schools.
- 5 Inspection outcomes are good or better in a greater proportion of large primary schools than small or medium-sized primary schools. Small and medium-sized primary schools are more likely to have more areas requiring improvement than large primary schools.
- 6 Pupils' standards are good or better in a higher proportion of large primary schools than they are in small and medium-sized primary schools. There is generally little difference in the percentage of pupils achieving the expected level in the Foundation Phase or end of key stage 2 teacher assessments for different sizes of schools.
- 7 Most primary schools have good or better standards of wellbeing. Pupils achieve good standards of wellbeing in all very small primary schools (those with 30 pupils or less). Small primary schools generally have better attendance levels than medium-sized and large primary schools.
- 8 Curriculum provision is better in large primary schools. In small schools, there tends to be shortcomings in the provision of foundation subjects at key stage 2. These shortcomings differ from school to school, but are often linked to gaps in the expertise of staff.
- 9 The quality of teaching is good or better in 80% of primary schools overall, but 72% of very small primary schools have teaching that is good or better. In these schools, there are three or more age groups in each class and teachers have to plan and deliver lessons that meet the needs of pupils from a wide age and ability range.
- 10 Leadership and processes to improve quality are usually better developed in large primary schools. In small primary schools, many headteachers have a significant teaching responsibility that limits the time they can devote to leading and managing and they have fewer opportunities to evaluate standards and to drive improvement.

Secondary schools

- 11 Large secondary schools need less follow-up activity after inspection than small and medium-sized secondary schools. About 4% of large secondary schools need significant improvement or special measures, compared to around 20% of small and medium-sized schools.
- 12 Examination results for large secondary schools are better than those for small and medium-sized secondary schools for nearly all measures.
- 13 Wellbeing is excellent in 33% of large secondary schools compared with 14% of medium-sized and 4% of small secondary schools. Attendance is similar for small and medium-sized secondary schools, but better in large secondary schools. Large

secondary schools tend to have more comprehensive procedures for monitoring attendance and for tackling persistent absences.

- 14 The quality of teaching in small and medium-sized secondary schools is broadly similar. It is stronger in large secondary schools. Large schools tend to have better arrangements for professional development and quality assurance, while these systems are less well developed in small and medium-sized schools. Teachers in small schools are less likely only to teach their specialist subject.
- 15 In general, curriculum provision is broader and better balanced in large secondary schools. Nearly all large secondary schools provide good or better learning experiences for their pupils, while learning experiences are good or better in the majority of small schools and many medium-sized schools. Large secondary schools are able to offer a wider range of options due to economies of scale. Small and medium-sized schools are more dependent on 14-19 partnerships to provide a suitable range of courses.
- 16 Leadership is good or better in nearly all the large secondary schools inspected. Leadership is good or better in the majority of medium-sized schools and in many small schools. In all schools where performance is strong, leadership is good or better. In small and medium-sized secondary schools, succession planning may be weak and, when key members of staff leave the school, there can be too long a delay before their skill-set is replaced.

No recommendations were included in this report.
