# **School education**





Prepared by Audit Scotland June 2014

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### Exhibit data

When viewing this report online, you can access background data by clicking on the graph icon. The data file will open in a new window.

## Summary



### Background

**1.** Education is fundamental in shaping a child's life. Getting a good education improves the likelihood of earning a higher income, enjoying better health and living longer. An effective school education system is an important factor in supporting the Scottish Government's strategic objectives to be a 'Smarter Scotland' and a 'Wealthier and Fairer Scotland'.<sup>1</sup> Better educational outcomes are a strong predictor of economic growth, and success in a global economy means that Scotland needs to keep pace with the best countries in the world.

**2.** In 2013, there were 665,499 primary and secondary pupils in Scotland being taught by 47,770 teachers in 2,418 council-run schools.<sup>2</sup> Education is compulsory between the ages of five and 16 in Scotland. Children spend seven years in primary school (P1-P7) and at least four years in secondary school (S1-S4). Pupils can then leave school at 16 or stay on for one or two more years (S5 and S6). Pupils undertake a range of qualifications between S4 and S6. These are delivered not only in schools but also through colleges and third sector organisations. Pupil numbers have been declining since the mid-nineties, but started to increase in 2013 and are projected to continue increasing.

**3.** The main organisations involved in the Scottish education system are:

- The Scottish Government, develops national policy and sets the overall direction of education policy.
- **Councils**, responsible under the Standards in Scotland's Schools Act 2000 for providing school education for every child of school age. This includes developing local education policy, and planning and managing resources to improve the quality of school education.
- Education Scotland, works to improve the quality of education, for example by inspecting schools and by developing the curriculum.
- The Scottish Qualifications Authority (SQA), accredits and awards qualifications at both secondary and college level.
- The Scottish Credit and Qualifications Framework Partnership, manages the Scottish Credit and Qualifications Framework. This sets out the level and type of qualifications that are available.
- The General Teaching Council Scotland, the independent professional body that promotes and regulates all teachers in Scotland.

**4.** In 2002, the then Scottish Executive set up a 'National Debate on Education' to develop its long-term education policy. A year later, it established a Curriculum Review Group to identify the purposes of education for the 3-18 age range and to determine key principles for curriculum design. The group published its report, *A Curriculum for Excellence* (CfE) in

2004, setting out the aims of education and the principles that should underpin the modern curriculum.<sup>3</sup> Exam performance (attainment) is still an integral part of the system but CfE also aims to ensure pupils develop a range of skills for living and working in the wider world (wider achievement). Pupils receive a broad general education from early years through to the end of S3 and take formal qualifications in the senior phase. CfE was formally implemented in schools in 2010.

### About this audit

**5.** School education accounts for a significant proportion of local government spending, and a number of important education policy developments have taken place in recent years, such as the introduction of CfE. However, there has been no independent evaluation of how much councils spend on education and what this delivers in terms of improved attainment and wider achievement for pupils. 2014 is the first year in which pupils are sitting new qualifications introduced as part of CfE. Comparisons with previous years will not be possible for some time. This audit is therefore timely as it provides an assessment of attainment over the last decade and identifies how effectively councils made improvements during this time.

**6.** Our audit assessed how efficiently and effectively councils are using their resources to maximise pupil achievement in schools. We examined:

- how much councils spend on school education and what they spend it on
- how effectively councils are driving forward improvements in pupil achievement
- how efficiently councils are using their resources to maximise pupil achievement.

7. The audit focused on primary and secondary school education in Scotland. We did not examine early years, pre-school, or special school education; independent schools; or further and higher education establishments. We also did not look at progress in implementing CfE or the quality of teaching in Scotland. We reviewed how councils deliver education, but did not examine the role of the Scotlish Government, Education Scotland or other stakeholders such as the SQA.

**8.** There is a range of attainment measures used within Scottish education. We have selected ten of these to examine performance across the entire senior phase, S4-S6. The selected measures are closely aligned to the measures that councils report to their own education committees.

**9.** This report has three parts:

- Part 1 examines how much councils spend on education and how this has changed
- Part 2 assesses exam performance over the last decade for S4-S6 and examines what wider achievement activities are available for pupils to prepare them for life and work
- Part 3 comments on what councils have been doing to improve attainment and wider achievement and how they are targeting their resources to seek improvement.

**10.** Appendix 1 outlines performance in the ten attainment measures we use in the report. Appendix 2 lists members of our advisory group who provided support and advice throughout the audit. We have also produced a separate checklist of issues (PDF) is for elected members to consider when scrutinising education services. Details of our audit methodology are provided in a separate supplement (PDF) is.

## Key messages



- In 2012/13, councils spent £4.8 billion on education services, of which £3.8 billion was spent on primary and secondary education. Around two-thirds of this expenditure (68 per cent) was on staff costs. Councils' spending on education fell by five per cent in real terms between 2010/11 and 2012/13, largely as a result of employing fewer staff. Councils' education services are likely to continue to face budgetary pressures, and they need to be alert to the potential impact of increased workloads on remaining staff.
- 2 Performance has improved against all ten of the attainment measures we examined over the last decade. However, there is significant variation in attainment between individual councils, schools, and groups of pupils; and there is a considerable gap between Scotland and the top performing countries. Current measures at both national and council level focus on the attainment of secondary pupils at S4-S6 level. There are no comparable measures available at a council and national level on wider achievement, or the performance of pupils from P1-S3.
- 3 Levels of deprivation have a large influence on attainment. Some schools have achieved better attainment results than their levels of deprivation would indicate, suggesting that the gap between the lowest and highest performing schools cannot be wholly attributed to different levels of deprivation. Closing the gap in performance between schools is likely to be critical to improving overall attainment levels.
- 4 Councils that have made the most improvements have focused on areas such as developing leadership skills, and improving both teacher quality and systems for monitoring and tracking pupil data. There are also increasing opportunities for pupils to develop a wide range of skills for living and working in the wider world. Councils are starting to target resources to improve both attainment and wider achievement but there is scope to improve strategic planning and strengthen the role of elected members in holding education services to account.

### **Recommendations**

The Curriculum for Excellence represents a significant shift in the way education is delivered in our schools. This has important implications for the economic wellbeing of Scotland, and the future prospects of young people. The recommendations outlined below are intended to support further progress and will involve councils working with key stakeholders.

#### Councils should:

- ensure they fully understand why levels of attainment vary between their schools and different groups of pupils
- develop and implement strategies to reduce the gaps in performance between the highest and lowest performing schools
- continue to work with the Scottish Government and Education Scotland to develop a suite of agreed performance measures which would provide an overall picture of educational attainment and achievement across Scotland
- review the sufficiency of information provided to education committees on attainment at S4-S6, pupil performance between P1-S3 and wider achievement. They should also ensure committees have the time and support to adequately challenge and hold to account education services
- develop more coordinated approaches to gathering and recording information on the range of wider achievement activities offered in schools, including the levels of pupil participation and the outcomes they achieve. This will help councils to scrutinise performance and ensure resources are being used as efficiently as possible
- ensure education strategic documents contain clear priorities and actions that set out what is to be achieved in the short, medium and long term. Performance management arrangements should monitor outcomes and report regularly on delivery against strategic objectives, such as raising attainment among the lowest performing pupils
- consistently use the Scottish Local Government Benchmarking Framework to compare their performance against other councils, and share good practice to improve educational attainment and wider achievement
- fully assess the potential long-term impact on attainment and wider achievement of budget reductions
- monitor and act on the impact of revised working practices and staff reductions across all affected groups (eg, teachers, administrative staff, classroom assistants) on staff wellbeing by, for example, monitoring sickness absence levels, and through specific questions in staff surveys.

### Part 1 School expenditure

### Key messages

- In 2012/13, councils spent £4.8 billion on education services, of which £3.8 billion was spent on primary and secondary education. Two-thirds of this expenditure (68 per cent) was on staff costs. Councils' spending on education reduced by five per cent in real terms between 2010/11 and 2012/13, largely as a result of employing fewer staff.
- 2 Spend per pupil varied across councils in 2012/13 from £4,433 to £10,821. Factors influencing how much councils spend on school education per pupil include rurality, the proportion of promoted posts and the number of chartered teachers employed.
- **3** As well as employing fewer staff, councils have adopted other strategies and approaches to reducing their education spending. These include changes to teachers' terms and conditions, increasing classroom teaching time, seeking efficiencies in school transport, and reducing training budgets. Councils' education services are likely to continue to face budgetary pressures, and they need to be alert to the potential impact of increased workloads on remaining staff.

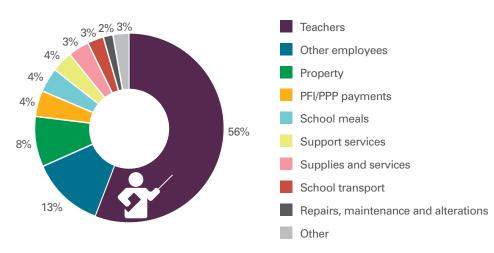
### Education is the single largest area of council expenditure

**11.** School education is mainly funded through the block grant that the Scottish Government provides to councils. The Scottish Government provides indicative funding allocations for each of the main council services. Councils then decide how best to allocate funding to individual services, based on their own priorities. In addition to the block grant, councils raise funding through council tax and service charges. They can also receive funding for specific education programmes and initiatives from a range of bodies including sportscotland, and independent trusts and charities. Schools and parents also contribute through fundraising activities.

**12.** In 2012/13, councils spent £4.8 billion on education, of which £4 billion was provided through the block grant.<sup>4</sup> Education is the single largest area of council expenditure, accounting for almost a third (31 per cent) of total revenue expenditure in 2012/13. The majority of education expenditure, £3.8 billion (80 per cent), was on primary and secondary school education ('school expenditure'). The remaining expenditure was on community learning and development, pre-school education, and special schools. Over half of school expenditure, £2.1 billion (56 per cent), was spent on teachers. Councils spent another £470 million (13 per cent) on other staff such as classroom assistants, laboratory technicians and administrative staff (Exhibit 1, page 9).

spending on school education has been reducing, largely through councils employing fewer staff





Breakdown of primary and secondary education revenue expenditure, 2012/13 Over half of council education spending is on teachers.

#### Note:

1. PFI and PPP stand for Private Finance Initiative and Public Private Partnerships. PFI/PPP charges are made against councils' education and corporate budgets, depending on the nature of the spend. The costs shown here relate only to the school education budget. 2. 'Other' includes parent council funding and expenditure on school textbooks.

Source: Audit Scotland analysis of councils' Local Financial Returns and additional information provided by councils, 2012/13



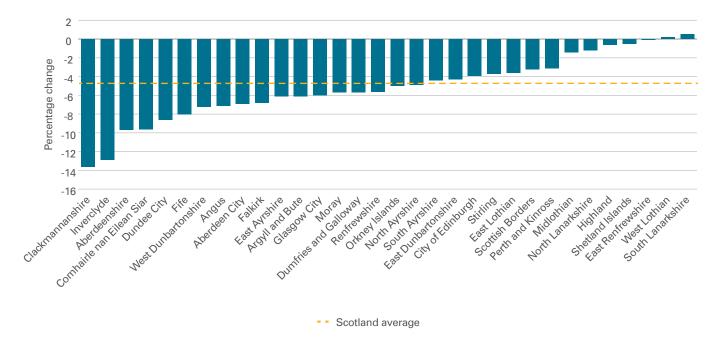
**13.** Councils spent almost as much on the primary sector as they did on the secondary sector in 2012/13, with £1.8 billion (48 per cent) spent on primary education and £2 billion (52 per cent) spent on secondary education. Spend per pupil across Scotland in 2012/13 was higher in the secondary sector at £6,525 per pupil, than in the primary sector at £4,667 per pupil (see **paragraph 17, page 10** for further explanation of spend per pupil).

### School expenditure reduced by five per cent over the last three years

**14.** Between 2010/11 and 2012/13, councils reduced spending on primary and secondary education by five per cent in real terms, that is, taking into account the effects of inflation. The reductions in spending were similar across both the secondary school sector (five per cent reduction in real terms) and the primary school sector (four per cent reduction in real terms). However, the reductions do not fully reflect changes in pupil numbers over the same period. Between 2010 and 2013, the number of secondary school pupils declined by four per cent. In contrast, the number of primary school pupils increased by three per cent. At a council level, changes in school expenditure over the past three years varied widely, ranging from an almost 14 per cent reduction in Clackmannanshire to an increase of almost one per cent in South Lanarkshire (Exhibit 2, page 10).

**15.** It is important to note that these figures represent a snapshot in time. Councils started making changes to education budgets at different times, so over the period on which we have based our analysis, councils were at different stages in making savings. It is also not possible to compare education expenditure between 2010/11 and 2012/13 with earlier years. This is due to changes in international accounting standards and how councils account for unitary charges for Private Finance Initiatives and Public Private Partnership contracts.<sup>5</sup>

Changes in school revenue expenditure in real terms, 2010/11-2012/13 Most councils have reduced spending on schools over the past three years.



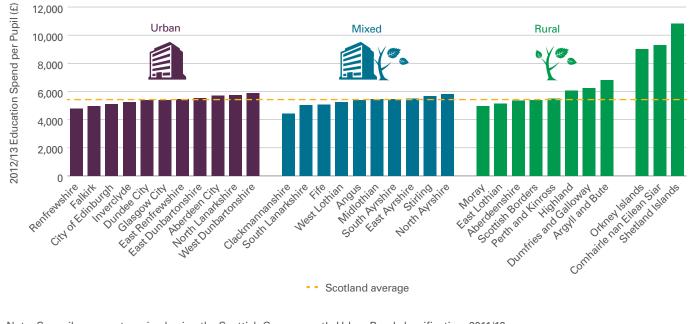
Source: Audit Scotland analysis of councils' Local Financial Returns and additional information provided by councils, 2010/11-2012/13

**16.** Reductions in education expenditure between 2010/11 and 2012/13 mirror wider reductions in council funding and expenditure. The Scottish Government's overall block grant to councils reduced by eight per cent in real terms between 2010/11 and 2012/13.<sup>6</sup> Councils' overall expenditure reduced by five per cent over the same period.<sup>7</sup>

### Spend per pupil varies widely across the country with rural councils spending the most

**17.** In 2012/13, the average spend per pupil across Scotland was £5,468 (Exhibit 3, page 11)  $^{8}$  and varied:

- across urban councils, from £4,782 in Renfrewshire to £5,899 in West Dunbartonshire £1,117 difference
- among councils with a mix of urban and rural areas, from £4,433 in Clackmannanshire to £5,799 in North Ayrshire £1,366 difference
- across rural councils, from £4,966 in Moray to £6,796 in Argyll and Bute £1,830 difference
- among the island councils, from £9,005 in Orkney to £10,821 in Shetland Islands £1,816 difference.



Spend per pupil by council, 2012/13 Spend per pupil varies widely across Scotland.

Note: Councils were categorised using the Scottish Government's Urban Rural classification, 2011/12. Source: Audit Scotland analysis using councils' Local Financial Returns and additional information provided by councils, 2012/13; and data from *Pupils in Scotland*, Scottish Government, 2013

**18.** Councils with more rural areas, including the island councils, generally spend more per pupil for a number of reasons:

- In general, there is a lower average number of pupils in each school. As a result, teacher costs per pupil are higher. In 2013, there was an average of 113 pupils per primary school in rural councils compared to an average of 265 primary pupils per school in urban councils.
- Because distances are greater and pupils are more widely spread, school transport costs are higher. For example, Aberdeenshire, Argyll and Bute and Highland councils spent six per cent of their total school expenditure on school transport in 2012/13, the highest of all mainland councils. In comparison, school transport accounted for 0.2 per cent of Dundee City Council's total school expenditure in 2012/13.
- The school estate tends to be larger due to high numbers of small primary schools. This brings increased maintenance and running costs.
- Recruiting both permanent and supply teaching staff can be more challenging for rural councils. As a consequence, employment costs can be higher as councils try to attract staff. For example, Aberdeenshire Council has found it difficult recently to fill teacher vacancies. To address this, the council ran an international recruitment campaign offering benefits such as help with housing to successful applicants.

**19.** In urban councils, differences in spend per pupil are mainly influenced by how much is spent on teachers. Higher proportions of promoted posts in the teacher workforce; more chartered teachers; and greater incidences of salary conservation among teachers (ie, when a salary is protected for a specified length of time) all impact on how much councils spend on teachers.<sup>9, 10</sup> To ensure services are being provided as efficiently as possible, councils must fully understand the factors influencing their spend per pupil, and how this compares to other councils.

### Councils have reduced what they spend on school education mainly by employing fewer staff

**20.** Councils have reduced spending on schools in the past three years largely as a result of employing fewer teachers. Between 2010/11 and 2012/13, spending on teachers reduced by seven per cent in real terms. All councils (except East Lothian which remained the same) reduced expenditure on teachers over this period. This ranged from a two per cent reduction in South Lanarkshire to 19 per cent in Stirling.

**21.** Overall teacher numbers reduced by 815 full-time equivalent (FTE) (two per cent) between 2010 and 2013 (Exhibit 4, page 13).<sup>11</sup> Teacher numbers reduced in the secondary sector over this period by 1,081 FTE (four per cent) and in the primary sector by 190 FTE (one per cent). In contrast, teachers classified as centrally employed increased by 456 FTE (64 per cent) over the same period. These are teachers who may work across more than one school, for example music teachers. However, because of the way data is collected, we are unable to assess the extent to which these changes are a result of:

- councils re-categorising staff from school-based teachers to centrally employed, or
- councils employing additional centrally employed teachers.

**22.** The biggest reduction is in teachers in their 50s leaving work, either through retirement or voluntary early release schemes. In 2012/13, 29 out of 32 councils used early departure and early retirement schemes to reduce staff numbers.<sup>12</sup> The average age profile of teachers is now 41.9 years, a reduction of 0.9 years since 2010. Twenty-seven councils have reviewed teaching staff formulas in the past three years to help make efficiency savings.<sup>13</sup> Pupil/teacher ratios have remained almost the same in the secondary sector since 2010, increasing by 0.1 pupils per teacher to 12.2 in 2013. In the primary sector, the pupil/teacher ratio increased from 15.8 pupils per teacher in 2010 to 16.5 in 2013.

**23.** Councils also reduced their spending on other education staff by 11 per cent in real terms between 2010/11 and 2012/13. Reasons for this include:

- councils using Quality Improvement Officers (QIOs) in a more proportionate and risk-based way, encouraging schools to evaluate their own performance. QIOs provide support and challenge to schools to help them improve and those that remain in post are increasingly targeting their efforts only at those schools that need extra support.
- service efficiency reviews and restructurings that have taken place within many council education departments.

Changes in FTE education staffing numbers, 2010-13 Reductions have been made across all staffing groups.

| chool-bas | ed and centi           | rally based)         |        | l-based)                          |                        |
|-----------|------------------------|----------------------|--------|-----------------------------------|------------------------|
| 2%        | 2010                   | 2013                 | Change | 2010 2013                         | Change                 |
| 270       | 48,585                 | 47,770               | -815   | 261 204                           | -57                    |
|           | and cler               | admin, prof          |        | oratory assistants<br>technicians |                        |
| inical an | d clerical sta         | III (SCHOOFL         | Juseu) | 2010 2012                         |                        |
|           | d clerical sta<br>2010 | 2013                 | Change | /0                                |                        |
|           |                        |                      |        | 2010 2013<br>1,272 1,122          | Change<br>- <b>150</b> |
| %         | 2010                   | 2013<br><b>5,162</b> | Change | /0                                | -150                   |
| %         | 2010<br>5,415          | 2013<br><b>5,162</b> | Change | 1,272 1,122                       | -150                   |

Notes: 1. The staff types are those used in the Scottish Government annual census of education staff.
2. Changes to staff are shown in calendar years rather than financial years as the data is gathered through an annual census of education staff carried out in September each year.

Source: Audit Scotland, using Teachers in Scotland, Scottish Government, 2010 and 2013

**24.** Other than staffing, councils have been reducing their education spending in a range of other ways. Examples include:

- Making savings from changes to teachers' terms and conditions of service, following the 2011 Scottish Negotiating Committee for Teachers pay and conditions agreement. This reduced annual leave for teachers on maternity and long-term sick leave from 66 to 40 days, increased time in the classroom for probationer teachers and introduced changes to supply contracts.
- Reducing the length of secondary school classroom periods from 55 minutes to 50 minutes and increasing the weekly number of periods from 30 up to 33. This has helped maximise teachers' class contact time and reduce the need for supply teachers. In keeping with the aims of CfE, schools also now have more flexibility to provide vocational opportunities and wider achievement activities for pupils.
- Re-tendering school transport when contracts are renewed. Some councils have also reviewed how they provide transport, for example by replacing larger vehicles with smaller ones and reviewing routes to reduce the amount of fuel usage.
- Reducing Continuing Professional Development (CPD) programmes and training budgets to schools and using in-house staff to deliver training instead of external providers.

### Councils' education budgets will continue to face pressures

**25.** Public sector finances will continue to be under pressure for the foreseeable future. An ageing population, changes to the welfare system, and the impact of the recent recession are also increasing demand for many public services. Councils need to allocate limited money, staff and other assets to individual services in line with their priorities and needs. As a result, elected members will need to consider and balance the demand for resources from education services with those of other services.

**26.** Education services are also likely to face a number of specific challenges that will place increasing pressure on finances. These include:

- increasing demand for teachers and education services, as a result of rising pupil numbers in some areas, especially in the primary sector
- Scottish Government commitments to reduce class sizes, especially for younger pupils in P1-P3
- public and political opposition to proposals to close schools, which may mean councils are unable to make the financial savings that closures could bring
- meeting the requirements of pupils with additional support needs in special schools and classes, and in mainstream schools
- maintaining and upgrading the school estate. Although councils have made significant progress in recent years, 18 per cent of schools remain in poor or bad condition.<sup>14</sup>

**27.** Many of the approaches to reducing budgets have only been introduced in the last two or three years. Given that staff costs comprise over two-thirds of councils' expenditure, employing fewer staff is an obvious way to reduce spending. However, councils need to be aware of the potential impact on remaining staff. More work is needed to monitor the impact of staff reductions on front-line services and also on the capacity of functions such as central education staff. Pressures arising from additional responsibilities or extra workload could result in increased sickness absence or low staff morale. Councils also need to understand the longer-term effect that budget reductions could have on efforts to raise attainment among pupils.

### **Recommendations**

#### Councils should:

- fully assess the potential long-term impact on attainment and wider achievement of budget reductions
- monitor and act on the impact of revised working practices and staff reductions across all affected groups (eg, teachers, administrative staff, classroom assistants) on staff wellbeing by, for example, monitoring sickness absence levels, and through specific questions in staff surveys.

## Part 2

### Pupil attainment and wider achievement

### **Key messages**

- 1 There is a lack of information on overall pupil performance at both a local and national level. Current measures focus on attainment of secondary pupils at S4-S6 level. There are no comparable measures of wider achievement, or the performance of pupils in P1-S3 available at both a council and national level.
- 2 Attainment in S4-S6 has improved over the last decade. However, it is not clear whether these improvements are greater or less than expected due to a lack of national targets. There is significant variation in attainment between individual councils, schools and groups of pupils, and there is a considerable gap between Scotland and top performing countries.
- **3** Deprivation continues to have a large influence on attainment. There are significant differences in attainment between pupils from deprived areas and those from more affluent areas. However, some schools have achieved better attainment results than their levels of deprivation would indicate, suggesting that the gap between the lowest and highest performing schools cannot be wholly attributed to different levels of deprivation. Closing the gap between schools is likely to be critical to improving overall attainment levels.
- **4** There are increasing opportunities for pupils to participate in activities that aim to improve their confidence and help them develop the skills required as they leave school and move into employment, training or continued education. Schools and councils need to ensure that they can scrutinise the outcomes from these activities to ensure that they meet the needs of pupils.

### Pupils' learning experiences have become much broader in recent years

**28.** Pupils in Scotland undertake a variety of courses and qualifications aimed at ensuring they gain both nationally recognised qualifications and wider employability and social skills. Traditionally, schools were the main providers of courses although learning has always taken place outside the classroom, at home and in the community. However, the range and types of courses available to pupils are now much wider and there is greater opportunity for pupil personalisation and choice (Exhibit 5, page 16).

attainment has improved over the last decade but there is significant variation between councils and pupils



**Pupil learning in Scotland** Pupils learn in a wide variety of ways, with examples shown below.



**29.** In delivering educational opportunities to pupils, councils are increasingly working in partnership with colleges to provide vocational qualifications. For example, Falkirk Council has had a formal partnership with Forth Valley College for more than a decade, providing pupils with opportunities to attend college during the school day to gain qualifications in a range of vocational subjects. Third sector organisations such as the John Muir Trust are involved in delivering wider achievement awards and programmes.

### Existing measures do not fully capture a pupil's performance throughout their time at school

#### Measures of attainment focus on pupils in S4-S6

**30.** Pupil performance in Scotland is measured nationally by the number and level of qualifications passed by pupils in secondary school. There are a range of attainment measures used within Scottish education. We have selected ten of these to examine the range of performance across the entire senior phase (S4-S6) (Appendix 1). The selected measures are closely aligned to the measures that councils report to their own education committees.

**31.** The achievements of some pupils who take vocational courses at local colleges are not captured by existing attainment measures. Pupils can complete courses at college but their achievements are not recognised in existing school performance measures. The *Interim Report* of the Commission for Developing Scotland's Young Workforce in 2013 recommended that the delivery of vocational qualifications for school pupils should be explicitly measured and published alongside other school performance measures.<sup>15</sup> In addition, pupils can complete groups of units at school or college, without completing the full course. These are also not captured in existing measures.

### Some assessment of pupil performance between P1 and S3 is made but it is not possible to compare the results between councils

**32.** Pupil performance during primary and up to S3 is collected nationally through the Scottish Survey of Literacy and Numeracy (SSLN).<sup>16</sup> Introduced in 2011 to reflect the changes brought about by the Curriculum for Excellence, the SSLN is an annual survey of a sample of P4, P7, and S2 pupils across the country that tests literacy and numeracy skills in alternate years. The SSLN is designed to provide national-level results. Results cannot be used at a council level due to the small numbers of pupils selected to participate in each council.

**33.** At a council level, there is no consistent approach to tracking and monitoring the progress of pupils from P1 to S3. Twenty-seven councils use some form of standardised testing at council level to assess and track the progress of their pupils from P1 to S3. This involves testing pupils at various stages to assess their progress in literacy and numeracy and comparing this with expected progress. The type of testing used and the extent to which pupils are tested varies across the country. For example, some councils test pupils in P1, P3, P5, P7 and S2 while others test less frequently than this.

### There are no comparable performance measures addressing pupils' wider achievement

**34.** There are no national performance measures on pupils' wider achievements, for example the number of pupils participating in specific award programmes such as the Duke of Edinburgh. Sixteen councils were able to provide us with data on their pupils' wider achievements in formal awards and programmes but there is significant variation around what each council collects.

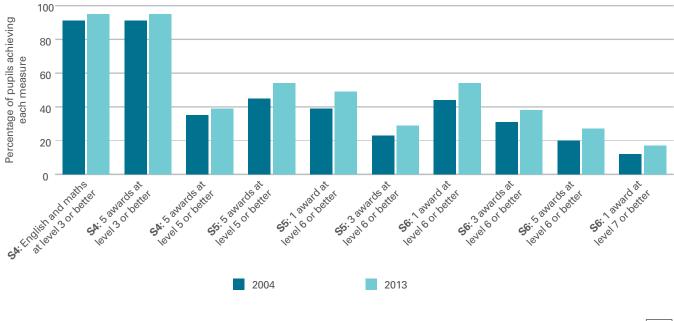
**35.** The Scottish Government is currently working with councils, national education agencies and other partners to develop a new benchmarking tool. The aim is that this tool will include a new set of performance measures that will take some account of pupils' wider achievement. This new tool is scheduled to be in place by August 2014. We discuss wider achievement in more detail in (paragraphs 56–60).

#### Attainment levels have improved over the past decade

**36.** Nationally, attainment has improved across all ten of the attainment measures we selected over the past decade, although the level of improvement has been mixed (Exhibit 6). Attainment improved by four per cent for the measures at S4 level between 2004 and 2013. At S5 and S6 levels, attainment improved between five and ten per cent. The vast majority of the improvements in attainment have been made in the past five years.

### Exhibit 6

Percentage of pupils achieving each of the ten attainment measures we selected in 2004 and 2013 Attainment has improved across all ten measures in the past decade although to differing degrees.



Note: Appendix 1 explains what each attainment measure means. Source: Audit Scotland, using data from Scottish Government Education Analytical Services Division

**37.** There are no national targets for exam performance. Therefore it is not clear whether the rate of improvement across the ten attainment measures over the last ten years is above or below what should be expected by councils.

**38.** The attainment gap between the highest and lowest-performing pupils in secondary education has closed slightly over the past five years. Every level and type of qualification in Scotland has an accompanying points score. The points gained by each pupil are added to create an overall tariff score. In 2012 (the most recent year available at time of reporting), the highest performing 20 per cent of

S4 pupils in Scotland had an average tariff score of 298. The lowest performing 20 per cent of S4 pupils had a tariff score of 71. The national average is 187. The gap between the highest and lowest performing 20 per cent of pupils narrowed slightly from 235 points in 2008 to 227 points in 2012.

### Nationally, most P4 and P7 pupils are performing well but performance is not sustained into secondary school

**39.** Results from the Scottish Survey of Literacy and Numeracy show that:

- The majority of P4 and P7 pupils tested are performing well, very well or beyond their expected stage in numeracy and literacy. However, the percentage of pupils performing at this level in numeracy declined by eight per cent for P4 pupils and by six per cent for P7 pupils between 2011 and 2013. Literacy was first tested in the SSLN in 2012 so trend figures are not yet available.
- S2 pupils' performance in literacy is similar to those of P4 and P7 pupils. However, S2 pupils performed significantly worse against the standard expected than primary pupils in numeracy in both 2011 and 2013. In 2013, 42 per cent of S2 pupils performed well or very well in numeracy compared to 69 per cent of P4 pupils and 66 per cent of P7 pupils. Onethird (35 per cent) of S2 pupils in 2013 were not working at their expected level in numeracy compared to only 0.2 per cent of P4 pupils and two per cent of P7 pupils.

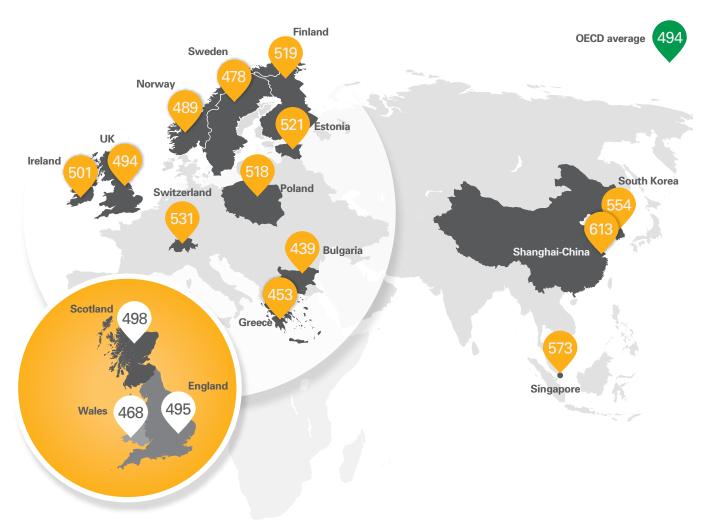
### There is a considerable gap between Scotland and top performing countries

**40.** International comparisons show that the academic performance of Scotland's pupils in recent years is static, after a period of relative decline. As part of its national performance framework, the Scottish Government uses the Programme for International Student Assessment (PISA), run by the Organisation for Economic Co-operation and Development (OECD), to compare how Scotland is performing against other OECD countries.<sup>17</sup> A sample of pupils in each participating country is assessed in reading, maths and science every three years. Between 2000 and 2006, Scotland's performance in reading deteriorated and between 2003 and 2006 performance in maths also fell.<sup>18</sup> Since 2006, performance in reading, science and maths has remained static. Scotland's performance has been above the OECD average in reading and science since 2009 and has been similar to the OECD average in maths.

**41.** Compared to other UK countries, Scotland's performance since 2006 (the first year that can be compared) has been similar to England and Northern Ireland in most areas and better than Wales.<sup>19</sup> More widely, a number of other countries have continued to improve in recent years compared to Scotland (eg, Poland), while some have seen a relative decline (eg, Australia and New Zealand). Overall, there is a considerable gap between Scotland and the top performing countries (Exhibit 7, page 20). All countries have different education systems and the focus of these will differ according to each country's national and local priorities. However, it is important that Scotland is able to keep pace with the best performing countries if it is to compete effectively in the global economy.

PISA scores in mathematics, 2012

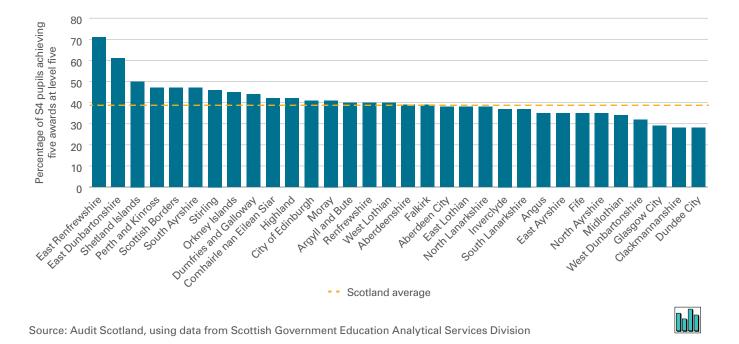
There is a considerable gap between Scotland and the top performing countries.



Note: These are mean scores for each country. As with all sample surveys, the values shown are subject to sampling error which means the true value could be slightly higher or lower than that shown. Source: Audit Scotland using *PISA 2012 Results in Focus*, OECD, 2013

### There is significant variation in attainment levels between councils and between individual schools

**42**. There are wide differences in attainment levels between councils in Scotland across almost all of the ten measures we use in the report (Appendix 1). Seven of the measures had a gap between the highest and lowest performing councils of 30 percentage points or more. The widest performance gap was in the percentage of S4 pupils achieving five awards at SCQF level five with a gap of 43 percentage points in 2013. In 2013, 28 per cent of S4 pupils in Clackmannanshire and Dundee City achieved five awards at level five, compared to 71 per cent in East Renfrewshire (Exhibit 8, page 21).



Percentage of S4 pupils achieving five awards at level five in 2013 by council Performance varies widely across the country.

**43.** Attainment levels also vary significantly between schools in the same council area. Exhibit 9 (page 22) shows the range and spread of performance across schools in each council using the percentage of S4 pupils achieving five awards at level five in 2013. This is an important measure as S4 is the last year in which all pupils sit national exams. There is similar variation within councils using two other commonly reported attainment measures: the percentage of S5 pupils achieving five awards at level six; and the percentage of S6 pupils achieving five awards at level six.

**44.** Looking at the percentage of S4 pupils achieving five awards at level five in 2013 in more detail:

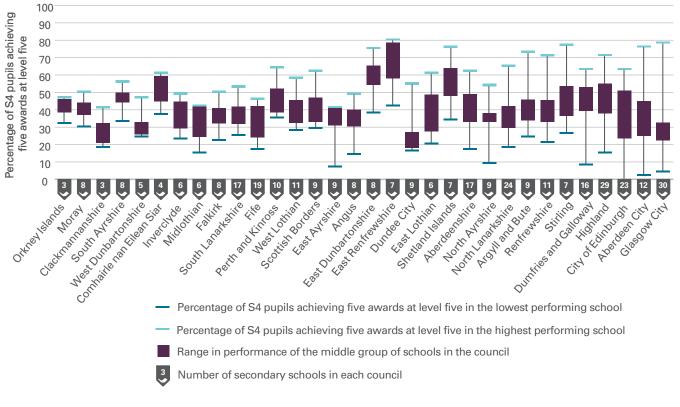
- Orkney Islands had the smallest gap between schools in 2013 at 15 percentage points. Aberdeen City and Glasgow City had the widest gap between schools at 74 percentage points. Across all secondary schools in Scotland, the percentage of S4 pupils achieving five awards at level five ranged from:
  - no pupils achieving this level in the lowest-performing school in the City of Edinburgh in 2013, to
  - 81 per cent of pupils achieving this level in the highest-performing school in East Renfrewshire.
- The spread of school performance in individual councils varies across the country. For example, the middle-performing group of schools in Glasgow City were within ten percentage points of each other. In contrast, in the middle-performing group of schools in East Lothian, the percentage of S4 pupils achieving five awards at level five in 2013 differed by 21 percentage points.

 The extent of the variation in performance across schools is not fully explained by a council's size, level of deprivation, or number of secondary schools. In 2013, Scotland's three largest city councils (Glasgow, Edinburgh and Aberdeen) had the widest gap in performance between schools. However, another four councils (Dumfries and Galloway, Highland, Renfrewshire, and Stirling) also had variations of at least 50 percentage points between their lowest-performing and highest-performing schools. All of these councils have a mix of deprivation levels, rurality, and number of schools.

### Exhibit 9

Range and spread of performance between schools in each council in terms of percentage of S4 pupils achieving five awards at level five, 2013

There are wide differences in performance between schools in each council area.



Note: 1. One school from Argyll and Bute, two schools from Orkney Islands, and one school from Shetland Islands have been removed from the analysis as they had less than five pupils in S4 in 2013. Source: Audit Scotland, using data from Scottish Government Education Analytical Services Division

### Lower-performing councils have made the most improvement in attainment over the past ten years

**45.** All councils improved attainment in at least four of the ten attainment measures between 2004 and 2013. The majority of councils (21) improved attainment across all of the measures. Within this ten-year period, however, councils' performance fluctuates. To identify more recent trends in performance

and understand how these compare to the longer-term ten-year period, we examined the most recent five years. This showed that of the 21 councils identified above:

- 14 continued to display an upward trend in all ten measures
- seven also displayed an upward trend in at least eight of the measures.

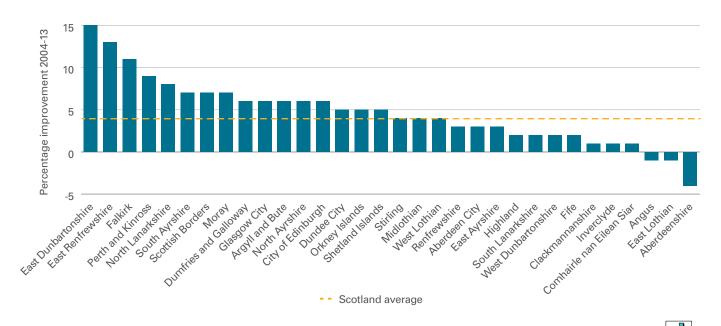
**46.** There is considerable variation in the scale of improvement among councils. **Exhibit 10** shows the level of improvement over the past ten years in the percentage of S4 pupils achieving five awards at level five in each council. There is similar variation in improvement levels across all other attainment measures used in the report. The biggest improvements in attainment have been made, in the main, by councils which were in the lowest-performing third of councils ten years ago.<sup>20</sup> For example, Glasgow City and Dundee City were the lowest-performing councils in 2004 in terms of the percentage of S4 pupils achieving five awards at level five. However, over the last decade, performance improved by six per cent and five per cent respectively in these councils, above the national average of four per cent.

**47.** Although it is mainly lower-performing councils that have made the most improvements in attainment in the past decade, continuous improvements have also been made by two of the highest-performing councils. Across all attainment measures, East Dunbartonshire and East Renfrewshire were the top-performing councils in 2013, despite already starting this period as high-performing councils.

### Exhibit 10

Percentage improvement by council in the percentage of S4 pupils achieving five awards at level five, 2004-13

Improvements in attainment over the past ten years vary markedly across the country.



Source: Audit Scotland, using data from Scottish Government Education Analytical Services Division

**48.** Councils are slightly more likely to have improved attainment in S5 and S6 than in S4 over the past ten years. For example, 31 councils improved the percentage of their S5 pupils achieving one award at level six (equivalent to Higher-level). This compares to 27 councils that improved the percentage of pupils of S4 pupils achieving five awards at level three (equivalent to Standard Grade Foundation level).

**49.** Although all councils have improved attainment in at least some of the ten measures, there has been little overall reduction in the variation in attainment between councils in the past ten years. Of the ten attainment measures, the size of the gap between the highest-performing and lowest-performing councils:

- reduced in five
- stayed the same in one
- increased in four.

For example, in 2004 there was a 38 percentage point gap in the percentage of S6 pupils achieving one award at level six between the lowest-performing and highest-performing councils in Scotland. By 2013, this gap had reduced by six percentage points. Conversely, the gap in performance between councils in the percentage of S4 pupils achieving five awards at level five increased by eight percentage points between 2004 and 2013.

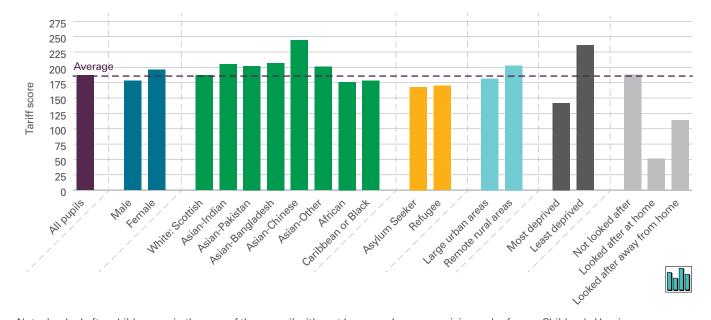
### The gap in performance between the lowest and highest-performing schools continues to increase in more than half of councils

**50.** Thirteen councils reduced the gap in performance between their highest and lowest-performing schools in the past ten years in terms of the percentage of S4 pupils achieving five awards at level five. They have reduced the gap largely by improving attainment levels in lower-performing schools, although there has also been a decline in performance among higher-performing schools in some councils. For example, Inverclyde closed the gap in performance between its schools the most between 2004 and 2013 (by 22 percentage points). The percentage of S4 pupils achieving five awards at level five increased from 14 per cent in the council's lowest-performing school in 2004 to 24 per cent in 2013. However, at the same time, the percentage of S4 pupils achieving the same award in the council's highest-performing school decreased from 62 per cent in 2004 to 50 per cent in 2013.

**51.** In 19 councils, the gap between the highest and lowest-performing schools increased between 2004 and 2013. This is mainly because the percentage point improvement in the percentage of S4 pupils achieving five awards at level five was greater over the past ten years in the highest-performing schools than in the lowest-performing schools.

### Gender, ethnicity and looked after status all impact on levels of attainment

**52.** Attainment differs across different groups of pupils (Exhibit 11, page 25).<sup>21</sup> Among S4 pupils in 2012, Asian-Chinese pupils were the highest performers, with an average tariff score of 244 (the national average is 187). This is almost five times greater than pupils who are looked after by a council but are living at home under a supervision order. These pupils had an average tariff score of 51.<sup>22, 23</sup>



Average tariff scores of S4 pupils by different characteristics in 2012 Attainment varies widely between different groups of pupils in Scotland.

Note: Looked after children are in the care of the council, either at home under a supervision order from a Children's Hearing, or accommodated away from home (such as a residential unit, foster care, or with relatives).

Source: Audit Scotland, using *Summary statistics for attainment, leaver destinations and healthy living, No.3: 2013 Edition – Attainment and Leaver Destinations*, Scottish Government, June 2013 and data provided by Scottish Government Education Analytical Services Division

**53.** Overall attainment has improved among each of the different groups of pupils. However, the extent of the improvement varies across and within the groups:

- Improvements in attainment vary markedly by ethnic background. For example, tariff scores of pupils with an Asian-Indian ethnic background decreased by two points in the most recent three years, compared to an increase of 16 points for pupils from an Asian-Pakistan ethnic background.<sup>24</sup>
- The average tariff score of pupils looked after away from home improved by 34 points over the past three years, more than double the rate of improvement among pupils looked after at home at 15 points. Pupils looked after at home were the lowest-performing group of pupils in 2010 and remained so in 2012.

### Deprivation is a key factor influencing attainment in Scotland but other factors are also important

**54.** The OECD review of Scottish education in 2007 found that a pupil's social background mattered more in terms of attainment than in other countries.<sup>25</sup> While the link between deprivation and attainment is not unique to Scotland, deprivation continues to have a major impact upon levels of attainment across the country:<sup>26</sup>

• At a national level, tariff score is very closely linked to level of deprivation. In 2008, the average tariff score of pupils in the least deprived areas of Scotland was 106 points higher than pupils in the most deprived areas. The gap has narrowed slightly in the past five years, but there is still a 94 point difference.

- In 2012, around half of the S4 pupils (51 per cent) who were in the lowest 20 per cent of achievers came from the three most deprived deciles in Scotland.<sup>27</sup> Around half (48 per cent) of pupils who were in the highest 20 per cent of achievers came from the three least deprived deciles in Scotland. This has not changed over the past five years.
- The impact of deprivation on pupil performance is also evident among primary pupils. The Scottish Survey of Literacy and Numeracy in 2013 showed that 61 per cent of P4 pupils in the most deprived areas in Scotland performed well or very well at the numeracy level expected. This compared to 75 per cent of pupils from the least deprived areas.
- A Save the Children report in 2012 using data from the Scottish survey Growing up in Scotland found that children born into poverty are twice as likely as other children to face developmental difficulties when they enter formal schooling.<sup>28, 29</sup>

**55.** Councils with more areas affected by deprivation generally have lower levels of attainment than councils with higher levels of affluence. However, deprivation is clearly not the only factor influencing attainment. For example, Inverclyde and East Lothian have similar levels of attainment in terms of the percentage of S4 pupils achieving five awards at level five (38 per cent and 39 per cent respectively) yet have widely different levels of deprivation. At a school level, deprivation also has an impact on attainment. Using the recognised measure of free school meal registrations as an indicator of deprivation, in general the greater the number of pupils registered for free school meals in a school then the lower the attainment levels (Exhibit 12, page 27). However, as the wide spread of schools shows, deprivation is clearly only one contributing factor in how well schools perform. For example, some schools with higher levels of pupils registered for free school meals to schools with much fewer pupils registered for free school meals. We discuss the other factors that influence school performance in **Part 3** of the report.

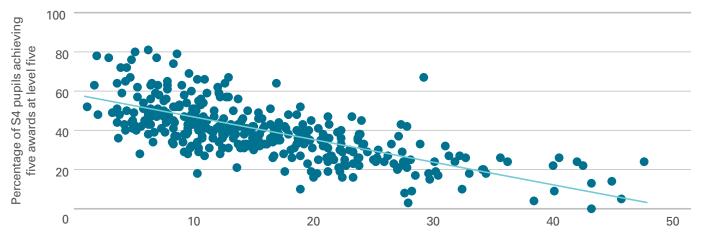
### There are increasing opportunities for pupils to develop wider employability and life skills

**56.** CfE places an emphasis on developing children to be successful learners, confident individuals, effective contributors and responsible citizens. It requires schools to recognise the breadth of pupils' achievement, and not only their ability to pass exams. Activities that pupils undertake both within and outwith school are more broadly known as wider achievement and these can take many forms (Exhibit 13, page 28).

**57.** Formal wider achievement programmes have been available in schools for some years. Councils told us that there has been a significant increase in the past five years, in both the types of programme being offered and the numbers of awards pupils are achieving (Exhibit 14, page 28). Pupils taking part in such activities must plan and identify their own personal goals. The programmes are designed to allow pupils to develop skills for life, learning and work, such as self-management, problem solving, teamwork and communication. These are attributes that major employers value when selecting prospective employees (Case study 1, page 29).

Free school meal registrations compared to the percentage of S4 pupils achieving five awards at level five in all secondary schools in Scotland, 2013

Deprivation (using registrations for free school meals as an indicator) is not the only factor affecting levels of attainment.



Percentage of pupils registered for free school meals

Note: The blue circles represent every secondary school in Scotland.

Source: Audit Scotland, using data provided by Scottish Government Education Analytical Services Division and school meals data from *Pupil Census*, Scottish Government, 2013

Schools are beginning to target wider opportunities to those pupils who would benefit the most, but how this activity is recorded and monitored is variable

**58.** CfE emphasises the importance of pupils having access to learning opportunities that are personalised and appropriate for them. This ensures that pupils gain the most they can from wider activities and programmes that help them learn life and employability skills. There are examples of schools and councils targeting programmes and activities towards those pupils who would most benefit. For example, Perth and Kinross Council has developed an outdoor programme to engage vulnerable pupils at St John's Academy and Kinross High School. The programme uses kayaking, gorge walking and climbing to help pupils develop new skills and increase their levels of confidence.

**59.** These types of activities are mainly organised at a school level. This means schools can appropriately tailor programmes and activities to their individual pupils. This is reflected in the variation in the range of programmes and awards available to pupils in different schools within the same council area. To ensure that all pupils have access to the most appropriate opportunities, it is important that schools are able to fully capture and record all the activities that are available and the achievements of pupils undertaking such activities. Schools also need to be able to share this information with their council so that elected members can scrutinise performance on pupils' access to, participation in, and outcomes from the wider activities and programmes on offer within the council area.

**60.** The new Scottish Senior Phase Benchmarking Tool ('Insight') is planned to be introduced across Scotland in August 2014. The tool is designed to help councils, schools and teachers use data to analyse, compare and improve the performance

of pupils in the senior phase (S4-S6). By gathering and reporting information on both attainment and wider achievement, the tool should help build up a picture of pupil performance across Scotland. Work is ongoing to determine which programmes will be included. The main criteria are that programmes are SCQF-rated and fit in with the CfE principles.

### Exhibit 13

### Examples of wider achievement activities

Wider achievement can be undertaken in a number of ways.

| Types of wider achievement  | Example in practice   |
|---|---|
| Formally recognised awards or<br>programmes, such as the Duke of<br>Edinburgh Award, the John Muir<br>Award, and The Prince's Trust.<br>These all provide opportunities for<br>pupils to develop their potential.                                   | The John Muir Award is an environmental award scheme that encourages<br>awareness and responsibility for the natural environment. While working towards<br>this award, P5/6 pupils at Slamannan Primary in Falkirk Council were trained in<br>scientific techniques. Working alongside Scottish Natural Heritage and the Royal<br>Society for the Protection of Birds, the children visited the habitat of geese and<br>studied their migration. The project encouraged pupils in other subject areas such<br>as drama and landscape painting. The pupils' work was highly commended in<br>the Nature of Scotland Awards, Youth and Education category. |
| Arrangements that do not lead to<br>an accredited award but which are<br>formally organised, for example<br>voluntary work, enterprise work<br>or leadership roles in the school.   | Pupils from Ellon Academy in Aberdeenshire Council have been involved in<br>a number of enterprise initiatives to develop skills for learning, life and work.<br>This has taken the form of various projects such as raising money for charity,<br>introducing fair trade school awards and working with local businesses. Through<br>engaging in enterprise activities, pupils have gained an awareness of wider global<br>issues and developed positive relationships with the local business community.<br>In 2012, the school won a national award for Enterprise and Employability.  |
| Developing skills through<br>achievements in the school, home<br>or wider community. For example,<br>taking part in sport, the arts, music<br>or activities in the community or<br>being in a position of responsibility,<br>such as a young carer. | The Instrumental Music Programme within West Lothian Council offers<br>opportunities for pupils to develop their music skills, and play instruments in<br>orchestras. This helps pupils develop confidence and team-working skills.<br>In 2013, the Schools Wind Ensemble was awarded a Gold plus award at the<br>Scottish Concert Band Festival.   |

Source: Audit Scotland

### Exhibit 14

### Number of pupils gaining the most commonly undertaken wider achievement awards, 2008-12

|  | Number of councils that provided data | 2008  | 2009  | 2010  | 2011  | 2012  |
|--|---------------------------------------|-------|-------|-------|-------|-------|
| Duke of Edinburgh Awards                                   | 14                                    | 1,195 | 1,153 | 1,980 | 2,202 | 2,994 |
| ASDAN (Award Scheme Development and Accreditation Network) | 9                                     | 276   | 512   | 1,277 | 1,417 | 1,966 |
| John Muir Award  | 10                                    | 57    | 454   | 310   | 788   | 3,095 |
| John Muir Award  | 10                                    | 57    | 454   | 310   | 788   |       |

### Case study 1

### The Duke of Edinburgh award scheme

The Duke of Edinburgh award has benefits for both pupils and employers.

The Duke of Edinburgh award scheme (DofE) is a personal development programme that helps young people learn new skills, work with others, engage with their community and learn how to train and carry out an adventurous journey. It is open to all young people from age 14. There are three levels: bronze, silver and gold and each of these involve completing objectives to learn new skills, trying new activities and volunteering. Each progressive level takes more time and commitment from the participants.

In Scotland, 89 per cent of secondary schools have active DofE groups associated with them. This figure increased from 72 per cent five years ago, and around 15 per cent of participants have additional learning needs or have declared a disability.

Many organisations and companies have a positive view of the DofE. For example, a United Learning Trust survey in 2005 asked employers what activities undertaken in school were most valuable to them in prospective employees, and they rated DofE as the most important. In recent years, Scotrail, Scottish Gas and Northern Constabulary have sought to recruit DofE participants. These organisations support participants as they work towards their gold award. A recent impact study by the University of Northampton noted 82 per cent of participants wanted to continue volunteering after their DofE programme and 74 per cent noted an increase in self-esteem or self-belief.

Source: Audit Scotland

### More than half of school leavers go on to higher or further education

**61.** In 2012, 90 per cent of school leavers went on to what is known as a positive destination, such as higher education or employment.<sup>30</sup> The largest single group of school leavers went on to higher education (36 per cent), while eight per cent of school leavers were unemployed and seeking work. The percentage of school leavers going on to a positive destination increased by six per cent between 2008 and 2012.<sup>31</sup>

**62.** At a council level, the percentage of school leavers going on to a positive follow-up destination in 2012 varied from 95 per cent in East Renfrewshire to 84 per cent in Glasgow City. All but one council has increased the percentage of pupils going on to a positive destination since 2008. Dundee City had the largest increase at 12 per cent, while Shetland Islands had a drop of three per cent. The percentage of school leavers entering employment fell in almost all councils between 2008 and 2012. This was mainly offset by an increase in pupils entering higher and further education.

**63.** Similar to attainment, the destinations of school leavers are also linked to levels of deprivation. School leavers from the most deprived areas in Scotland were:

• half as likely in 2012 to go on to higher education than pupils from more affluent areas (20 per cent compared to 42 per cent)

 twice as likely to be unemployed and seeking work (14 per cent compared to six per cent).<sup>32</sup>

**64.** Glasgow City Council and City of Edinburgh Council have put in place a range of initiatives to improve positive destinations (Case study 2).

#### **Case study 2** Improving positive destinations

Glasgow City Council's Employment and Skills Partnership Team offers a wide range of programmes to provide pupils with employment-related learning opportunities in a way that is tailored, responsive and flexible to meet their individual needs. It has focused on five workstreams including enterprise, skills and aspirations, and business partnerships. The various workstreams focus on offering pupils a range of tailored opportunities and experiences so that they develop the confidence and skills for living and working in the wider world. These include work experience, participating in school and college vocational programmes, learning in different environments and business mentoring. Between 2008 and 2012, Glasgow City Council increased the number of pupils going on to positive destinations by 6.3 per cent compared to a national increase of 5.5 per cent.

In 2011, City of Edinburgh Council introduced the 'Edinburgh Guarantee'. This is an initiative which aims to ensure young people leave school with the opportunity of a job, training or further education. It primarily focuses on Edinburgh school leavers within the last three years and to date 950 pupils have benefited from the scheme.

Source: Audit Scotland

### Recommendations

#### Councils should:

- ensure they fully understand why levels of attainment vary between their schools and different groups of pupils
- develop and implement strategies to reduce the gaps in performance between the lowest and highest-performing schools
- continue to work with the Scottish Government and Education Scotland to develop a suite of agreed performance measures which would provide an overall picture of education attainment and achievement across Scotland
- develop more coordinated approaches to gathering and recording information on the range of wider achievement activities offered in schools, and the levels of pupil participation and the outcomes they achieve. This will help councils to scrutinise performance and ensure resources are used as efficiently as possible.

## Part 3

### Improving pupil performance

### **Key messages**

- Councils that have raised attainment the most over the last decade have focused on specific areas such as developing leadership, and improving both teacher quality and systems for monitoring and tracking pupil data. Increasing pupils' own aspirations and expectations of what they could achieve after school has also been important.
- 2 Strategic planning could be strengthened so that plans better identify the most important priorities for improvement. There is scope to strengthen elected members' role in scrutinising and challenging education performance around both attainment and wider achievement. Councils also need to continue to improve how they engage with parents.
- **3** Spending more money on education does not guarantee better pupil performance. Councils are starting to target resources to the lowest-performing pupils to raise educational achievement, but this could be developed further. In making spending decisions, councils need to fully understand what the most effective ways are to improve pupil performance.

### A range of factors play an important role in improving attainment

**65.** Improving attainment depends on a number of factors. There is no one solution and many of the elements are interlinked. There is a wide range of literature on what influences pupil attainment. Aside from deprivation, other key factors that are recognised as playing an important role in improving attainment include:

- improving teacher quality
- developing leadership
- improving systems for monitoring and tracking pupil data
- increasing parental involvement
- developing pupil motivation and engagement.

developing leadership skills and improving teacher quality are key to raising attainment



**66.** Evidence also suggests that a child's home environment, and the extent to which it is supportive and stimulating to children during their early years, plays a key role in future educational attainment. Public bodies' early years intervention activities are therefore important in tackling issues which can influence attainment in later years. This is outside the scope of this audit.

#### Councils that have improved attainment the most have focused on areas such as developing leadership and improving teacher quality

**67.** As we outlined in <u>Part 2</u> of the report, 14 councils in Scotland have successfully improved attainment across all of the ten measures of attainment we examined in both the last five and ten years. These councils have focused on some or all of the key factors outlined in **paragraph 65, page 31**.

#### Improving teacher quality

**68.** *Teaching Scotland's Future* highlighted that improving the quality of teaching and leadership is central to improving attainment.<sup>33</sup> Similarly, a 2007 review by McKinsey & Company found that those pupils placed with the highest-performing teachers progressed three times as fast as those with the lowest-performing teachers.<sup>34</sup> Improving teacher quality depends on:

- being able to attract the best candidates
- providing high-quality teacher training
- offering adequate salaries to retain staff
- having effective career development and support.

**69.** Examples of improvement in this area include:

- Falkirk Council has developed its recruitment process to test the specific competencies of each post and then find candidates who demonstrate the right skills and knowledge. For example, applicants for senior school leaders now take part in an assessment centre and applicants for classroom teachers have their teaching style formally observed and assessed in the classroom.
- Glasgow City Council has improved its approach to supporting and challenging individual schools and teachers. It has strengthened its human resources function and there is a greater focus on addressing poor performance. It offers tailored help and mentoring to teachers who need to improve their classroom practice.
- Fife Council has developed a Teacher Learning Community model. This brings together teachers on a regular basis to improve learning and teaching, and to share good practice. Teachers are encouraged to identify their own development needs and support their colleagues as a group.

**70.** The Scottish Government has established an implementation board to put in place the recommendations from *Teaching Scotland's Future*. These focus on improving the full spectrum of teaching education including an enhanced commitment to career professional learning and development by teachers. Councils must also support all aspiring head teachers in accessing a qualification or professional award in educational leadership. It is too early to determine

whether these changes will realise the intended benefits, but they provide an important framework for councils to deliver improvements.

#### **Developing leadership**

**71.** Effective leadership is crucial to improving attainment. This applies to all central education departments, Head teachers, and individual teachers. Leadership affects a wide variety of other areas, for example teacher development and pupil and parent relationships. Examples of improvement in this area include:

- In 2009, Glasgow City Council reviewed its staff development policy to provide a more systematic approach to planning staff professional development, improving teacher quality and developing leadership. Staff have participated in a range of tailored programmes. Ninety senior managers have completed the Aspiring Heads programme and over 100 teachers have achieved Harvard Leaders of Learning accreditation. These programmes are intended to improve the quality of learning and teaching in classrooms. The council considers that learning and development achieved through these courses has improved classroom practice, with learning widely shared among peers and other colleagues.
- Dumfries and Galloway Council has developed a Transformational Leadership Development Pathway to support succession planning within education. Given its rural context and the challenge of recruitment, the council recognised the need to develop local solutions, build capacity among existing staff in-house and identify at an early stage potential future leaders within schools. The programme is available to all teaching staff from probationer teachers through to Head teachers and focuses on sharing learning and best practice between schools.
- In 2010, South Ayrshire Council set up its own leadership development programme. The council recognised that a number of senior teachers were due to retire in the coming years, and considered that introducing a programme would not only support succession planning but encourage aspiring leaders among teachers to consider a route into headship. The course involves a range of elements including academic study and research, work shadowing in another school, working with peers to learn from each other and sharing best practice. The course allows candidates to learn more about the council's role in delivering education in areas such as budgetary management and strategic planning.

#### Developing systems for monitoring and tracking data

**72.** Assessing, monitoring, and measuring performance at school, teacher and pupil level is central to understanding how to improve attainment. Monitoring how pupils are progressing allows teachers and schools to identify:

- if pupils need extra help
- what types of methods the school could offer
- how successful interventions have been in improving the pupil's learning.

- **73.** Examples of improvement in this area include:
  - Fife Council has developed its tracking and monitoring systems at both primary and secondary levels through standardised testing and better performance management. Detailed analysis of the data gathered takes place centrally and within schools. Annual performance packs are produced for each school that identifies the school's performance compared to other schools so that areas of underachievement can be targeted.
  - West Lothian Council has developed a standardised testing programme at all stages. The information available through this has been used at an individual school level to target underachievement and identify the best ways to help pupils improve, with a particular focus on those pupils most in need.

#### Increasing parental involvement

**74.** The Joseph Rowntree Foundation has found that improving parental involvement in their child's education contributes to raising attainment.<sup>35</sup> This includes involving parents in the school and in their child's learning. For example, Falkirk Council is using Information Technology innovatively to improve parental engagement, through for example Twitter, YouTube, interactive school websites and email. The central education department regularly updates an 'education blog' containing information on raising attainment. These approaches are intended to assist parents in helping their child learn at home.

#### Developing pupil motivation and engagement

**75.** It is widely acknowledged that a successful education system needs to be based within a culture that values education, and where all members of society have high aspirations for pupils. The OECD identified that high-performing education systems have high expectations of every pupil, not just high achievers.<sup>36</sup> Examples of improvements in this area include:

- West Lothian Council has developed nurture groups for pupils at P6/P7 and S1/S2 who face challenges in learning. These provide additional support in literacy and numeracy to ensure pupils remain engaged with school.
- Glasgow City Council has been focusing on increasing pupils' own aspirations and goals. It has developed a range of employment-related opportunities (Case study 2, page 30), ensuring the courses and programmes are relevant and suitable to pupils' needs. It also provides tailored mentoring and support for pupils who are considering going to university.
- North Ayrshire Council is committed to tackling youth unemployment and has a programme to support pupils in considering all their available options after leaving school. In particular, vulnerable pupils are targeted at an early stage to ensure that support is in place. A named 16+ coordinator in each secondary school works closely with guidance staff and other partners to ensure that pupils are provided with support to make the transition from school into work and equip them with the necessary skills.

**76.** Overall, improving educational attainment is likely to be achieved by bringing together a number of linked initiatives. As outlined earlier, East Dunbartonshire

and East Renfrewshire have been the top two performing councils in terms of attainment over the last decade. East Renfrewshire Council has continued to improve levels of attainment through having a clear focus on the types of approaches which work best for it (Case study 3). The council has seven secondary schools and 23 primary schools. In the Scottish Index of Multiple Deprivation (SIMD), 5.8 per cent of the council's datazones are in the 15 per cent most deprived in Scotland. All seven secondary schools have consistently performed above the national average across the ten attainment measures in recent years.

### Case study 3

**Raising attainment** 

East Renfrewshire Council has used a range of approaches to continue raising attainment.

East Renfrewshire Council has a clear strategy and planning framework within which its education service operates. Activities to improve quality are central to this approach. There is a well-established and understood annual cycle of activities involving the central education department, quality improvement officers and schools.

Leadership at all levels has been developed to promote the council's vision of 'Inclusion, Achievement, Ambition and Progress for All' and to address succession planning in the teaching workforce. Head teachers are empowered to drive forward improvement within their schools, meet regularly with their peers and share best practice between schools.

CPD among teachers is well established. This involves coaching, and sharing and building knowledge across the council. In a recent survey, 88 per cent of teachers identified that they had good opportunities to participate in CPD activities.

The council carries out baseline assessments of pupils in P1, with standardised testing used again in P3, P5 and P7 and S2. Among other things, this enables pupils who are not performing as well as others to be quickly identified so that schools can give tailored support to individual pupils.

Well-established performance management and reporting arrangements are in place. Detailed analysis of all performance information gathered takes places at both council and school level. This information is used to set targets and improve performance.

All secondary schools operate a 33-period week. This was introduced in 2006 and has allowed the council to maximise teaching time and deliver curricular benefits such as more time for physical education for pupils.

Source: Audit Scotland

### Some councils lack the key elements that could help schools improve education performance

**77.** Council education departments play a central role in improving the quality of school education within the schools they manage. This provision is clearly laid out in the Standards in Scotland's Schools Act 2000.<sup>37</sup> Against this background, we examined how effectively councils' education structures and systems are being used to help schools raise attainment and promote wider achievement by reviewing:

- education services' strategic planning
- performance management arrangements
- scrutiny and governance arrangements
- parental engagement
- pupil engagement.

Councils' strategic plans for education contain commitments to improve pupil performance but they could be clearer about their most important priorities **78.** Effective education strategies should take account of local priorities and set out what councils aim to achieve over the short, medium and longer term. They should also provide clear objectives and targets to measure progress. Councils use a variety of approaches to set out their strategic priorities and commitments for education services, with the majority developing a three or five-year service improvement plan as the basis of their main strategic planning document. In more than a third of councils, education is encompassed as part of an integrated children's and young persons' service plan, or is included in a plan with other services such as leisure or communities. This reflects the move in recent years towards integrated planning of council services.

**79.** All councils' education strategic plans contained some form of commitment or priority centred on raising attainment or improving performance and outcomes for learners, although these differed in how specific they were. The plans also identified a wide range of priorities and objectives that would be used to raise attainment, for example early intervention, developing pupil literacy and numeracy skills and improving teacher quality.

**80.** Improvements that could be made in the plans we reviewed included:

- Scope to provide clearer links between how these plans complement and support wider council priorities and Community Plans. In around a quarter of the plans, it was not clearly articulated how the education actions and activities contribute to the delivery of the council's corporate priorities as outlined in the Single Outcome Agreement and Community Plan.
- Setting out the most important priorities within education. Some plans
  listed numerous priorities and actions but it was not always clear from
  these which priorities were the most important and intended to be
  addressed in the short, medium or long term.

• Providing clear statements about how to develop and support wider achievement activities for all pupils. This could include an overview of the wider achievement areas the council intends to focus on and how these will assist in providing pupils with life skills.

## Councils are now using pupil tracking and monitoring data more regularly to manage performance

**81.** Performance management involves gathering, analysing and acting on information to manage and improve services. Education services, both individually and collectively (through the Local Government Benchmarking Framework), have been seeking to improve these arrangements in recent years. All councils across Scotland collect a wide range of information about their education services. Most commonly this includes:

- SQA results
- results from standardised testing of pupils (where this is in place)
- SIMD data for pupils
- attendance and exclusion data
- data on staying-on rates and leaver destinations.

**82.** Councils are starting to seek ways to use performance information more effectively, such as to:

- challenge schools on performance, for example in focused discussions with individual head teachers on SQA results at school and departmental level
- help schools improve, for example by identifying specific schools that require additional support, such as more visits from QIOs
- set targets, for example, for pupil or school performance in exams.

**83.** In recent years, councils and schools have been improving how they track and monitor pupil progress and achievement. Developing better performance information has been part of this process. Tracking and monitoring allows longer-term assessments of performance to take place, taking account of a pupil's individual pace and progress in learning. Tracking is being used to:

- identify groups and individual pupils who are under-achieving
- develop teaching strategies and helping schools target interventions effectively.

Where tracking and monitoring is most developed it takes place at both a school and council level. This allows the council to compare performance between schools, develop interventions and set appropriate targets.

## Councils are using benchmarking to compare their performance against other councils and are starting to share best practice

**84.** Improving the use of benchmarking data across the public sector can help identify good practice and potential inefficiencies. Use of benchmarking data allows councils to explore opportunities for improvements, reduce costs and change the way they deliver services with the money they have available. All councils report using benchmarking to understand their education performance in relation to other councils. Most commonly, councils generally benchmark themselves with others that are similar in terms of socio-economic and demographic factors.

**85.** In March 2013, the Society of Local Authority Chief Executives (SOLACE) launched a new benchmarking framework with the Improvement Service and all 32 councils. The new project is based on 55 indicators across major service areas and includes four indicators that relate to education. The new framework provides an opportunity for councils to explore and understand variations in their practice and share learning.

**86.** Councils could do more to systematically share effective practice. Education Scotland is leading a new initiative called the School Improvement Partnership Programme (SIPP). The programme involves linking up schools across councils to tackle educational inequality and raise attainment. It aims to encourage staff within different schools to learn from each other, experiment with their practice and monitor and evaluate change.

## Elected members could have a more active role in scrutinising, challenging and improving education performance

**87.** Scrutiny and governance play an essential role in ensuring that councils' budgets, strategies and plans are credible and readily understandable, and that elected members challenge service performance to help secure improvement.

**88.** Education committee structures have changed over the past ten years. Most commonly this has been as a result of education services merging with other services such as children and families, housing, social work or leisure. At present, 12 councils have a committee that focuses only on education. The other 20 councils deal with education alongside other service areas. It is for councils to decide what committee structures best meet their needs but in doing this they must ensure that governance arrangements are fit for purpose. Councils also need to ensure that information provided to committees is both concise and relevant so that elected members can scrutinise and challenge council performance.

**89.** A wide range of education performance information is reported to the relevant committees. Most commonly, performance reporting includes:

- analysis of SQA results and leaver destinations
- school inspection reports by Education Scotland
- capital and revenue budget positions
- updates on the condition of school buildings
- school attendance and exclusion rates.

**90.** Our analysis of the agendas and minutes of the main committee that deals with education identified that the level of scrutiny and challenge undertaken by elected members varied. We found examples of committee minutes documenting evidence of elected members challenging performance, seeking additional information and requesting updates on areas of work. However, in around 30 per cent of councils, education performance reports were either approved or noted with limited discussion or scrutiny recorded.

**91.** Committees could play a more active role in raising attainment and developing wider achievement. In particular, elected members could do more to challenge attainment performance to improve consistency between schools and to scrutinise measures to narrow the gap between the lowest and highest-performing pupils. They could also consider the extent to which wider achievement awards and programmes add value and are equipping pupils with the skills for living and working in the wider world. Our review of committee papers in 2013 found that:

- 23 committees received information on specific approaches to raising attainment, for example how strategies and targeted interventions are being used to raise attainment among the lowest performing pupils or to improve levels of literacy and numeracy. The amount and frequency of the information received varied widely among councils.
- 12 committees received information about pupil performance at various stages between P1 and S3, either in the form of standardised test results or the number of pupils meeting expected levels in literacy and numeracy through the CfE framework.
- 18 committees received information about pupil participation in wider achievement that included, for example the type of programmes and activities being offered or the number of pupils achieving a specific award.

**92.** West Dunbartonshire is an example of a council where the education committee has a strong focus on raising attainment. At each quarterly meeting there is an update on progress on the council's 2011 strategy to raise attainment and achievement. This report covers progress on issues such as plans for raising attainment and leadership for learning. The committee also considers individual progress reports from each of the five secondary schools. West Dunbartonshire's attainment has improved across the ten attainment measures we used in the last five years, particularly across S5 and S6.

## There are increasing opportunities for parents to be involved in education but they still face barriers

**93.** Parents can play a key role in improving not only their own child's educational performance but also that of the school and council more widely. Parental involvement covers a wide range of activities such as helping with homework, attending school events, volunteering in the school, being part of a parent council, and playing a part in school and council governance. The Scottish Schools (Parental Involvement) Act 2006 aimed to help parents become more involved in their child's education and placed a number of duties on schools, councils and the Scottish Government to make it easier for parents to become involved.

**94.** There are a variety of opportunities for parents to become involved at school and council level. At a school level, these include participating on the parent council (75 per cent of schools in Scotland now have a parent council), fundraising, and volunteering. At a council level, there are opportunities for parents to be involved in developing education strategies, plans and initiatives. This includes opportunities for parents to be involved in monitoring plans and providing feedback after publication. Councils reported using a variety of ways to involve parents in education decisions including consultations, surveys and parent forums and focus groups. Eighty per cent of councils report having a named staff member with responsibilities for parental engagement. However, in around half of councils this accounted for less than 40 per cent of the post-holder's time.

**95.** Parents face a number of barriers to becoming more involved. Our survey of parents found that 58 per cent of the parents surveyed would like to get more involved with their school.<sup>38</sup> However, lack of time was identified by parents as the key barrier to further involvement. Other barriers included lack of information on the school, a lack of opportunities to get involved, and not knowing how to get involved.

**96.** Parents reported that the vast majority of information they receive about education is information from the school on their child's performance and news about the school, such as school events. Parents felt less informed about how their child's school is performing as a whole and half had not received any information in the last 12 months on the ways in which their school is working to improve performance. Only a quarter of the respondents had received information on what their council is doing to improve education.

**97.** Education Scotland is leading a project to bring together the data in Scottish Schools Online, Parent Zone, inspection reports and a range of other materials into a website. It aims to simplify all the existing information and help parents to make sense of the range of material available.

**Pupils' own aspirations can sometimes be a barrier to achievement 98.** Nearly all councils reported having pupil councils in their schools, as well as a wide range of other opportunities for pupils to get involved in having a say in their school. Examples include eco committees, pupil representatives on education committees and pupil surveys.

**99.** Pupils' own aspirations of what they can achieve can be a barrier to raising attainment and reflects the findings from our own focus groups, where pupils in lower-performing schools tended to be less ambitious about their future careers. Teachers from these schools also agreed that some pupils have low expectations of themselves and so limit their ambitions. This was thought to result from local culture and expectations. Councils need to seek ways to improve pupil motivation and aspirations, through, for example, the initiatives outlined in paragraph 75, page 34.

**100.** Aberdeenshire Council provides a good example of a council that in recent years has put in place the building blocks required to drive forward improvement and raise attainment (Case study 4). Its education service has responded to a longer-term situation where, from a period of high attainment levels, SQA results have fallen to around the national average. The council recognised that a refreshed and proactive approach was required to make improvements.

### Case study 4

Seeking improvement and raising attainment Aberdeenshire Council has put in place a range of elements to support improvement.

**Strategic planning:** developing a new strategy to raise attainment and wider achievement. This was developed collaboratively between senior managers and Head teachers, and sets out a clear focus on specific learning and teaching strategies. These include literacy and numeracy, using technology to improve learning, and identifying specific interventions to meet learners' needs. Head teachers have shared and discussed the approaches with staff, pupils and parents to support positive partnership working.

**Performance management:** introducing a more robust approach to improving quality. This ensures that schools are provided with the appropriate level of support and challenge they need to improve. This approach is aimed at providing greater consistency and rigour across schools and is underpinned by a new quality improvement framework.

**Developing pupil tracking and monitoring:** adopting a systematic approach to using standardised assessment evidence at classroom, school and council level. This supports a clear evidenced-based approach for monitoring and tracking progress as well as enabling early interventions. Data is now analysed across every school and used to inform actions plans and self-evaluation of performance.

**Scrutiny and governance:** opportunities for greater elected member involvement by the Education, Learning and Leisure Committee and six Area Committees, who receive regular reports on attainment in each of the secondary schools in their area. This allows greater scrutiny and challenge by elected members of improvement progress in individual schools.

**Raising attainment:** an increasing focus on developing leadership across all sectors. A Primary Leadership for Excellence programme has been introduced to support aspiring primary Head teachers, as well as continuing support for staff pursuing the Flexible Route to Headship programme. A Depute Head teachers' group has been established that meets regularly to share learning and best practice. There has been a review of the Head teacher appointment procedures. There are now clear arrangements for effective succession planning across Aberdeenshire and Head teacher induction, building on the new standards required nationally for school leadership.

#### Source: Audit Scotland

# Councils are starting to target resources to improve attainment but this could be developed further

**101.** How councils allocate money and resources both centrally and at a school level is a decision for each council. Evidence from our literature review suggests that it is how councils decide to spend their education budget rather than the overall level of spend which has most impact on attainment levels.<sup>39</sup> The literature also suggests the impact of funding on attainment could be more significant if it was targeted at those schools and pupils where the need to improve attainment was greatest.<sup>40</sup>

**102.** Overall, we found no direct correlation between changing levels of educational spending and increasing levels of pupil attainment. For example, there is a group of seven councils whose spending on education has decreased by more than five per cent in the last three years while their percentage of S4 pupils achieving five awards at level five has increased by more than the national average (four per cent). This matches the evidence from our literature review which identified that increased expenditure does not automatically result in increased attainment.

**103.** As part of our work we examined how councils are targeting their resources to support improvement and raise attainment (Case study 5, page 43). We found examples of QIOs offering targeted support to schools where it is most required and examples of wider achievement activities being targeted towards pupils who would most benefit. Resources are being directed towards those schools with the lowest performing pupils and where a greater focus around raising attainment is required. This approach could be developed further. Although most councils could provide examples of ways they are targeting resources to raise attainment there is scope for them to make better use of performance information (such as pupil tracking and monitoring data) to help support decisions which have a financial impact, such as the provision of more staff to particular schools with low attainment levels.

**104.** Looking ahead, it will be important for councils to ensure that all resources including money and staffing are used as efficiently and effectively as possible. This will be challenging as finances continue to come under pressure and significant resources are tied up in areas such as the school estate and teaching costs.

**105.** In making decisions about how resources are targeted, councils need to fully understand what interventions are the most effective. For example, improving teacher quality and developing leadership are recognised as two important factors in raising attainment. Therefore, it would seem appropriate that resources are targeted towards these. However, as education budgets have been reducing in recent years, many councils have reduced CPD and training budgets for teachers. Councils have reduced the range of courses provided and sought to deliver training in other more cost-effective ways. Councils need to ensure that they fully consider the impact of short-term savings on the long-term impact on attainment and overall pupil learning.

## Case study 5 Targeting resources

Aberdeen City Council offers schools three types of support, depending on an assessment of what they need. This assessment covers the school's SQA performance, inspection data, and attendances and exclusions. Those schools that the council considers require the least support receive an annual visit and a keep-in-touch visit. Targeted support involves an annual attainment review meeting and six days' support each year. Intensive support involves an annual review and 12 days of support from the council each year. This ensures QIOs' time is directed towards those schools that need it the most.

To support its raising attainment strategy, West Dunbartonshire Council seconded one secondary school teacher from each of its five secondary schools to become dedicated 'raising attainment teachers'. These teachers work with the lowestperforming pupils, targeting areas for development and supporting improvement. Although the teachers remain in their own schools, they come together as a team to share learning and good practice to try and achieve greater consistency between schools.

West Lothian Council has targeted resources to schools in areas of relative deprivation to set up nurture classes at P6/P7 and S1/S2. Nurture groups have been set up in a range of primary and secondary schools. The aim is to ensure pupils make a successful transition to secondary school and prevent exclusion or low attendance. Staff receive training in a nurturing approach and the young people receive direct support in managing their school experience and further develop their literacy and numeracy skills.

Source: Audit Scotland

## Recommendations

### Councils should:

- ensure education strategic documents contain clear priorities and actions that set out what is to be achieved in the short, medium and long term. Performance management arrangements should monitor outcomes and report regularly on delivery against strategic objectives, such as raising attainment among the lowest-performing pupils
- review the sufficiency of information provided to education committees on attainment at S4-S6, pupil performance between P1-S3 and wider achievement. They should also ensure committees have the time and support to adequately challenge and hold to account education services
- consistently use the Scottish Local Government Benchmarking Framework to benchmark their performance against other councils, and share good practice to improve educational attainment and wider achievement.

# Endnotes



- The Scottish Government has five strategic outcomes: to make Scotland Wealthier and Fairer, Smarter, Healthier, Safer and Stronger, and Greener.
- Pupils in Scotland, Scottish Government, 2013; Teachers in Scotland, Scottish Government, 2013. Teacher numbers are primary, secondary and centrally employed teachers.
- ◀ 3 A Curriculum for Excellence, Scottish Executive, 2004.
- 4 This is revenue expenditure. We did not examine capital expenditure on school education due to the different timescales involved in councils' capital expenditure programmes and the different funding approaches taken by councils.
- FI and PPP are financing arrangements used by councils to fund new school builds. Councils pay an annual charge, the unitary charge, to private firms to build and maintain schools over a set period of time, after which the school becomes the property of the council.
- This is general revenue funding (also known as the General Resource Grant) from the Scottish Government to councils. Scottish Local Government Finance Statistics 2012/13, Scottish Government, February 2014.
- Scottish Local Government Finance Statistics 2010/11, Scottish Government, 2012; Scottish Local Government Finance Statistics 2012/13, Scottish Government, 2014.
- Spend per pupil is calculated by dividing a council's gross expenditure (excluding support service costs) by the number of pupils. This is the methodology used by SOLACE and the Improvement Service in the Local Government Benchmarking Framework.
- 9 Chartered Teachers were introduced in 2006 as part of the *Teaching Profession for the 21st Century* agreement. Chartered Teacher status was intended to recognise and reward the excellence of those teachers who wished to remain in the classroom while continuing to encourage professional development. When they complete their qualification, teachers receive a lifelong salary enhancement. The scheme has since been disbanded.
- 10 Salary conservation occurs when a post is re-graded and the new salary is lower than previously. The post-holder then receives salary protection for a specified length of time.
- 11 This is primary, secondary, and centrally employed teachers. Education staffing numbers are displayed in calendar years as they are collected in the annual staff census in September of each year.
- ◀ 12 Scotland's public sector workforce (PDF) Audit Scotland, November 2013.
- 13 Teaching staff formulas are used by councils to indicate how many teaching staff a school needs. The criteria used in the formulas can include pupil numbers and whether a school is in a deprived area. The criteria varies across the country.
- ◀ 14 School estates 2012/13, Scottish Government, 2014.
- ◀ 15 Interim Report, Commission for Developing Scotland's Young Workforce, 2013.
- In SSLN replaced the Scottish Survey of Achievement in 2011. The survey covers literacy and numeracy in alternate years and consists of a set of written and practical assessments and questionnaires for both pupils and teachers. Approximately 11,000 pupils and 5,000 teachers take part across the country.
- 17 The OECD is a forum enabling governments to work with each other to promote economic growth, prosperity and sustainable development. The OECD established PISA in 2000 to provide reliable, comparative data on the performance of education systems around the world. PISA assesses the competencies of a sample of 15-year-olds in both state-run and private schools in 65 countries and economies in reading, maths, and science. The most recent assessment was in 2012.

- 18 The assessment methodology used by the OECD changed in 2003 for maths and in 2006 for science. It is therefore not possible to compare performance prior to this.
- 19 It is not possible to compare UK countries before 2006 due to unreliable data.
- To assess comparative performance among councils in 2004, we ranked each council (from 1 to 32) on each of the ten key attainment measures. We then identified how many of their rankings were in the highest-performing third of councils, middle-performing third, and lowest-performing third. Based on this, we then grouped councils into high-performing, middle-performing, and lowest-performing groups.
- 21 Pupil-level attainment data is from 2012 as 2013 results were not available at the time of reporting.
- Summary statistics for attainment, leaver destinations and healthy living, No.3: 2012 Edition, Scottish Government, 2013; Data provided by Scottish Government Educational Analytical Services.
- I 23 Pupils who are looked after by a council may be 'looked after away from home' (living in foster homes, with relatives, friends or in other community placements, in residential units or schools) or 'looked after at home' which means living at home under a supervision requirement from a Children's Hearing.
- 4 24 2010 is the earliest comparable year for ethnicity due to changes in census categories. 2010 is the first year of data available on looked after pupils.
- 25 Review of Scotland's education system, OECD, 2007.
- 4 26 A wide range of academic and other research, such as the Commission for School Reform, 2013 and Joseph Rowntree Foundation, 2012, shows that deprivation is a common factor affecting levels of attainment in many countries' education systems.
- These are deciles 1 to 3 in the Scottish Index of Multiple Deprivation (SIMD). Each SIMD decile contains ten per cent of Scotland's data zones. So, for example, decile 1 is made up of the 651 of the most deprived data zones in Scotland. The least deprived areas are deciles 8 to 10 in the SIMD.
- 28 Thrive at Five, Save the Children, 2012.
- If a several cohorts of Scottish children from their early years, through childhood and beyond.
- 30 Positive destinations are classified by the Scottish Government as higher education; further education; training; employment; voluntary work; and activity agreements.
- In the most recent national destinations data available at the time of reporting was the 2012 cohort of pupils.
- 32 Deprived areas are the 15 per cent most deprived in Scotland.
- ◀ 33 Teaching Scotland's Future; A report of a Review of Teacher Education in Scotland, Donaldson G, 2010.
- 4 34 How the world's most improved school systems came out on top, McKinsey & Company, 2007.
- 4 35 The role of aspirations, attitudes and behaviour in closing the educational attainment gap, Joseph Rowntree Foundation, 2012.
- ◀ 36 PISA Results in Focus 2012, OECD, 2013.
- Section 3 (2) of the Standards in Scotland's Schools Act 2000 states that 'the role of the local authority is to endeavour to secure improvement in the quality of school education which is provided in the schools managed by them; and they shall exercise their function in relation to such provision with a view to raising standards of education'.
- 38 We conducted an online survey of parents of school-age children in February 2014. Four hundred responses were received from 25 council areas.
- 4 39 Does money buy strong performance in PISA? Results in focus 2012; OECD, 2013; What makes a school successful? Resources, policies and practice Vol.IV, OECD, 2010.
- 40 Does money buy strong performance in PISA? Results in Focus, OECD, 2013; Visible learning: a synthesis of over 800 meta-analyses relating to achievement, Hattie, J, 2008; How the world's best performing school systems come out on top, McKinsey & Company, 2007.

# **Appendix 1**

# The ten measures of school-level attainment used in the report



| Attainment measure                    | Equivalent to  | Overall %<br>of pupils<br>achieving<br>this level<br>or better,<br>2013 | Range in<br>performance<br>between lowest<br>and highest-<br>performing<br>councils |
|---------------------------------------|--|---|---|
| English and maths at<br>level 3 in S4 | <ul> <li>English and maths at Standard Grade<br/>Foundation level</li> <li>English and maths at National level 3</li> <li>English and maths at Access level 3</li> </ul> | 95  | 86 - 99   |
| 5 awards at level 3 in S4             | <ul> <li>5 Standard Grades at Foundation level</li> <li>5 awards at National level 3</li> <li>5 awards at Access level 3</li> </ul>                                      | 95  | 92 - 99   |
| 5 awards at level 5 in S4             | <ul> <li>5 Standard Grades at Credit level</li> <li>5 awards at National level 5</li> <li>5 awards at Intermediate level 2</li> </ul>                                    | 39  | 28 - 71   |
| 5 awards at level 5 in S5             | <ul> <li>5 Standard Grades at Credit level</li> <li>5 awards at National level 5</li> <li>5 awards at Intermediate level 2</li> </ul>                                    | 54  | 44 - 80   |
| 1 award at level 6 in S5              | • 1 Higher   | 49  | 41 - 77   |
| 3 awards at level 6 in S5             | • 3 Highers  | 29  | 21 - 60   |
| 1 award at level 6 in S6              | • 1 Higher   | 54  | 45 - 77   |
| 3 awards at level 6 in S6             | • 3 Highers  | 38  | 29 - 63   |
| 5 awards at level 6 in S6             | • 5 Highers  | 27  | 18 - 48   |
| 1 award at level 7 in S6              | <ul><li>1 Advanced Higher</li><li>Scottish Baccalaureate</li></ul>   | 17  | 10 - 32   |

Note: Scottish Government calculates attainment by the end of S5 as a percentage of the S4 year group from the previous year. S6 attainment is calculated as a percentage of the S4 year group from two years previously.

Source: Audit Scotland, using data from Scottish Government Education Analytical Services Division

# Appendix 2 Membership of advisory group



Audit Scotland would like to thank members of the advisory group for their input and advice throughout the audit.

| Member                         | Organisation   |
|--------------------------------|--|
| Donna Bell                     | Scottish Government                                  |
| Jackie Brock                   | Children in Scotland                                 |
| Greg Dempster                  | Association of Head Teachers and Deputes in Scotland |
| Sarah Else and Gordon Wardrope | Fife Council   |
| Phil Jackson                   | Educational Institute for Scotland                   |
| Joan McKay                     | Education Scotland                                   |
| Maureen McKenna                | Glasgow City Council                                 |
| Moira Niven                    | West Lothian Council                                 |
| Eileen Prior                   | Scottish Parent Teacher Council                      |
| Ronnie Summers                 | School Leaders Scotland                              |
| Hayley Wotherspoon             | COSLA  |

Note: Members of the advisory group sat in an advisory capacity only. The content and conclusions of this report are the sole responsibility of Audit Scotland.

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