



Department
for Education

Review of efficiency in the schools system

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Executive summary

Schools revenue funding remains protected in real terms in 2015-16. This means that we can meet the rising demand for school places, consult on how best to introduce a fair national funding formula that will address the gap between the highest and lowest funded schools across the country and ensure that funding is distributed in a fair way that reflects pupils' needs.

However, all schools must do their part in securing value for money in public spending. That is why we have carried out this review of school efficiency, to support schools to learn from the best and drive even better outcomes from the money that they spend. The review identified the following seven key characteristics of the most efficient schools. These schools:

1. **Deploy the workforce effectively, with a focus on developing high quality teachers.** Teacher quality is proven to be the single most important feature of successful education systems. The most efficient schools that we visited invest a great deal of effort to get the staffing structures right, recruiting the right people and ensuring that they are continually supported to improve.
2. **Make use of evidence to determine the right mix of teaching and education support staff.** We have found that, particularly in the secondary phase, high attaining schools tend to spend proportionately more on teaching staff and proportionately less on education support staff than their lower attaining peers. This is still the case even when comparing schools in similar circumstances and with similar pupil intakes. However, the way schools deploy support staff is also important, with the potential to have a significant and positive impact on pupil outcomes if used in line with the evidence on what works.
3. **Employ or have access to a skilled school business manager who takes on a leadership role.** There is strong evidence that the employment of a high quality school business manager (SBM) can enable schools to save significant amounts of money. In all the schools we visited the SBM plays a prominent role.
4. **Make good use of financial benchmarking information to inform the school's own spending decisions.** Schools that use benchmarking information to compare themselves to similar schools, and who act on what they find, manage to generate significant savings.
5. **Make use of school clusters, sharing expertise, experience and data, as well as accessing economies of scale when making shared purchases.** All the schools we visited were part of some kind of cluster arrangement, and there is clear evidence that schools can drive far-reaching efficiency savings by working together with other schools.

6. **Manage down back office and running costs.** There remains considerable variation in the amount that similar schools spend on running costs, such as energy or premises. The most efficient schools drive these costs down through improved procurement practices and a greater focus on value for money.
7. **Have in place a strong governing body and leadership team that challenges the school's spending.** A governing body that is willing to challenge schools on their use of workforce, their use of benchmarking information and the other aspects drawn out above, is a vital factor in encouraging greater whole-school efficiency. Where this is supported by a strong leadership team that is open to and welcoming of this challenge, schools can make significant efficiency gains.

We also set out our current programme of reforms in school workforce and make a number of proposals that we believe will support schools to become more efficient:

1. **Effective workforce deployment.** Because the bulk of school spending is on the workforce, we have focused a great deal already on how we can support and encourage effective workforce deployment. This report sets out the wide programme of reforms that the Department is already undertaking in this area.
2. **Benchmarking report.** We will work with partner organisations to develop a school-level benchmarking report card of schools' key financial and performance data as compared to similar schools. We will then send this out annually to all schools.
3. **A simple indicator of overall school efficiency.** We will develop a new indicator to provide a simple way for schools to compare their overall efficiency against other schools.
4. **Improving procurement.** We will look to develop a real time procurement benchmarking product for schools that will act as a price comparison site that enables schools to benchmark prices and drive better deals. We will also explore the creation of a series of voluntary framework contracts to exploit the economies of scale inherent in national-level purchasing and reduce the cost of the procurement process itself.
5. **Greater access to clusters and school business managers.** We want to provide small start-up grants to enable clusters of primary schools to take on a school business manager, who could then provide support to the entire group. The grant would last one year only, to contribute towards the initial recruitment costs, but we would then expect the role to become self-sustaining as the schools start to reap the benefits of that expertise.

6. **More effective governance and accountability.** We will strengthen our expectations about governors' roles in driving financial efficiency, as set out in the Governors' Handbook. We will also strengthen the focus on financial efficiency within the National College's leadership development programme for chairs of governors and investigate the feasibility of developing a specific training programme for governors on effective challenge and efficiency.

During the course of this review, we have come across inspirational examples of the creative and resourceful ways in which some schools have made each penny really count, and tailored the way they spend their money exactly to the needs of their pupils. But we also know, from analysing the data and what schools have told us first hand, that there is still too much inefficiency and waste in the sector. We hope that this review can support all schools to make the small changes that, taken together, will make a real difference. We will also publish an implementation plan in due course, which will set out the next steps for all of our proposals.

In this report, references to schools include academies except when stated otherwise.

Why have we conducted this review?

Schools spend a lot of public money every year, and how they spend it has a profound impact on pupils' achievement and future prospects. An efficient school or education system is central to the country's future prosperity.

Investment in education remains one of the Coalition's key policies for driving long-term economic growth, particularly at a time of economic difficulty. One of the most important investments a country can make is in its people and there is clear evidence that countries with successful education systems see faster economic growth¹.

According to economists Eric Hanushek and Ludger Woessmann, if the UK could halve its 50 point gap with Finland on the international PISA student assessment, this could eventually boost the annual GDP growth rate by around 20 per cent. And the UK's level of GDP could be around 6 per cent higher by 2050². While there is, of course, considerable uncertainty when making these sorts of projections decades into the future, the potential scale of the benefits from investment in education is clearly significant. Maintaining investment in schools – while supporting them to make even better use of that investment – is therefore absolutely the right thing to do.

The most recent research has found that additional spending on education (beyond the core funding that every school needs to function) can have a small, but not insignificant, positive impact on outcomes³. However, the link between resources and attainment is a complex one and we know there are examples of similar schools (with similar pupil cohorts and needs) achieving similar outcomes with very different levels of resources. This suggests that while overall resources do matter, there is still potential to improve efficiency by using these resources more effectively. A key to efficiency is *how* schools spend the money they have available, not just *how much* they spend.

We have undertaken this review of school efficiency to try to understand the *how*. We wanted to find out what the best schools do to ensure they are making the most of their money, and how we can apply those lessons to the sector as a whole. This report is concerned with efficiency at school-level, in terms of better understanding the relationship between how a school allocates its budget and the results it achieves.

We have found that the most efficient schools maximise their investment in teaching staff, activities and learning resources that make the greatest difference to pupil outcomes – and they are creative in minimising all other running costs. Their focus on efficiency also creates more robust management systems that reduce the risk of financial irregularities. Efficiency is not a static concept and improving efficiency is not a one-off exercise. The most effective schools are thinking continuously about how to

¹ Hanushek and Woessman (2010)

² Hanushek and Woessman (2012)

³ Gibbons et al (2011) and Nicoletti and Rabe (2012)

optimise their spending decisions to achieve the best outcomes for their pupils.

We have also kept in mind the importance of school autonomy. Decisions about how to achieve the greatest efficiency *in* schools are best taken *by* schools. One size does not fit all. Our vision for an efficient and autonomous school system is one where:

- all schools are funded fairly so that the needs of their pupils are reflected and suitably supported;
- every school has the freedom to make the resourcing decisions that best suit its own context and circumstances;
- schools take responsibility for getting the most out of their resources; and
- the Department gets involved only in a very limited number of areas and when there is clear evidence that it can add value to what is currently available from the market.

During the course of this review we have come across powerful examples of the creative and resourceful ways that some schools have made each penny really count; and how they have tailored the way they spend their money to the needs of their pupils. We have highlighted the most relevant and interesting cases throughout this report.

But we also know, not just from analysing the data but from what schools have told us first hand, that too much inefficiency and waste still exists in the sector. Some schools continue to achieve poor value for money from the funds entrusted to them. In those schools, pupil outcomes are negatively affected and public money spent inefficiently, which is not acceptable.

We do not think that achieving greater efficiency should be complicated or mysterious. This review aims to seek out the characteristics of efficient schools, identify where barriers prevent schools from being efficient, and then draw on these to propose ways in which the Government could help. Every school has the capacity to make small changes that, taken together, will make a real difference.

Methodology of the review

In gathering findings to inform the review, we:

- **Visited schools**, gaining first-hand knowledge of how the most efficient schools operate and manage their resources by speaking with head teachers, school business managers and governors. A summary of our key findings is available at Annex A;
- **Met representatives of the sector**, such as the National Association of School Business Managers (NASBM), Association of School and College Leaders (ASCL), National Association of Head Teachers (NAHT) and other representative bodies, giving them the chance to contribute to the review;
- **Launched a call for evidence**, asking schools and others in the education sector for their views about efficiency in the schools system. A summary of the responses received is available at Annex B;
- **Carried out analysis of school expenditure data**, looking for correlation between spending and outcomes and characteristics of the most efficient schools. Further detail of the methodology we used is in Annex C; and
- **Reviewed existing research**, both domestic and international, on efficiency in schools and the behavioural cues that drive decisions about resources. References are given in full in Annex D.

What are the characteristics of the most efficient schools?

Whole-school efficiency is achieved by taking all the resources that a school has and deploying them in the way that best supports pupil outcomes. This section identifies some of the most important drivers of whole-school efficiency, drawing from our own data analysis and by talking to schools that are achieving the best outcomes for their given resources. We also asked for views on school efficiency from anyone with an interest in education, through our call for evidence.

Across all of these avenues of investigation the following characteristics of efficiency stood out. The most efficient schools:

1. Deploy the workforce effectively, with a focus on developing high quality teachers
2. Make use of evidence to determine the right mix of teaching and education support staff
3. Employ or have access to a skilled school business manager who takes on a leadership role
4. Make good use of financial benchmarking information, to inform the school's own spending decisions
5. Make use of school clusters, sharing expertise, experience and data, as well as accessing economies of scale when making shared purchases
6. Manage down back office costs and running costs
7. Have in place a strong governing body and leadership team that challenges the school's spending

We believe they are all achievable for the vast majority of schools. Where we have referred to data, we have exemplified our overall findings with specific cases, but a summary of the underpinning analysis is available in Annex C.

1. Deploy the workforce effectively, with a focus on developing high quality teachers

Teacher quality is the single most important feature of successful education systems and schools spend, on average, over half of their total budget on teaching staff. This is by far the largest amount of money spent on a single area. According to research that measured teaching effectiveness across England, having a good teacher rather than an average teacher for two years is estimated to be worth three grades for pupils taking

nine GCSEs⁴. This adds up to a huge impact across several classes and years. Unsurprisingly, investment in teacher quality is the key characteristic that the most efficient schools we visited share. Later in this report, on pages 25 to 26, we set out our wider programme of reforms aimed at supporting better teacher quality and workforce deployment nationally.

Dover Grammar School for Girls is rated outstanding by Ofsted and achieved 99% 5A*-C GCSEs including English and maths in 2012. The school continuously reviews staffing structures and focuses resources towards teaching staff (63% compared to 9% for support staff and 1% supply staff). Staff contact time is only 83% against a permitted maximum of 90%. There is precise monitoring of the cost of all promoted and leadership posts: the head teacher, business manager and appropriate committees of the governing body provide very effective oversight of personnel and financial processes. Through careful planning, a strong focus on performance management, and effective timetabling they keep payroll costs down while not compromising on quality. The school reviews evidence about workforce deployment, but still relies on its own judgement and creativity in getting the best out of its staff in the context of the school.

Retention of effective teachers is a vital part of ensuring that schools have successful outcomes. The evidence shows that there are a number of factors that influence why teachers leave the profession such as work load and pupil behaviour, which schools can address to increase the chance of these teachers remaining in the profession and in their current schools⁵. These, alongside action to tackle teacher stress, recognising teachers' work and improving relationships with parents, are all low cost aims that can improve teacher retention and maintain teacher quality in schools.

How schools manage staff absences is also an important part of ensuring consistently high standards. Many of the schools we visited, for example, use their cover budgets to employ permanent members of staff as cover supervisors instead of relying on expensive agency supply staff. This has reduced costs and improved teaching quality overall since the staff are permanently employed by the school and known to the pupils. Schools can also performance manage them as permanent members of staff.

Hagley Catholic School in Worcestershire is a large secondary school with consistently good GCSE results, rated outstanding by Ofsted. It has found a creative solution to absence cover. Teaching staff approaching retirement are actively recruited back onto the workforce on non-teaching contracts as cover supervisors. The school gets a high quality member of staff to undertake cover at a fraction of the cost of buying in agency staff. Discipline is maintained at the highest levels and cover lessons are of high quality with real learning outcomes. These staff cost in the region of £70 per teaching day as opposed to agency costs of between £160 and £180 per day.

⁴ Slater et al (2009)

⁵ Smithers and Robinson (2003), Hobson et al (2007), NFER (2012)

Good leadership is also vital. A 2009 McKinsey report⁶ found that ‘Second only to the quality of teaching is school leadership. Replacing an ‘average’ principal with an ‘outstanding’ principal in an ‘average’ school could increase student achievement by over 20 percentile points.’

All the most efficient schools we visited were led by strong and competent head teachers, supported by a committed senior leadership team. Many of the school leaders we met actively encouraged challenge from, for example, their governing bodies, and constantly pushed their schools to be better and more efficient.

2. Make use of evidence to determine the right mix of teaching and education support staff

Staffing costs account for the most substantial part of a school’s spending. On average primary schools spend 79% of their budgets on staffing and secondary schools spend 78%. Annex C contains a more detailed breakdown of school spending. The overall level of efficiency that a school is able to achieve is therefore clearly driven in a large part by choices over staffing structures.

Overall we have found that in the majority of cases, high performing schools, particularly in the secondary phase, tend to spend more of their budget on teaching staff and less on education support staff, compared to poorer performing schools with similar resources.

Spending patterns vary considerably between schools and the optimal mix will not be exactly the same for every school. However, we can gain some useful insights into how similar and successful schools spend their money from studying the 2011-12 expenditure data of all maintained schools in England. We found that among groups of schools serving pupils with similar levels of deprivation and prior attainment, the higher performing schools tended to spend proportionately more on teaching staff and less on education support staff than their lower performing peers. This pattern is particularly striking for schools with high expenditure. There is no similar correlation between school attainment and spending on administrative or back office staff.

Figure 1 below provides an example of maintained secondary schools with similar characteristics, cohorts *and* overall expenditure. We have highlighted the 20th, 50th and 80th percentiles for attainment. Even having controlled for the most important factors that characterise groups of schools, we see that similar schools with similar levels of funding exhibit significant variations in attainment.

⁶ Barber and Mourshed (2009)

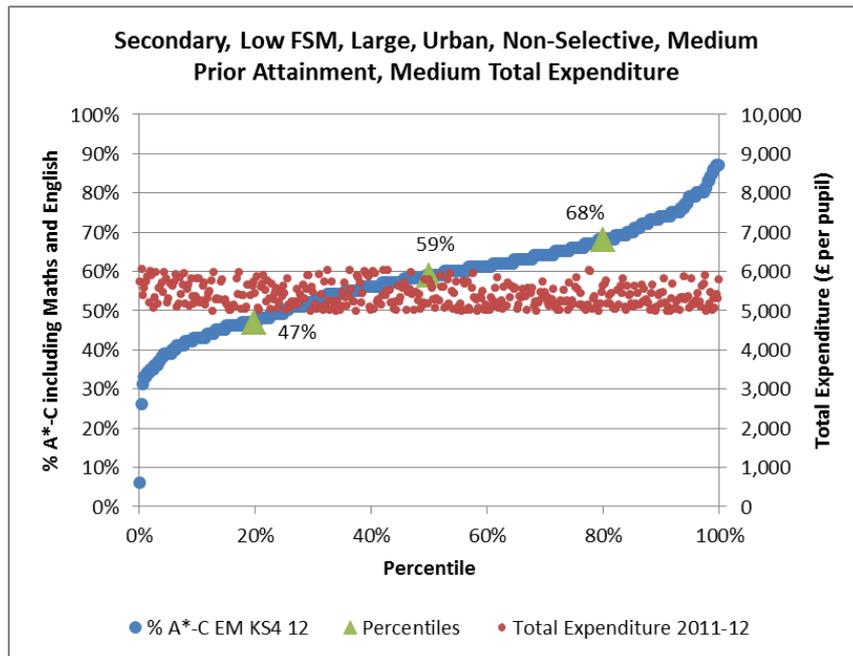


Figure 1 – Variation in attainment in otherwise similar secondary schools

Schools in the top performance quintile spent, on average, proportionately more on teaching staff and proportionately less on education support staff. Figures 2 and 3 below demonstrate this phenomenon across secondary schools with different levels of expenditure but similar characteristics to the schools shown in Figure 1.

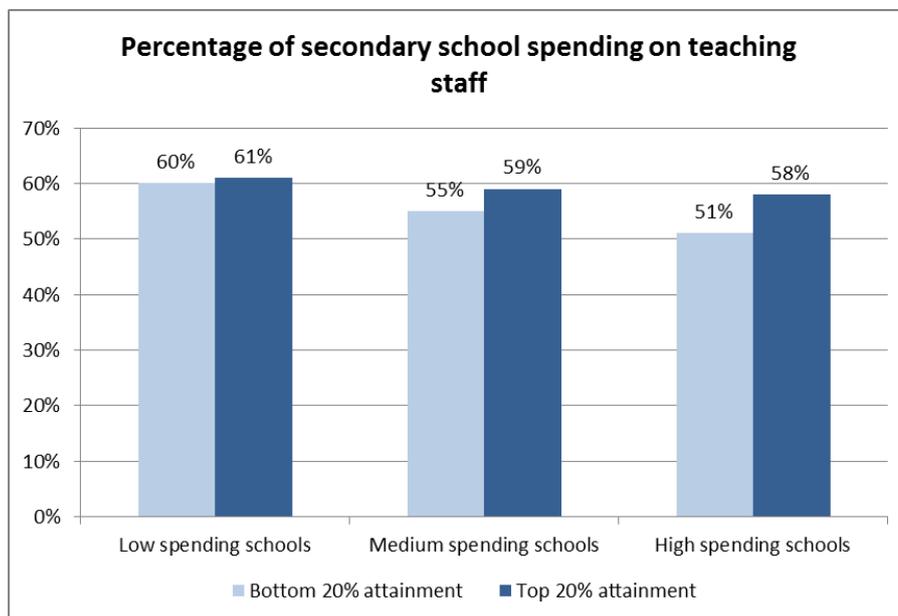


Figure 2 – Percentage of secondary school spending on teaching staff

The light blue bars represent schools in the bottom performance quintile and the dark blue bars are schools in the top quintile. Figure 2 shows that the average share of spending on teachers falls with increasing overall expenditure, reflecting that fixed costs for schools spending the least will represent a higher share of spending, leaving less to spend on other things. But the striking pattern evident from the chart is that, across all three expenditure groups, the top performing schools spend proportionately more on teaching staff, and the gap widens as overall school expenditure increases.

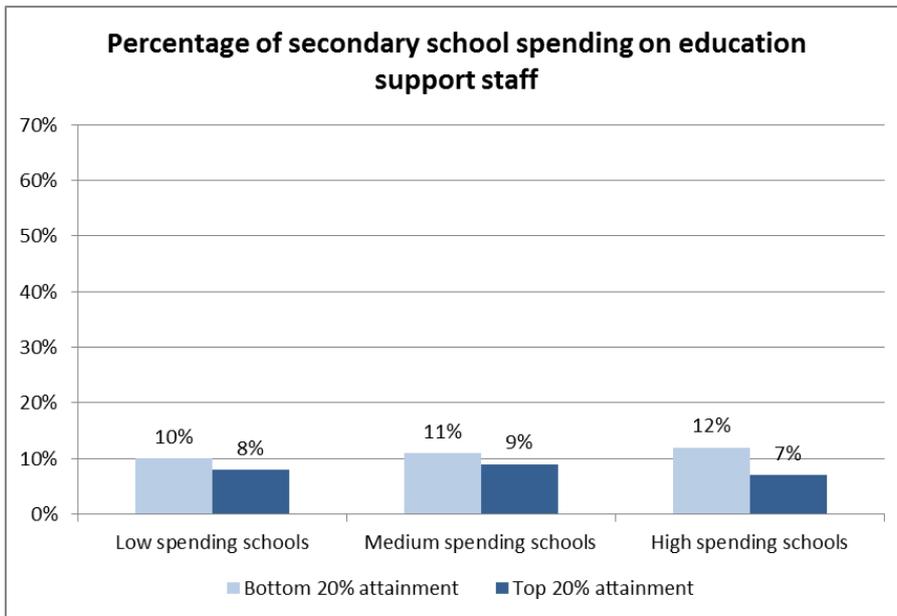


Figure 3 – Percentage of secondary school spending on education support staff

Figure 3 shows that on average low performing schools spend more on education support staff. For the high spenders in this group of schools, the 5% extra that low attainers spend on education support staff amounts to around £300 per-pupil. This is a significant sum of money, particularly when scaled up for a large secondary school and the more money these low attaining schools have to spend, the greater the share they spend on education support staff. These charts perhaps indicate that particularly where schools have additional funding and greater discretion over how to spend it, the highest performing schools chose to invest more in teachers and less in education support staff.

A similar pattern is found for maintained primary schools, although to a somewhat lesser extent, perhaps reflecting that primary schools have less flexibility over the composition of their staff due to their size. Figure 4 below represents the attainment levels of a set of primary schools, again with similar characteristics and spending levels.

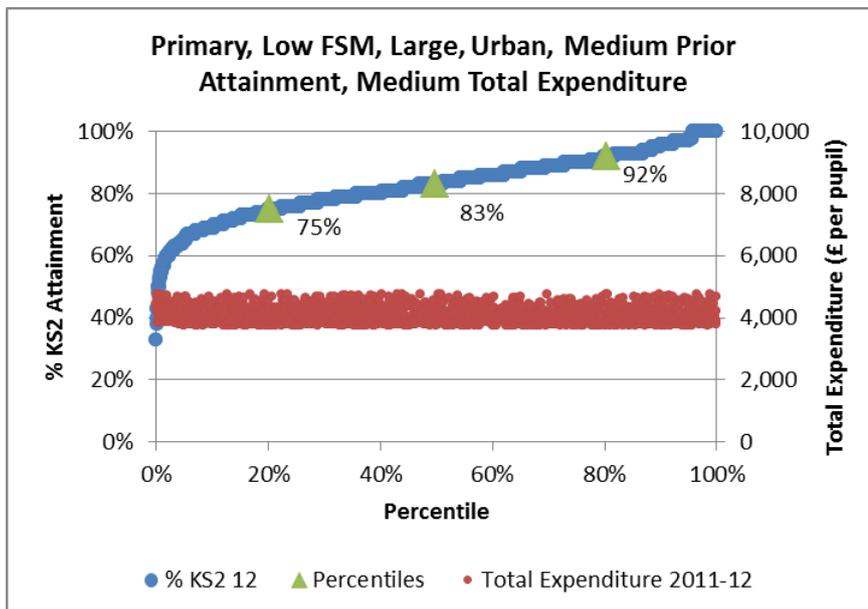


Figure 4 – Variation in attainment in otherwise similar primary schools

In line with the finding for secondary schools, there is considerable variation in KS2 attainment. Again we have highlighted the 20th, 50th and 80th percentiles for attainment.

Figures 5 and 6 below illustrate the average spending patterns of a group of primary schools with similar characteristics to those in Figure 4 but with varying expenditure levels. It is still the case that top quintile primary schools with medium to high levels of overall spending tend to spend more on teaching staff, but the differences with the low attaining schools are less pronounced. In contrast with the findings for secondary schools, differences in spending between high and low attainers amount to only around a £50 per-pupil difference for the high spenders.

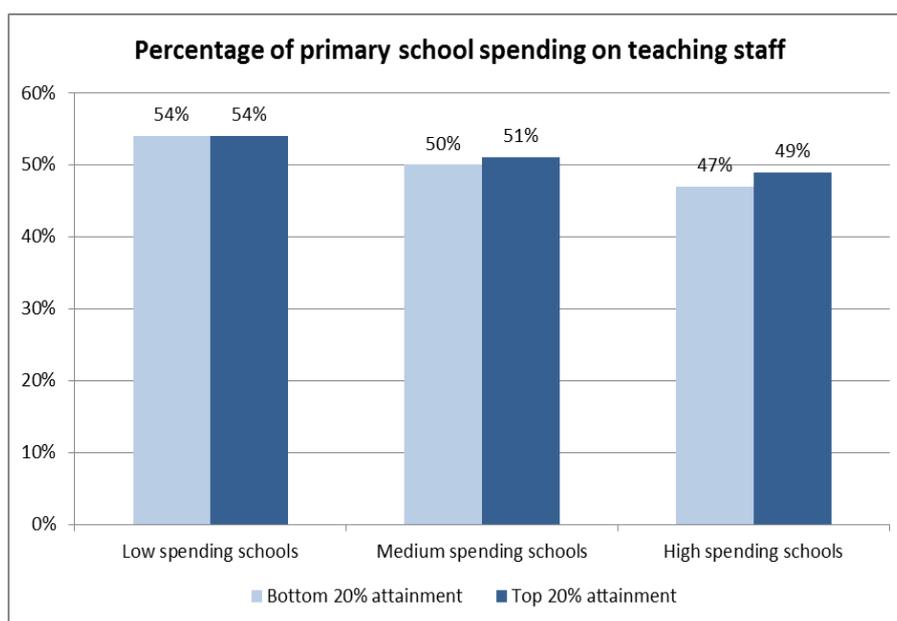


Figure 5 – Percentage of primary school spending on teaching staff

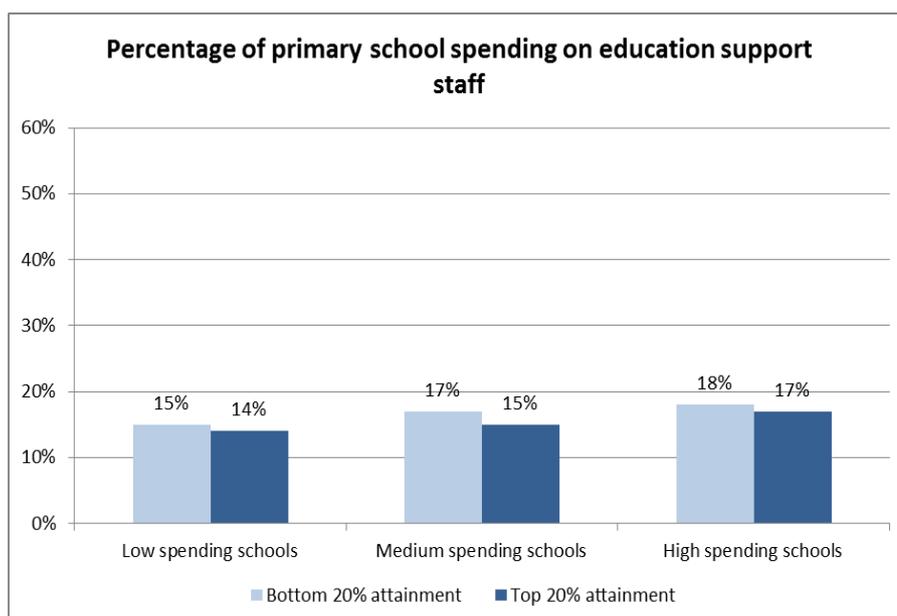


Figure 6 – Percentage of primary school spending on education support staff

These examples illustrate (strongly in the case of secondary schools and less so in the primary phase) that schools in similar circumstances with similar levels of expenditure

can make quite different spending decisions and schools with higher overall resources may have more scope to spend some of their money differently. However, overall we have found that high performers, particularly in the secondary phase, tend to spend more of their budget on teaching staff and less on education support staff, compared to poorer performing schools with similar resources. This pattern was replicated in the majority of school groups considered.

Spending patterns do not in themselves tell the whole story, however. How a school uses its staffing resources also matters. Substantive studies have previously attempted to understand the correlation between support staff and pupils' academic performance and have drawn conflicting conclusions. Since support staff are employed and deployed very differently by schools it is not surprising that findings from a range of studies show varied impact on pupil attainment. While one major study⁷ suggests that the deployment of support staff in classrooms has had a broadly negative impact on attainment and neutral effect on attitudes to learning, in other research studies⁸, school leaders and teachers have identified improved teaching and learning in the classroom as a result of the role teaching assistants play in reducing the workload of teachers and removing administrative burdens.

Evidence suggests that these differences can be explained by factors associated with the deployment of support staff. Ofsted found that teaching assistants are most effective when they are well-trained, well informed, aware of pupil targets and confident in assessing programmes. Ofsted concluded that the more general support offered by teaching assistants in the classroom is less effective.

St Peter's High School in Manchester is an average sized secondary school in an area of significant deprivation. 48% of pupils are eligible for free school meals and 70% have been eligible for free school meals at some point in the last 6 years. 44% of pupils speak English as an additional language and there are 64 different first languages spoken. The school was rated outstanding by Ofsted in 2009/2010. The school has seen first-hand the beneficial impact of investing in support staff for very clearly defined roles. Seven support staff, led by an experienced teacher, are employed within a study room environment to accelerate learning and provide academic support. The school recruits recent graduates who are considering teaching into these roles. This has allowed teachers to concentrate on teaching within the classroom while support staff are empowered and trained to focus on individualised learning, often for vulnerable pupils.

The number of teaching assistants employed in England has increased significantly over recent years⁹ but it is clear that not all of them are being utilised to best effect in the classroom. Schools may wish to review the deployment of their teaching assistants

⁷ Blatchford et al (2009)

⁸ Hutchings et al (2009)

⁹ Continuing a trend of consecutive year-on-year increases, the number of FTE teaching assistants has increased by 12,500 (5.7 per cent), from 219,800 in 2011 to 232,300 in 2012.

in light of this evidence. In particular, where teaching assistants offer more general support, schools may want to consider their impact and how it might be improved, for example through specific training. More widely, schools may want to weigh up their overall spending on support staff compared with teaching staff, in light of the available evidence about the balance in high performing schools.

Schools that take account of the evidence when organising their staffing structure – as many of the efficient schools we visited do – can create an environment where outcomes are improved and pupils flourish.

3. Employ or have access to a skilled school business manager who takes on a leadership role

There is strong evidence that the employment of a high quality school business manager (SBM) can enable schools to save significant amounts of money. A wide range of research has shown the positive impact of SBMs on school efficiency. For example, a report by PricewaterhouseCoopers (PwC) that was commissioned by the National College estimated that over the period 2002/03 to 2008/09 National College-qualified SBMs have generated £306m in savings and income¹⁰.

They did this by achieving cost savings in the following main ways:

- Implementing more efficient staffing structures and increasing the use of shared staffing;
- Better management and negotiation of contracts;
- Taking advantage of bulk purchasing opportunities; and
- Improved project management, particularly important in reducing capital costs.

SBMs also play a major role in generating income, for example managing additional activities such as the hire of school premises, bidding for grants and generating sponsorship. Effective SBMs save head teacher time and reduce workloads for others by taking away burdens and streamlining the systems within which all the staff operate.

In all the schools we visited, both primary and secondary, we have seen that the SBM plays a prominent role not only in managing the school's finances, but in working with the head teacher and other senior leaders who set the strategic direction of the school. Many SBMs see it as their duty not just to balance the books but also to ensure that the resources going in are translated into good quality outcomes for the school's pupils.

¹⁰ National College for Leadership of Schools and Children's Services (2010)

Hagley Catholic High School employs a highly qualified (Chartered Secretary) and experienced, proactive SBM who plays a central role in the school leadership team and has over thirty years of experience in financial management in the education sector. All decisions about the allocation of resources involve the SBM. He sees it as a personal challenge to bear down on costs and uses a range of approaches to do this, such as lease brokers, local clusters and SBM networking through the Midland Bursar Group.

The head teacher and SBM have actively worked together to create a school culture in which every member of staff and the wider school community is aware of the need to make every penny count. Financial information is shared openly with the whole school community and budget holders are not automatically penalised for under spending their budget allocations, thus negating any pressure to spend to the limit at year end.

4. Make good use of financial benchmarking information, to inform the school's own spending decisions

Evidence shows that people are influenced by social norms and what others are doing. They are particularly swayed by the actions of groups or individuals who they believe to be comparable to themselves¹¹. Benchmarking information that makes schools aware of the performance of schools that are similar to them can therefore be a powerful tool for change. It can provide a source of information to challenge school leaders on how resources are used and on the school's relative performance.

The school business director at **Keswick School** in Cumbria is one of the National College's School Business Manager Advocates and makes frequent use of benchmarking data to compare staffing levels, energy efficiency and premises costs with those of similar schools. Because of the geographical challenges the school faces, finding schools that are truly comparable is an important part of effective benchmarking. Where she finds that similar schools are spending much less and yet achieving the same outcomes, she contacts them directly to understand more about what they are doing. Applying this open-minded technique has enabled the school to save significant sums.

Examples include:

- negotiating a 28% discount for advertisements in local press for all schools involved in a local cluster saving c.£220 per advert per school;
- negotiating a call-off system with a paper supplier to guarantee price and quality and to reduce administration;
- negotiating directly with catering suppliers to achieve 5-8% discounts on all purchases; and
- using benchmarking to see how schools run effectively on different staffing levels and using this in a review of support staff structures.

¹¹ Dolan et al (2010)

The availability of benchmarking data for all schools fosters much greater transparency in the sector, allowing an autonomous school to take responsibility for its own improvement and hold itself to account.

All the schools we visited made use of benchmarking data to inform financial decisions, in many cases taking it further and seeking to learn from schools that outperformed them. It was also the most popular tool cited by respondents to the call for evidence in describing what products or information their schools use to inform spending decisions. Schools collect the information from a range of sources, such as the Department's own financial benchmarking website, information provided by local authorities, commercial products or 'benchmarking clubs' designed by third parties. Schools in cluster arrangements also share information in order to benchmark against one another. Benchmarking does not just relate to financial information. As the Keswick School example shows, benchmarking can also be used very effectively to determine the most successful staffing structures.

South Hunsley School and Sixth Form College in Melton, East Yorkshire is an Ofsted-rated outstanding school that has worked closely with ASCL for a number of years to develop a sustainable and efficient model for curriculum development. An important part of this is the staff combing chart (which aims to maximise timetable efficiency) drawing on methodology developed by ASCL. This enables the school to track their pupil/teacher ratio and contact ratio and to adjust them in real time to reflect any changes that are made. From start to finish the school is able to ensure that staffing costs match funding streams, allowing the school to target significant resources to school improvement priorities. This has in turn driven year on year improvements in student achievement. This work is shared with governors and annual benchmarks for staff deployment are agreed. In the school's most recent inspection report, Ofsted praised the school's 'very robust financial management arrangements'.

5. Make use of school clusters, sharing expertise, experience and data, as well as accessing economies of scale when making shared purchases

A strong theme that has emerged from the review, and in particular from conversations with individual school leaders, has been the clear benefits to be gained from operating as part of a cluster. Every school we visited was a member of some kind of cluster and when we asked, in our call for evidence, for examples of approaches taken by schools that are particularly effective in improving efficiency, the use of clusters was by far the most popular response.

The term cluster is a loosely defined word and does not need to be a legally binding relationship. Clusters range from an informal network of head teachers or SBMs, to a Teaching School alliance, to a multi academy trust. It is important that schools have the freedom to choose the clustering arrangements that best suit their needs and

circumstances. But regardless of how they are arranged, the message is that the schools involved benefit substantially from shared expertise, shared resources and bulk purchasing power.

Millais School in Horsham, West Sussex is a girls' secondary school with an outstanding Ofsted rating. As a Teaching School, it has led the development of an online collaborative hub for sharing training and expertise between schools in the county, called e-PD. The hub currently covers 200 schools and operates on a credits system where members earn credits through delivering training and events or hosting conferences, and spend credits when signing up to training that others deliver. Credits can also be bought to pay for training and events. All members pay a small subscription fee which, alongside advertising revenue and commission from partnerships, covers the administrative costs of e-PD and can be re-invested into the hub to enhance its offer and sustain the drive for improvement. Income is also generated by selling services and resources to external parties.

All the members benefit from access to a huge range of local provision, saving them time as well as money, as all the training and events are focused on clearly defined needs and are delivered at cost rather than at commercial rates. The initiative has the full support of the local authority, which has asked e-PD to perform some of the functions it can no longer sustain, such as the recent addition of Gifted and Talented enrichment provision for pupils.

Where clustering opportunities are missed however, waste can inadvertently accrue in the system. A recent Department for Education survey¹² demonstrated in stark terms the potential efficiency losses from schools in the same geographical area not operating in a cluster. From a survey of 23 schools (3 secondary and 20 primary) all based within a 15 mile radius of each other with total non-pay spend of approximately £5m per year:

- 1,828 different suppliers were used;
- 1,524 different suppliers were used for a transaction value of less than £500; and
- the schools in the survey were using the same suppliers but on varying terms and conditions and paying different amounts.

If each of these schools spent five minutes a week with half of these suppliers it would add up to 961 hours of duplicative time a year, not to mention the missed savings opportunities from shared procurement.

Even where schools are geographically isolated from one another, making the physical sharing of services difficult, some have still been able to benefit from shared contracts and suppliers, reducing costs and the time spent in managing individual negotiations.

¹² ATOS 100 schools data collection project

Withernsea Primary School in East Riding is a large primary school achieving 84% level 4 including English and maths with FSM eligibility of 29.3%. It has a highly experienced business manager, who is both a National College Advocate and Specialist Leader of Education for a Teaching School. As well as being a key member of Withernsea's senior leadership team, she has also provided business management support to five smaller primaries in the area that would not otherwise have had access to such expertise. To date this partnership has generated savings of £37,000 across the five smaller schools in the cluster.

6. Manage down back office and running costs

Through the review we have gathered evidence of how some schools have driven far-reaching efficiencies through their procurement functions. In most cases this is due to the savings that can be generated by clusters of schools procuring together and taking advantage of economies of scale.

Schools that buy from framework contracts provided by organisations such as the Government Procurement Service and the Public Sector Buying Organisations have also generated substantial savings.

An insurance framework developed by the **Crescent Purchasing Consortium**¹³ is generating significant reductions in insurance costs for academies. There is evidence of 30 academies saving 25% on their premiums and 20 academies saving nearly 50%. If the average savings were applied to all academies, the reduction in spending across the sector as a whole would be £46.6m.

To improve its financial management the school business manager of a **large secondary school** in Surrey renegotiated all of the school's contracts by meeting every contractor, challenging the cost of the contracts and negotiating more favourable contract amendments in return for renewing contracts. These amendments included striking out clauses that required the school to give contractors 90 days' notice of termination, without which the contract would be deemed to be renewed. This was changed to requiring contractors to contact him 90 days before expiry setting out why the school should renew. Robust practices are in place to ensure the school gets what it pays for, and if a supplier fails to do something at a certain time or to a standard outside the agreed contract, the school does not pay the full price. The school never accepts the first quote from suppliers, no matter how big they are, as they find that there is generally always room for manoeuvre. Through this and other actions the school has saved £1.8m, and now spends only 10% on back office costs.

Individual school circumstances vary and the condition and size of the school buildings will strongly determine certain running costs, such as energy, premises or maintenance.

¹³ <http://www.thecpc.ac.uk/>

However, we have again found that spending per-pupil on back office and administrative costs varies considerably across different schools, beyond just the level that differences in circumstances might suggest. Nationally, spending on back office costs ranges from £202 to £1432 per pupil in maintained secondary schools and £144 to £1392 per pupil in maintained primary schools¹⁴. This spread in spending patterns suggests that there is scope for savings if some of the high spenders were able to bring their costs down. The money currently spent on these items could then be reinvested into improving pupil outcomes.

Bridgewater High School in Warrington is rated as outstanding by Ofsted and has the challenge of operating across a split site. The SBM is also a National College Advocate. Because of the need for staff and pupils to travel between the two sites, the school used to spend £30,000 per year on a dedicated minibus driver. After the governing body and school business manager questioned and reviewed this practice, they invested in training for teachers to acquire unrestricted minibus driving licences. This investment gave the school the added flexibility to use their minibuses for extracurricular activity and educational visits as well as resulting in a £17,000 a year saving.

7. Have in place a strong governing body and leadership team that challenges the school's spending

There are over 300,000 school governors in England and they play a major role in our educational landscape. High quality governance can have a significant and positive impact on school performance, including financial efficiency.

A strong theme from our visits to some of the most efficient schools is that they have governing bodies that are committed to driving the efficiency of the school. The governors, even those who make up the finance committees, are not necessarily financial experts, but do have a focus on value for money and have the ability to understand and interpret financial and management data.

A governing body that is willing to challenge schools on their use of workforce, their use of benchmarking information and the other aspects drawn out above, is a vital factor in encouraging greater whole-school efficiency. Where this is supported by a strong leadership team that is open to and welcoming of this challenge, significant efficiency gains can be made. Ofsted outlined the characteristics of effective governing bodies as those that are well informed, have a positive relationship with school leaders, which systematically monitor progress towards meeting targets, and are able to take and support hard decisions as necessary.

Many of the schools we visited have also taken specific steps to increase the relevant skills of their governing bodies, and to provide them with user-friendly, jargon-free

¹⁴ 2011-12 Consistent Financial Reporting data

analysis and performance reports. They encourage governors to undergo training as well as actively recruiting for skills gaps, commonly through the School Governors' One-Stop Shop (SGOSS)¹⁵. This allows the governing body to provide better challenge and support to the head teacher and school business manager. The members of the governing body are expected to take responsibility for ensuring that they have the skills and information needed to monitor and challenge all aspects of school performance. In such schools, the 'challenge' function is seen as actively beneficial to the school's overall outcomes, by providing an independent perspective to that of the management team and guarding against complacency.

Swanwick Hall School in Derbyshire is a large secondary school that has seen steadily improving results in each of the last five years. The school has a governing body with a proactive business committee. While members of the committee are not financial experts, they come from a variety of backgrounds (such as commerce, education and industry) and have brought a high level of commercial expertise and insight to the governing body. As well as finance and budget, the committee also has strategic oversight of staffing, premises, ICT and health and safety. This wider remit ensures that they have wider contextual information before making financial decisions.

The head teacher and strategic resource manager bring all major spending decisions to the committee and there is full and open discussion before they make any long term financial commitment. The open relationship between the governors and the school ensures that any challenges are met positively, lines of accountability are clear and decisions can be justified. Governors come into school to work on policies and to familiarise themselves with projects with major financial implications.

The governors and leadership team of Swanwick Hall School view financial efficiency as more than an exercise in making procurement savings. There is always a short-term, medium-term and long-term focus on how the finances received into school will impact on student experience and their outcomes, measured by the year on year improvement in results and low NEET figures. While the school currently has a comfortable surplus, there is a clear five year strategy in place to ensure that, despite any financial uncertainties, this money will be deployed to ensure that students coming in to year 7 will continue to have the same experience throughout their time at Swanwick Hall.

¹⁵ <http://www.sgoos.org.uk/>

What are the drivers of efficiency?

Many schools are extremely effective at using their resources well, and pupil outcomes have benefited as a result. We have also found that in many cases, the most efficient schools are defined by a set of common characteristics.

Unfortunately, however, this is not a universal story, and many schools are still failing to maximise the effectiveness of their spending. The reasons for this are not simple but the review has identified a number of issues that are likely to provide some explanation. We believe that there are both internal and external influences that can support schools to achieve greater efficiency.

Internal drivers

1. **Linking effective spending with attainment.** Every school's core purpose is to focus on improving pupil outcomes and to ensure that all pupils reach their potential. The existence of Ofsted and league tables provides further incentives in this regard¹⁶. But because the link between what schools spend, how they spend it and the education outcomes they achieve is complex, the impetus to improve outcomes does not always translate into a drive for greater efficiency. Greater awareness of the powerful impact that spending decisions could have on pupil outcomes could mean that the same strong incentives that drive schools to constantly improve pupil outcomes can also support improved efficiency.

2. **Access to financial management skills.** This review has highlighted the importance of having access to a highly skilled school business manager and other senior leaders and governors with the skills to challenge and scrutinise expenditure. However too many schools still lack expertise in this area, which can greatly reduce their ability to achieve value for money.

3. **Efficiency as a norm.** Evidence from behavioural economics shows that cultural norms heavily influence how people behave¹⁷. These insights suggest that if schools compare themselves to others and see that their peers are operating in a more effective manner, it is likely they will try to improve their own spending decisions. For an efficiency culture to develop throughout the system, schools must be able readily to compare their performance with that of their peers.

4. **Use of information.** We know that many schools feel they are making decisions on their own in something of an information vacuum. For example, only 39% of school governors who responded to the 2012 governors' survey said that they use the DfE financial benchmarking website. Presenting financial information better, and making it

¹⁶ Burgess, Wilson, Worth (2011)

¹⁷ Dolan et al (2010)

more relevant and more accessible to schools, will help schools to become more focused on efficiency.

5. **Challenging inefficiency.** Maximising efficiency takes effort and in some cases may involve risk (for example, moving away from a known supplier). It takes time to find the best deals and it is easy to fall into purchasing patterns formed more by habit than analysis. The most effective schools constantly challenge past decisions with a view to improving future ones.

External drivers

6. **Accountability.** Inspection reports and league tables are undoubtedly influential, and as we have said above there is no corresponding external pressure on schools to improve their financial efficiency. More accountability in this area, particularly from governing bodies that fulfil the challenge role, could drive more schools to focus on efficiency.

7. **Efficient school funding allocations.** Unfair variation in funding can mean that similar schools are funded very differently, with the potential for the higher funded schools to operate less efficiently. The allocation of funding to schools is outside the scope of this review. However, we have already made significant reforms to the school funding system in order for all schools to be funded on a more equitable basis, and we will be consulting on how best to introduce a new and fair national funding formula in 2015-16. This means that in future, the amount of funding a school receives will be based on a fair and rational assessment of the needs of its pupils. We expect that these measures will go a significant way to removing this barrier to greater efficiency.

Proposals to support greater efficiency in schools

This review has produced insights into the most effective ways in which schools can maximise their resources and has shown where and why some schools struggle to achieve greater levels of efficiency.

The proposals with which this report concludes reflect on those insights. They seek to create a framework within which schools can improve their own levels of efficiency, while still maintaining the freedom to take the decisions that are right for them. We hope to implement proposals that will address commonly cited concerns and hindrances to improving the efficiency of the sector as a whole.

Because the bulk of school spending is on the workforce, we have focused a great deal already on how we can support and encourage effective workforce deployment. As a result, we begin by setting out the wide programme of reforms that the Department is already undertaking in this area. We follow this with a series of proposals, developed through this review, covering school spending more generally.

Effective workforce deployment

We are removing unnecessary restrictions and regulations that constrain how workforce decisions can be tailored to the requirements of individual schools.

- We are shifting to school-led initial teacher training (ITT), giving schools much greater choice in the quality and quantity of applicants from which to draw their teachers and allowing better matching of trainee skills with school requirements. Our plans for school-led ITT expand the best of the school-based routes into teaching, including the School Direct programme and Teach First.
- We are giving school leaders much more freedom to reward good teachers, recognising those who perform highly. Currently, annual progression along the main pay scale is virtually automatic. From September 2013, all progression for classroom teachers on the main and upper pay scales will be linked to their performance, and the first progression decisions based on the revised arrangements will be made in September 2014.
- The School Teachers' Review Body (STRB) is currently considering a remit to make recommendations on leadership pay, allowances, non-pay terms and conditions, and salary safeguarding. Our evidence to the STRB argued that the same principles underpinning pay reform should apply to this remit also. Through this process, the Secretary of State wants to provide both teachers and head teachers with greater freedom and flexibility to determine how they can best serve their pupils and schools. Removing unnecessary detailed prescription

about what teachers can and cannot do, and giving schools more freedom in respect of teachers' terms and conditions, would enable them to manage their resources more effectively and efficiently.

- We have made it easier for schools to deal with incompetent teachers: a process which could previously take a year or more has now been reduced to approximately a term, with less complex arrangements than before. We have streamlined and simplified teachers' annual appraisals, replacing arrangements that were overly prescriptive.
- At school-level, we are stripping back the burdens and unnecessary bureaucracy that could divert school leaders and teachers away from delivering high quality education. We have removed or simplified over 50 unnecessary duties and regulations and cut the guidance issued to schools by 75%.

More widely, we are acting to improve school leaders' and teachers' access to the best evidence and expertise on workforce deployment, focusing on school to school support rather than centrally driven initiatives.

- We are expanding the numbers of specialist leaders of education, local leaders of education, and national leaders of education. The Teaching Schools programme (which will create 500 Teaching Schools by the end of this Parliament) supports schools in decisions about ITT, continuous professional development, talent management, leadership development and research and development.
- We have licensed 33 school-led partnerships to offer leadership development linked to national qualifications, including a re-designed National Professional Qualification for Headship. This includes a range of materials on managing school finances, effective workforce deployment and development and achieving efficiency, in particular for aspiring head teachers. Nearly 5,000 leaders had been recruited onto the programmes by March 2013, with the aim of 9,000 each year.
- We are encouraging teachers and school leaders to use evidence of what works to shape their practice, through the commissioning and publishing of a review by Dr Ben Goldacre, which clearly articulates the benefits of using evidence¹⁸. Alongside this we have made significant investments in the Education Endowment Foundation which is already having an impact on school decision-making and improving the evidence base on effective approaches to education.

¹⁸ Goldacre (2013)

Benchmarking report

We will work with partner organisations to develop a benchmarking report card of a school's key financial and performance data as compared to similar schools. We will send this out annually to all schools.

As we have seen, benchmarking can be an important way for schools to analyse their own performance, and to challenge the status quo when their spending decisions and outcomes appear to be out of kilter with their peers. However only 39% of school governors who responded to the 2012 governors' survey said that they use the DfE financial benchmarking website and many schools do not necessarily understand or make use of benchmarking.

Responses to the call for evidence published by the Department as part of the review found that some respondents thought the financial benchmarking information the Department provides would be more powerful if the data content was improved and the tool made more user-friendly and relevant to them. This was a view shared by almost all the schools we visited.

We want to make benchmarking the norm in all schools, and for schools to make more effective use of the data the Department already holds on school finances and performance. We are also planning to improve the way that financial data is reported and recorded. We want to create a short, digestible and user-friendly benchmarking report that will also contain easy access to sources of support and information on schools' peers. In particular we want to target school governing bodies and help them hold the head teacher and school business manager to account. The following graph illustrates a possible way of presenting a school's spending on energy in comparison with similar schools. The blue bar represents the individual school, set against all the schools in the comparison group. The graph also highlights the peer average spend and national average spend.

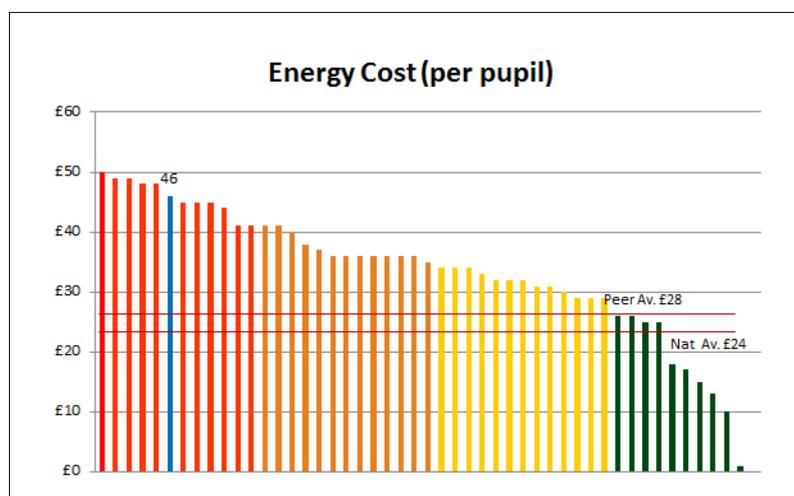


Figure 7 – Exemplar benchmarking report – energy costs

Our next step is to consult schools about the current benchmarking information that is available, in order to understand better how it could be improved and made more relevant to schools. From that we will look to develop, with partners, a benchmarking report which we hope will encourage schools to ask questions of their own efficiency through comparison with their peers. By then sending the benchmarking report out proactively to all schools we hope to make it easier for schools to access the same information.

There are many ways to present efficiency indicators and benchmarking information to schools and some will be more effective than others. So as well as consulting schools on their development, we will look to test out different approaches to see what works best.

A simple indicator of overall school efficiency

We will develop a new indicator to provide a simple way for schools to compare their overall efficiency against other schools.

A new benchmarking report that is more user-friendly and sent to all schools should encourage them to consider how they might deploy their resources in more efficient ways to improve pupil attainment. But by looking at individual spending lines and attainment separately, the benchmarking data does not, of itself, give a school a good indication of its overall scope to make efficiency gains. To do that we need to bring together overall pupil attainment and the resources used to achieve it. Most of the schools we visited thought that a measure that captured this would be useful in showing how efficient schools were relative to others.

The Audit Commission examined this question in its 2008 report *Value for Money in Schools – Literature and Data Review*. They concluded that value for money could usefully be defined in terms of ‘educational value-added per pound of educational expenditure’. This is in line with the feedback from school visits and the call for evidence. They opted for value-added because:

- progress is adjusted for prior attainment, rather than raw student outcomes – analysis shows that there is a very strong relationship between examination performance of pupils at a previous key stage and their current key stage; and
- progress of all pupils is measured, rather than just those who cross a particular attainment threshold.

Working with schools, we will be looking to introduce an overall school efficiency indicator based on data the Department already collects to incorporate into the new school benchmarking report. We intend for it to show a school’s relative efficiency and

illustrate the potential improvements that could be made in pupil attainment through greater efficiencies. This work will explore options for developing an efficiency indicator that meaningfully relates pupil attainment to the money spent on achieving it, while taking account of prior attainment.

Improving procurement

We will work with schools to exploit economies of scale inherent in national level purchasing.

Some areas of school spending could be provided far more cheaply if economies of scale were exploited. The Department has already facilitated a number of framework contracts that have saved the sector millions of pounds. For example, the Department has negotiated with Microsoft a discounted licence pricing for UK schools based on economies of scale. This saves the system approximately £12m each year. The Harris Federation of Academies estimates it achieves annual savings of 75% by using this agreement rather than alternatives.

The Department has also negotiated with the Copyright Licensing Agency and the Music Publishers' Association for the provision of licences. From April 2013 these cover every state-funded school in England for the copying of printed materials (whether hard copy or electronic), including the use of sheet music. Purchasing the licences at a national level reduces administration costs, in addition to the discount on price secured by the Department. This will save around £1.6m nationally in 2013-14. We are looking at whether this approach can be applied to other licences required by schools.

The Department will analyse savings opportunities across each area of spend. Where there is clear evidence that sizeable savings can be made, we will work with partners to put in place frameworks and contracts for schools to access¹⁹. There is still scope for substantial savings for the sector across categories that are sensitive to economies of scale, including energy supply (including collective switching), office supplies, facilities management, educational supplies, professional services, learning resources, transportation, and telephony. The Department will also drive uptake of existing framework contracts, making schools aware of the benefits that can be achieved.

We will also look to develop a real time procurement benchmarking product for schools which will act as a price comparison site that enables schools to benchmark prices and drive better deals.

As this report shows, many schools have found creative ways to drive down costs in procuring goods and services, but there remain obstacles to achieving these efficiencies

¹⁹ Capital funding is not in scope for the review but we have also been able to reduce the cost of building schools significantly through use of Contractors' Framework rates, baseline designs and reducing waste.

across the sector as a whole. Too many schools continue to procure on their own for goods and services, failing to realise potential economies of scale. A recent survey of prices for routine items purchased by all schools (such as ICT equipment and stationery) showed how costs varied hugely by supplier. Many of the items surveyed had a price variance of over 100%, rising to a variance of 966% for one item depending on the supplier selected.

A large number of schools fail to access critical information on costs, prices and contracts. Indeed, without joining some form of cluster, it is very difficult for a school to benchmark how efficient their procurement function is. Many schools we spoke to feel that the lack of information on prices is a significant impediment to driving procurement efficiencies – and that they do not have time or resource to test the market properly. A real time procurement benchmarking product would provide schools with a target price for their purchasing, and encourage them to drive better deals where appropriate. It would also go some way to making the market more competitive and transparent.

We are now scoping the feasibility of developing this kind of tool, and will be engaging with the sector about how it could be made most useful. We will also continue to build procurement capability in the system by providing schools with relevant tools and information.

Greater access to clusters and school business managers

We want to provide small start-up grants to enable clusters of primary schools to take on a school business manager, who could then provide support to the entire group. The grant would last one year only, to contribute towards the initial recruitment costs, but we would then expect the role to become self-sustaining as the schools start to reap the benefits of that expertise.

As we noted when we discussed the characteristics of the most efficient schools, schools that operate within clusters have been able to generate significant savings. We also found that there is strong evidence that the employment of a high quality school business manager (SBM) can enable schools to improve their efficiency.

Yet although the evidence about the benefits of SBMs is clear, the National College estimates that there is a significant disparity in access to SBMs between the primary and secondary sectors. While around 90% of secondary schools are believed to have access to an SBM, the corresponding figure is 40% for primary schools, driven in part by the greater pressure that an individual salary puts on smaller schools with smaller budgets. Field research into school funding carried out by the Department last year corroborates this. In half the primary schools we visited, the role of the SBM was either not mentioned at all (despite the visits being largely about how schools make spending decisions) or clearly positioned as an administrative role. In contrast, in nearly all the

secondary schools we visited the role and involvement of the school business manager was evidently much greater.

Bringing this together with the benefits of clusters, and given that capacity to employ an SBM appears to be the single largest barrier to accessing this support, we want to facilitate with a small amount of grant funding SBM partnerships among interested primary schools. We could provide seed funding for one year to a partnership of schools to overcome capacity concerns.

For example, on the basis of research undertaken by Oakleigh Consulting, we estimate that for a one year cost of £6m an additional 3,500 primary schools could gain access to SBM support (20% of all primary schools). This could drive a net saving of approximately £70m in the first year. Evidence from previous projects indicates that at least 80% of these partnerships continue once the seed funding is withdrawn. We will be undertaking further work to define the size and scope of the grants shortly.

More effective governance and accountability

We will strengthen our expectations about governors' roles in driving financial efficiency, as set out in the Governors' Handbook.

We know how important skilled governance is to schools, and the research has shown that effective governing bodies have a significant impact on the performance of a school. The Governors' Handbook states that one of the core functions of all governing bodies is to ensure the effective use of schools' financial resources – this is reinforced by new regulations on the role of maintained school governing bodies, the EFA's monitoring and accountability arrangements for academies, and Ofsted's inspection criteria for effective governance.

We will take every opportunity to promote the role of governing bodies in driving financial efficiency, and strengthen the expectation that all governing bodies ensure they have the skills to do so. We will amend guidance on the constitution regulations for maintained school governing bodies to emphasise more clearly the need to ensure they are constituted with governors with the skills to deliver their core functions – including driving efficiency. We will also investigate whether we can enhance the existing financial returns from maintained schools and academies to give a greater focus on efficiency.

We will strengthen the focus on financial efficiency within the National College's leadership development programme for chairs of governors and investigate the feasibility of developing a specific training programme for governors on effective challenge and efficiency.

Although many governing bodies are extremely effective, and a key driver of their

schools being able to achieve greater efficiency, we know that there are still gaps. Some governing bodies still lack the right mix of skills and knowledge, particularly in relation to school-level efficiency, and actual take-up of training also remains low and variable. Ofsted found that in 2009/10 governance was good or outstanding in 56% of schools inspected. However, in just over a fifth of schools governance was judged to be less effective than leadership suggesting that there is room for governors to make a greater contribution to improving outcomes.

Our 2012 online survey of governors, which received over 3,300 responses, indicated a need for a better understanding of the general remit of governors, and for specific financial and procurement skills (39% stated that better skills would 'definitely' help, and a further 47% 'possibly'). Without it, many felt that they were unable to ask the right questions of head teachers and SBMs, and thus could not provide appropriate challenge.

At a time when schools are taking much more responsibility for their own improvement and local authorities are taking a step back, it is even more important for governing bodies to feel confident that they have the capacity to guide the strategic direction of the school.

The chair of governors has a crucial role to play in ensuring the effectiveness of the governing body – including ensuring whole-school efficiency. The National College has to date focused its resources on leadership development training for chairs and aspiring chairs. We will look at how this programme can promote to chairs the role of the governing body in relation to efficiency. We will also look at whether specific training workshops for governors on driving greater efficiency might be developed within the National College's available resources. This would help governors to understand and interpret school management and financial data and create robust accountability for their schools' levels of efficiency.

Next steps

It is not for the Department to dictate how schools spend their money, and individual schools and leaders are best placed to take the decisions that are right for their own pupils and circumstances. However, this report aims to provide schools with the information and tools they need to make the best use of their money. We hope that schools will tailor the insights we have drawn from the review to their own needs.

We have also set out a series of proposals for further ways the Department can support schools to become more efficient. We will work with schools and other representative bodies to develop and deliver these proposals, and will be publishing an implementation plan in due course to set out further detail and timescales.

Annex A: Summary findings from visits to schools

This annex is based on the key findings from 18 school visits in May and June 2013 (2 primary, 1 middle, 14 secondary, and 1 combined primary and secondary school).

We used an analytical technique called Data Envelopment Analysis (DEA) to help us identify a number of 'typically efficient' schools. All these schools had relatively high attainment given their circumstances but their spending was relatively low for many categories of expenditure. The schools we visited were a mixture of those from the typically efficient list and schools that had been nominated by national representative bodies to take part in the review.

The discussions were based around four themes:

- The concept of efficiency
- How schools achieve efficiencies
- Barriers to efficiency
- Motivations and incentives

Theme 1: The concept of efficiency

There was a strong and consistent response that being efficient meant **getting the most out of the money available** to give children the best quality of education.

Many schools also thought that an **overall efficiency indicator**, reflecting this concept of efficiency, would be a useful tool for schools to gauge how efficiently they were operating. This meant dividing a measure of attainment by the cost per-pupil. Some thought that we could simply use the value-added score as the attainment measure, while others felt it would be more helpful to be able to compare against similar schools.

Theme 2: How schools achieve efficiencies

All the schools were involved in some form of **clustering**, working with other schools in some form, such as:

- regular contacts and exchange visits with other schools;
- taking advantage of and, in some cases establishing, networking opportunities with other head teachers and business managers to share best practice;
- sharing benchmarking data with neighbouring schools, whether facilitated by the local authority or the schools themselves;
- sharing business manager expertise with neighbouring schools that do not have the capacity;

- sharing teaching and other facilities with neighbouring schools, to broaden the range of opportunities available to children by achieving economies of scale; and
- participating in collaborative buying consortia, to reduce the costs involved in the procurement process itself and negotiating better deals through exercising combined buying power.

The schools were strong advocates of various forms of **benchmarking** and mentioned:

- using DfE benchmarking data on attainment and spend to see how they match up nationally and against statistical neighbours;
- using more localised benchmarking data, where they had a better understanding of the context of the other schools involved;
- using pricing benchmarking data for common areas of spend, so that they could be sure that they are not paying over the odds; and
- establishing the performance of potential contractors through contacts with other schools.

All the schools routinely carried out **market testing**, in some cases using it to negotiate better deals with existing suppliers, including local authorities. Some schools with more developed procurement practices also focused closely on contractual terms and conditions; and were strong on contract management, in some cases withholding payment when suppliers did not deliver contractual requirements.

Typically the schools **budget prudently** and withhold a proportion of the budget from departments at the start of the year, requiring them to bid for additional money on the basis of robust business cases. This helped to promote a culture of value for money, in the process giving departmental heads the opportunity to develop their business, as well as teaching, skills.

Some schools **generated significant additional income** through creative private lettings of the school premises, subject to the limitations of the site.

The schools pointed out the value of an **able and dedicated business manager as part of the senior leadership team** with a good understanding of the school's strategic direction, with strong backing from a head teacher equally committed to efficiency.

Spend on teaching staff is by far the largest part of the budget, with support staff generally the next highest. So **managing workforce effectively is key to overall efficiency** and pupil outcomes. The schools stressed the importance of **planning**. Many of them have multi-year strategic plans which they update regularly, as well as annual plans. Having clear workforce plans and structures allows them to react effectively when staff leave, not automatically making like-for-like replacements, but taking advantage of the opportunity to move where possible to their preferred structures without the need for costly and disruptive redundancy programmes.

A theme of the visits was **keeping down spend on support staff and agency staff to maximise spending on qualified teachers**. Schools also stressed the importance of timetabling, class sizes, and using spare capacity effectively to maximise use of resources. A number of schools share classes where practical, to give pupils greater choice and take advantage of spare capacity.

They used the existing **pay flexibilities** as part of performance management, and thought the further flexibilities being introduced could also be useful.

The schools were aware of the **evidence about what works for workforce deployment**. One head teacher said that he takes an afternoon off a few times a year to review academic research at the local university; while another was concerned about being bombarded with too much low value research but thought that some meta-study bringing together all the key evidence would be more useful.

Theme 3: barriers to efficiency

Some schools did not mention any barriers - while providing information was a burden they could see the justification for it as they were spending public money. The barriers other schools mentioned included:

- lack of capacity and capability for small schools;
- geographical restrictions making collaboration more challenging;
- lack of expert knowledge in areas such as ICT to take the best-informed decisions; and
- inefficient and inadequate premises.

Although outside the scope of this review, some also mentioned having to deal with different financial and academic years, and late notice of budget allocations.

Theme 4: motivations and incentives

All schools mentioned **providing the best education they could for their children** and the associated publication of attainment and Ofsted inspections. **Governors who provided effective challenge were also a key motivator**. Many of the schools said that they had encouraged governors to be more challenging in a number of ways such as appointing people with strong finance and commercial skills, encouraging and providing training, and simply telling them to be more challenging.

Annex B: Summary responses to the call for evidence

This annex is based on the 70 responses we received to the call for evidence.

As some respondents supported more than one option, total percentages listed under any one question may exceed 100%. Throughout this annex percentages are expressed as a measure of those answering each question, not as a measure of all respondents.

Some respondents did not answer every question; and some did not use the template return, though we have incorporated their responses where they relate to relevant questions.

The organisational breakdown of respondents was as follows:

Schools	54	(77%)
Associations	9	(13%)
Local authorities	3	(4%)
Others	4	(6%)
Total responses	70	(100%)

Q1: How, and by whom, are decisions made about the allocation of resources in your school? What type of information or evidence is used to support these decisions?

There were 60 responses to this question. Most respondents said that the budget is prepared by a combination of the head teacher, senior business manager and other members of the senior leadership team, and then submitted to a governors finance committee before approval by the full governing body. Some respondents also mentioned involving frontline staff in this process.

On evidence, respondents pointed to: historic data, procurement quotes, discussions with teachers and the senior leadership team, benchmarking data, data on numbers on roll and local trends on admissions, pupil performance and evidence about how best to improve it and strategy reviews (including school improvement plans).

Q2: How effectively do current budget-setting practices ensure that school spending decisions minimise costs and maximise educational outcomes?

There were 62 responses to this question. Most responses said that budget-setting

practices are effective at minimising costs and maximising educational outcomes, with the focus on teaching staff consuming the majority of the budget. A small number of responses pointed to some staff or subjects being protected at the expense of value for money, decisions being based on what can be afforded rather than having the luxury of choosing where to spend the money, and a lack of time to give some of these decisions the attention they deserve. There were also references to toolkits that can help link spend to educational impact, and the value of multi-year budgets.

Q3: Does your school use any approaches that you feel are particularly innovative and effective in improving efficiency? If so, what are these?

There were 51 responses to this question. 12 (24% of respondents), by far the most common response, mentioned the use of clusters for networking, pooling of resources and collaborative procurement. Other approaches mentioned were benchmarking, using support staff or qualified teaching assistants to provide cover for teachers, so saving on supply costs; and using framework agreements for procurement.

Q4: If any, what specialist skills or knowledge are needed by schools' decision makers? Do you feel decision makers in your school are equipped with these?

There were 63 responses to the first part of this question. Of those, the most popular responses to the questions about specialist skills of school decision makers were:

Financial expertise (including some specific mentions of SBM qualifications) and understanding the school funding system	37	(59%)
Strategic and in-depth understanding of how the school works and the key issues it faces	16	(25%)
Using common sense, having the right attitude and experience	9	(14%)
Commercial and procurement skills	9	(14%)

In response to whether the decision makers in schools were equipped with these skills, respondents said:

Yes	43	(77%)
No	5	(9%)
Not answered / unsure	8	(14%)

Q5: What tools or techniques does your school currently use to inform its spending decisions? If any, how effective do you think they are?

There were 53 responses to this question. The most popular tools and techniques cited were:

Benchmarking	25	(47%)
Advance planning and risk management to help manage financial pressures	9	(17%)
Using budget management software	7	(13%)
Clustering	6	(11%)

Respondents are generally positive about the usefulness of these tools and techniques.

Q6: How effective are the specific tools provided by the Department for Education? How could these be improved?

There were 52 responses to this question. On the effectiveness of tools provided by the Department for Education the responses were:

Very	5	(10%)
Relatively	18	(35%)
Not	8	(15%)
Not answered / unsure	21	(40%)

Of those that commented most refer to the benchmarking information. Five respondents found the information of some use; ten thought it was not helpful because the information is out of date, not relevant because it does not take account of the circumstances of individual schools, or unreliable because of inconsistent use of account codes. There were suggestions to: consult more, and provide more publicity, on the content; make it easier to print graphs; and more generally make it easier to access and use.

Other responses include: making the sector more aware of what is available and on offer to them, streamlining the guidance across government and making them more consistent and manageable; and making supportive tools more specific and in-depth.

Q7: Are there any new tools – or additional information – that you feel would improve schools’ ability to make better decisions and improve their efficiency?

There were 54 responses to this question:

Yes	27	(50%)
No	6	(11%)
Not answered / unsure	21	(39%)

There were a wide range of suggestions including:

- Online courses for governors
- More business managers for schools
- Case studies from financially effective schools
- Central suppliers database to give prices of frequently ordered goods and easy click through to order

Although outside the scope of the efficiency review a number of respondents proposed giving schools more notice of their budgets to improve planning.

Q8: What internal incentives do financial decision-makers in schools face when making decisions? Which incentives are particularly strong (or weak)?

There were 53 responses to this question. The majority – 29 (55%) – of respondents said that the main or only incentive on decision-makers is to improve pupils’ attainment (which a few responses linked to the external motivation of Ofsted – see Q10), with only 4 (8%) saying that financial performance is reflected in performance appraisals.

Q9: Are there any particular barriers or disincentives that hinder a school’s ability to change or improve the effectiveness of their spending decisions? If so, what are these?

There were 59 responses to this question. The most common responses were:

Budget pressures	18	(34%)
Funding uncertainty hindering planning decisions	15	(28%)
The low profile of efficiency amongst school leaders	6	(11%)

Q10: What, if any, external incentives, influences or opinions are important in actually affecting schools' spending decisions?

There were 51 responses to this question. The most common responses were:

Parental influence	11	(22%)
Budget pressures	8	(16%)
Political climate – government policy and advice	8	(16%)
Ofsted	8	(16%)
Student choice and competition from other schools	7	(14%)

Q11: What would strengthen schools' incentives to use their resources more efficiently?

There were 50 responses to this question. The most common responses were:

Schools do not need more incentives	10	(20%)
Longer-term funding certainty	8	(16%)
Greater use of clustering and partnerships (inc. through benchmarking)	6	(12%)
Tighter accountability	5	(10%)

Q12: For what reasons, if any, do schools build up their reserves? How has your school used reserves in the past?

There were 58 responses to the first part of this question. The main reasons given were:

Capital projects, expansion and long term improvements	38	(66%)
Longer-term funding certainty	22	(38%)
Contingency/unexpected need/rainy day	14	(24%)
Pupil number fluctuations and uncertainty	9	(16%)

There were 50 responses to the second part of this question. In line with responses to the first part of the question by far the most popular response was capital spend (56%).

Other responses included repairs, refurbishment, general school maintenance, and supporting staff levels and structures (to prevent redundancy, support teachers, and drive school improvement).

Q13: Do you have any additional views on school efficiency that you would like to share?

There were 26 additional views given in response to this question. There was some consensus on the following:

- Employing a bursar/SBM to drive efficiency and positive financial management
- Addressing lack of financial acumen in some schools (e.g. ensuring good budgeting arrangements, reviewing inefficient practices and establishing cultures of efficiency, and linking finance to student outcomes)
- Inter-school collaboration – benefitting from economies of scale, sharing skills, staff and good practice
- Staffing structures – constantly under review and flexible
- Procurement – improving procurement practices (time to consider schools' purchases, knowledge and expertise of procurement and contracts)
- Capitalisation – the ability to capitalise revenue funding is important in light of lower capital funding

Annex C: Underpinning analysis and methodology

The purpose of this annex is to provide more detail about the various data sources and school groupings that were used to produce the analysis for this report.

It also offers a broader picture of the results that were exemplified in the report, to demonstrate that the observations highlighted in the report were also present for a wider group of primary and secondary schools.

Breakdown of school-level expenditure

Figure 8 below shows the way that maintained primary schools allocate their resources between different areas of expenditure²⁰. In the primary sector, on average staff costs make up 79% of total expenditure, within which 50% is spent on teaching staff and 16% on support staff.

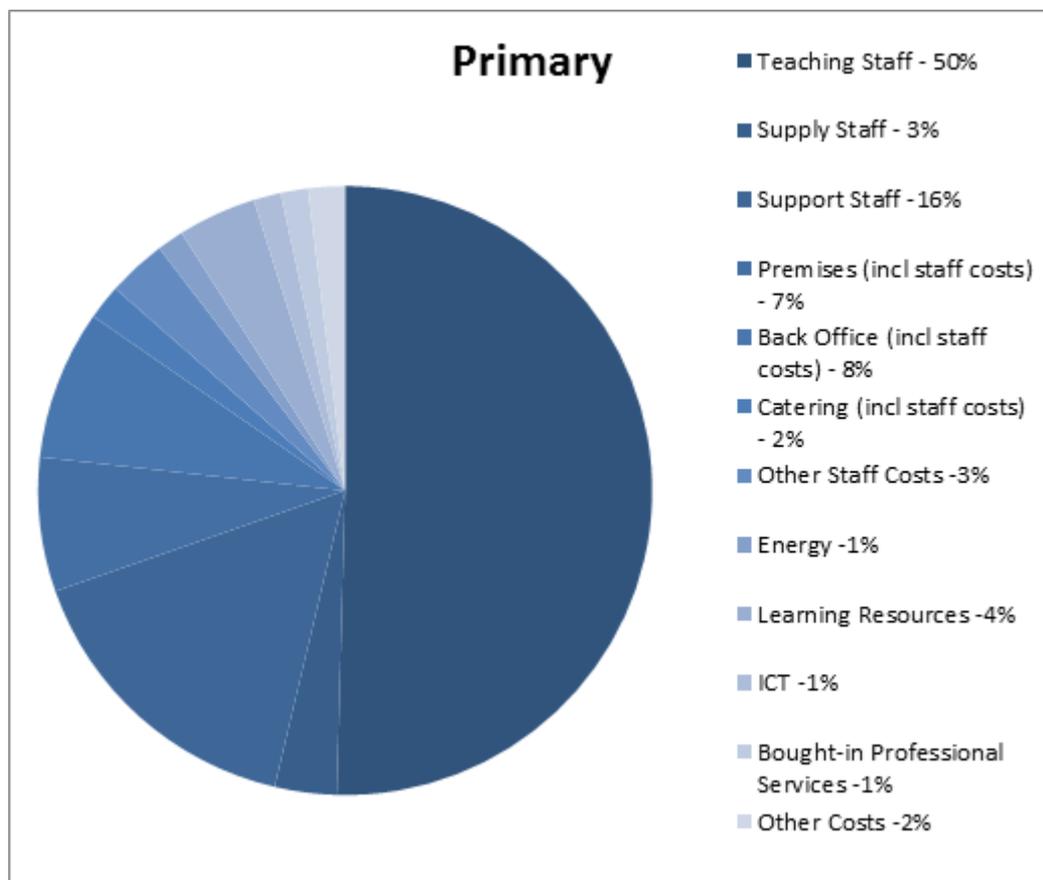


Figure 8 – Breakdown of maintained primary school expenditure

Figure 9 below shows the corresponding breakdown of expenditure for maintained secondary schools. In the secondary sector, on average staff costs make up 78% of total expenditure, within which 56% is spent on teaching staff and 10% on support staff.

²⁰ Percentages given may not add up to 100% due to rounding.

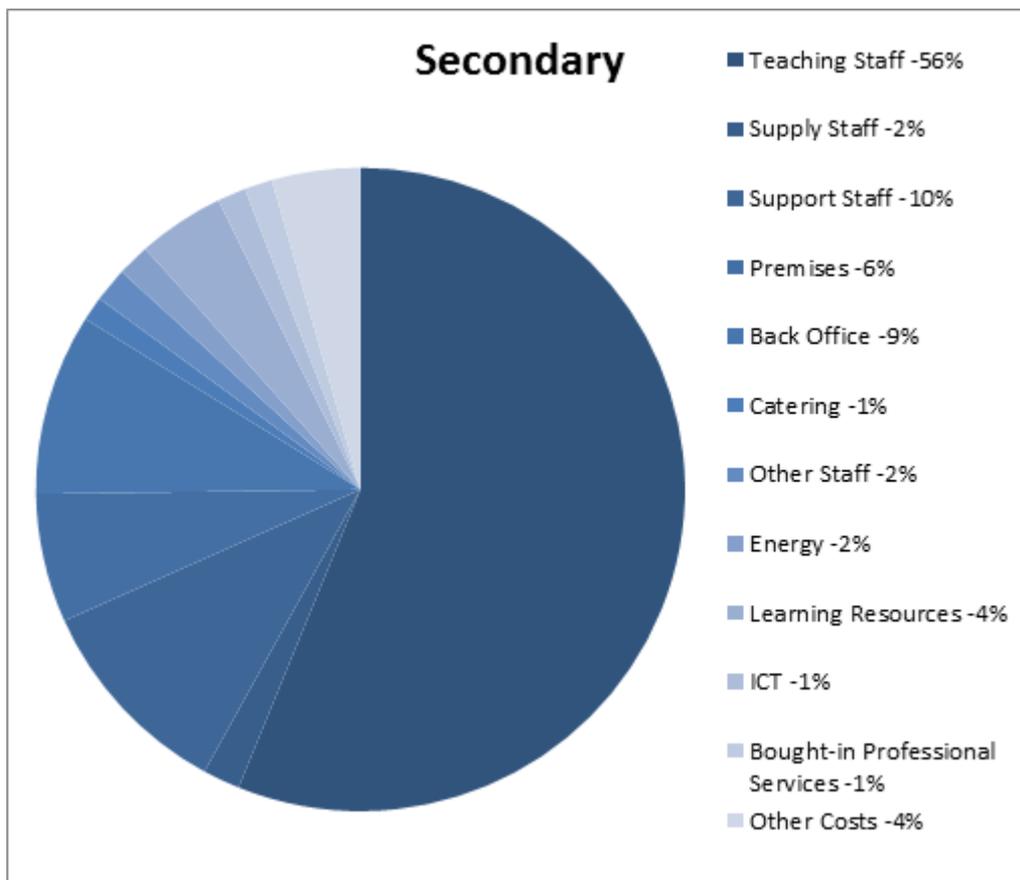


Figure 9 – Breakdown of maintained secondary school expenditure

Data sources

All the analysis carried out for the review uses Consistent Financial Reporting data (CFR), which all maintained schools submit to the Department. The CFR data collects information on schools' income and expenditure, for the period April 2011- March 2012²¹, broken down into various codes. Table 1 shows how the 16 income and 32 expenditure codes have been grouped to produce the 14 categories referenced in the analysis. Income code I14 is unused on the current CFR return, so is not shown here.

The headline attainment indicators for individual schools are the same as those published in the 2012 Performance Tables: the percentage of pupils achieving Level 4 or above in both English and maths at Key Stage 2 and the percentage of pupils achieving 5 A*-C GCSE or equivalent, including English and maths. We have also used the average point score (APS) at Key Stage 1 (KS1) and Key Stage 2 (KS2) as a measure for prior attainment for the primary and secondary sectors respectively.

The final data sources used in this analysis are the January 2012 Annual School Census (ASC) which provides contextual information about each school – e.g. number of pupils – and the November 2011 Schools' Workforce census which gives further information on the breakdown of staff – e.g. number of teaching staff, back office staff.

²¹ The 2012-13 financial data is not yet available.

School groupings

In order to compare only schools that have similar characteristics, circumstances and pupil intakes, we grouped schools according to the following characteristics:

- Type - primary or secondary
- Location - urban or rural
- School size - small primary schools are defined as having fewer than 100 pupils, and small secondary fewer than 500 pupils
- Measure of deprivation - the same free school meals (FSM) bands that are used on the published Finance Tables²² (low: 20% or below, medium: 20.01-35%, high: greater than 35%)
- Prior attainment - the same bands that are used on the primary and secondary performance tables
 - a. Primary Low attaining - schools with pupils below Level 2 at Key Stage 1 (i.e. those with a KS1 APS less than 12)
 - b. Primary Middle attaining - schools with pupils at Level 2 at Key Stage 1 (i.e. those with a KS1 APS greater than or equal to 12 but less than 18);
 - c. Primary High attaining - schools with pupils above Level 2 at Key Stage 1 (i.e. those with a KS1 APS greater than or equal to 18)
 - d. Secondary Low attaining - schools with pupils below Level 4 at Key Stage 2 (i.e. those with a KS2 APS less than 24)
 - e. Secondary Middle attaining - schools with pupils at Level 4 at Key Stage 2 (i.e. those with a KS2 APS greater than or equal to 24 but less than 30)
 - f. Secondary High attaining - schools with pupils above Level 4 at Key Stage 2 (i.e. those with a KS2 APS greater than or equal to 30)
- Total expenditure for both primary and secondary schools was split into three different bands:
 - a. Primary low expenditure – below the 25th percentile (less than £3,752 per-pupil)
 - b. Primary medium expenditure - between 25th to 75th percentile (from £3,752 but less than £4,771 per-pupil)
 - c. Primary high expenditure - above the 75th percentile (greater than or equal to £4,771 per-pupil)
 - d. Secondary low expenditure - below the 25th percentile (less than £4,984 per-pupil)
 - e. Secondary medium expenditure - between 25th to 75th percentile (from £4,984 but less than 6,054 per-pupil)
 - f. Secondary high expenditure - above the 75th percentile (greater than or equal to £6,054 per-pupil)

²² Finance Tables which form part of the Performance Tables suite can be found via the link: <http://www.education.gov.uk/schools/performance>

In grouping all the schools by these characteristics, we had 117 groups for the secondary sector and 108 for the primary sector. However, a large number of these groups contained fewer than 15 schools (107 secondary groups and 80 primary groups) which is too small a sample to use. Therefore the analysis focused on only the groups that contained more than 15 schools.

This leaves 10 groups for secondary, which collectively make up 93% of all secondary schools, and 28 groups for primary, which covers 98% of all primary schools. A full list of these groups and their characteristics is included in Tables 2 and 3, below.

All schools that had closed or converted to academy trust status were removed from this analysis (as they did not have data for the full year) along with any outliers.

Variations in spending and attainment: secondary schools

The report highlights in particular the different spending decisions of large, urban, schools with similar levels of low deprivation, medium total expenditure and medium prior attainment. This group was drawn out in order to exemplify the general trend.

Across the majority of the groups we looked at, (9 out of the 10 groups) those with high levels of attainment spend on average a larger proportion of their budget on teaching staff than lower attaining schools.

Schools in the top attainment quintile also spend proportionately less on education support staff (again, we observed this in 9 out of the 10 groups). Only in the selective group did schools at both the top and bottom end of the attainment spectrum spend the same (around 8%) on education support staff.

Variations in spending and attainment: primary schools

Just like the secondary sector, the primary schools display an overall trend in line with the example given in the report. For 20 out of the 28 groups, schools in the top quintile, in both high spending and low spending group of schools in similar circumstances, spend a larger proportion on teaching staff, however the differences are not as pronounced as they are in the secondary sector.

For 22 out of the 28 groups the high attaining primary schools also spend proportionately less on their education support staff than low attaining schools with otherwise similar characteristics.

Table 1: CFR Groupings

Grouped Category	Code	Title
INCOME		
Grant funding	I01	Funds delegated by the LA
	I02	Funding for 6 th form students
	I03	SEN funding
	I04	Funding for minority ethnic pupils
	I05	Pupil Premium
	I06	Other government grants
	I07	Other grants and payments
	I15	Pupil focussed extended school funding and/or grants
Self-generated income	I08	Income from facilities and services
	I11	Receipts from other insurance claims
	I12	Income from contributions to visits etc.
	I13	Donations and/or private funds
EXPENDITURE		
Teaching staff	E01	Teaching staff
Supply teachers	E02	Supply teaching staff
	E10	Supply teacher insurance
	E26	Agency supply teaching staff
	- I10	(minus) Receipts from supply teacher insurance claims
Education Support Staff	E03	Education support staff
Premises	E04	Premises staff
	E12	Building maintenance and improvement
	E13	Grounds maintenance and improvement
	E14	Cleaning and caretaking
	E15	Water and sewerage
	E18	Other occupation costs
Back office	E05	Administrative and clerical staff
	E22	Administrative supply
	E28	Bought in professional services – other
Catering	E06	Catering staff
	E25	Catering supplies
	- I9	(minus) Income from catering
Other staff costs	E07	Cost of other staff
	E08	Indirect employee expenses
	E09	Development and training
	E11	Staff related insurance
Energy	E16	Energy
Learning resources (not ICT)	E19	Learning resources (not ICT equipment)
ICT learning resources	E20	ICT learning resources
Bought in professional services – curriculum	E27	Bought in professional services – curriculum
Other	E17	Rates
	E21	Exam fees
	E23	Other insurance premiums
	E24	Special facilities
	E29	Loan interest
	E31	Community focussed extended school staff
	E32	Community focussed extended school costs
	- I16	(minus) Community focused extended school funding and/or grants
	- I17	(minus) Community focused extended school facilities income

NB: E30 is Capital Expenditure from Revenue (CERA) and is not included in these calculations.

Table 2: Secondary school groups - characteristics

Secondary Categories	Prior Attainment Band	Expenditure Band	Number of schools
Low FSM, Large, Rural	Medium	Low	78
Low FSM, Large, Rural	Medium	Medium	91
Low FSM, Large, Urban, Selective	High	Low	19
Low FSM, Large, Urban, Non-Selective	Medium	Low	230
Low FSM, Large, Urban, Non-Selective	Medium	Medium	410
Low FSM, Large, Urban, Non-Selective	Medium	High	61
Medium FSM, Large, Urban	Medium	Medium	132
Medium FSM, Large, Urban	Medium	High	149
Medium FSM, Small, Urban	Medium	High	17
High FSM, Large, Urban	Medium	High	72
TOTAL			1259

Table 3: Primary school groups - characteristics

Primary Categories	Prior Attainment Band	Expenditure Band	Number of schools
Low FSM, Small, Urban	Medium	High	17
Low FSM, Small, Rural	Low	High	16
Low FSM, Small, Rural	Medium	Medium	446
Low FSM, Small, Rural	Medium	High	630
Low FSM, Small, Rural	High	High	26
Low FSM, Large, Urban	Medium	Low	1721
Low FSM, Large, Urban	Medium	Medium	1789
Low FSM, Large, Urban	Medium	High	185
Low FSM, Large, Urban	High	Low	53
Low FSM, Large, Urban	High	Medium	18
Low FSM, Large, Rural	Medium	Low	671
Low FSM, Large, Rural	Medium	Medium	1070
Low FSM, Large, Rural	Medium	High	93
Low FSM, Large, Rural	High	Low	16
Low FSM, Large, Rural	High	Medium	23
Medium FSM, Small, Rural	Medium	High	62
Medium FSM, Large, Urban	Low	Medium	18
Medium FSM, Large, Urban	Medium	Low	106
Medium FSM, Large, Urban	Medium	Medium	1210
Medium FSM, Large, Urban	Medium	High	530
Medium FSM, Large, Rural	Medium	Medium	92
Medium FSM, Large, Rural	Medium	High	20
High FSM, Small, Urban	Medium	High	15
High FSM, Small, Rural	Medium	High	17
High FSM, Large, Urban	Low	Medium	25
High FSM, Large, Urban	Low	High	72
High FSM, Large, Urban	Medium	Medium	445
High FSM, Large, Urban	Medium	High	864
TOTAL			10250

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