Curriculum breadth

Better value for money in schools

March 2011
Introduction

1 Maintained schools in England spent over £35 billion in 2009/10, some £5,000 on average per pupil. They have seen a large increase in available funds, with spending increasing by 28 per cent since 2002/03. Schools spend three quarters of this funding on their workforce. As budgets tighten, school leaders are increasingly focusing on how well that money is spent.

2 Schools make decisions about how they design their provision and how they deploy and manage their workforce. These decisions reflect their individual circumstances and constraints and will depend upon their different priorities. But they all face the challenge of tightening budgets. School leadership teams and governing bodies need to understand the costs and benefits of different staffing models in order to achieve value for money. Councils can help assess the relative positions of local schools and consider where they can offer support.

3 This briefing is one of four published by the Audit Commission in March 2011 which aims to identify where schools can achieve greater efficiency. The briefings examine patterns of spending in maintained schools in England. They build on our national report Valuable lessons, published in 2009. (Ref. 1) We aim to help schools, governing bodies and councils identify where they have scope for efficiencies without compromising the effectiveness of their provision. This briefing examines curriculum breadth. The others look at classroom deployment, staff absence and cover, and the wider schools' workforce.

4 The main findings on curriculum breadth are as follows.

■ Up to Key Stage 4, schools have little choice in the timing they give to particular subjects, if they follow the guidance by the Qualifications and Curriculum Development Agency (QCDA). Schools use the choice they do have to support English and mathematics. Overall, the time spent on particular subjects in primary and secondary school has not changed between 2006 and 2010.

■ On average schools enter their pupils in 24.5 subjects at GCSE, while others offer as many as 42 subjects. The breadth of the curriculum at GCSE is largely explained by school size. We have not found evidence that offering a broader curriculum increases cost per pupil, suggesting that narrowing the curriculum will not necessarily increase value for money.

■ Spending on bought-in curriculum services has more than doubled since 2003. Schools could achieve greater value for money in this area without narrowing their GCSE offer to pupils. However, because the total spending in this area is relatively small, the scope for savings is likely to be limited.
Investigating the priorities given to subjects taught

5 The national curriculum was introduced in 1988. It specifies the majority of subjects and the content that needs to be taught at each Key Stage. At both primary schools and Key Stage 3 the QCDA used to issue guidance allocating schools’ time to different subjects, covering between 73 and 93 per cent of the school working day. While these guidelines no longer apply, schools told us during our fieldwork that they nonetheless felt obliged to follow them because they believed they still had relevance in Ofsted inspections. Schools can improve their efficiency if they ensure that they allocate their teachers in ways that reflect the priorities of the school and the cost of providing different subjects.

6 We have examined how schools use their unallocated ‘free’ time on various subjects. We tested whether different uses of time are associated with different levels of attainment in schools. We also calculated the spend on teachers associated with providing different subjects at national level, allowing schools to make better decisions about their time allocation.

7 We have found that schools use the ‘free’ time in the curriculum mainly to focus on English and mathematics (Figure 1). Part of the reason for this may be the introduction of national strategies in 1998, which encouraged schools to teach English and mathematics in a specific, clearly structured style. However, schools are likely to also make active choices to improve attainment, particularly for less able pupils in booster groups.

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Figure 1: Schools use their ‘free’ time to focus on English and mathematics

Schools’ use of the time not covered by National Curriculum or QCDA suggestions

Source: Audit Commission analysis of Department for Education (DfE) schools census 2010 compared to average number of minutes suggested in national curriculum
The time pupils spend on particular subjects in primary and secondary school has not changed significantly between 2006 and 2010 (Figure 2). Our model of the impact of different choices about allocating ‘free time’ did not find a significant impact on overall attainment in schools.

The consistency in subject delivery also translates into consistency in teaching costs. We found that in 2010 primary and secondary schools spent £3.1 billion on teachers teaching English, £2.6 billion teaching mathematics, and £1.3 billion teaching science. These figures have not changed significantly since 2006.

Figure 2: Time spent on specific subjects has not changed significantly
Pupil activity from 2006 to 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>English</th>
<th>Science</th>
<th>PE</th>
<th>Other</th>
<th>Music, Singing or Drama</th>
<th>Mathematics</th>
<th>Humanities</th>
<th>Technology &amp; ICT</th>
<th>Art, Craft or Design</th>
<th>Modern Foreign Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>26%</td>
<td>21%</td>
<td>10%</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>12%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>2009</td>
<td>25%</td>
<td>21%</td>
<td>10%</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>11%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
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<tr>
<td>2008</td>
<td>25%</td>
<td>21%</td>
<td>10%</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>11%</td>
<td>5%</td>
<td>5%</td>
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<tr>
<td>2007</td>
<td>24%</td>
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<td>10%</td>
<td>6%</td>
<td>7%</td>
<td>7%</td>
<td>12%</td>
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<td>3%</td>
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<tr>
<td>2006</td>
<td>24%</td>
<td>20%</td>
<td>9%</td>
<td>8%</td>
<td>7%</td>
<td>7%</td>
<td>12%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Audit Commission analysis of DfE schools census 2006-2010

We found smaller schools are more likely than larger schools to have pupils learning English, mathematics and science. This may imply that smaller schools at Key Stages 1 to 3 concentrate on a narrower curriculum. For example, in primary schools with fewer than 100 pupils, on a typical day 37 per cent were studying mathematics. In primary schools with more than 350, only 29 per cent were. At Key Stage 3 secondary schools with fewer than 600 pupils, 42 per cent of pupils were learning English, mathematics and science on a typical day. In secondary schools with over 1,200 pupils this percentage was 39 per cent.

In this briefing changes in expenditure over time are calculated for 2009/10 prices using the Treasury GDP deflator.
Forty-three per cent of school business managers in our survey felt schools could save money by altering teaching hours spent on the core curriculum. Our analysis did not reveal significant scope to save money by altering the time allocated between subjects, even ignoring the limits imposed by the national curriculum and the implications of previous QCDA guidance. However, school leadership teams should explore the particular costs associated with individual subject offerings in their schools. This will allow them to reflect not only the needs of pupils in their decisions but also achieve maximum efficiency.

In its 2010 White Paper, The Importance of Teaching, the coalition government intends to return the national curriculum to a minimum national entitlement organised around subject disciplines. It is too early to say how the English baccalaureate and other proposed changes will affect what schools teach. One confirmed change is that the baccalaureate intends to encourage teaching of modern foreign languages and classical languages. Schools will need to decide how they will continue to achieve financial balance while offering languages that reflect their local intake and meeting the aims of the baccalaureate.

Questions for school leaders, governing bodies and councils

- How do you use the ‘spare’ time in the curriculum? How do you decide?
- What scope do you have to adjust your subject offer to achieve financial balance as funding becomes tighter? How would this impact on the provision of a balanced and broadly based curriculum?

The GCSE curriculum offer in secondary schools

Schools are required to offer a balanced and broadly based curriculum. The curriculum offer of any school is dependent on its priorities. Schools continually manage a trade-off between curriculum affordability, driven by funding and pupil numbers, and meeting pupils’ needs and ambitions. Many schools face timetabling and room availability constraints due to the nature of available school buildings.

Secondary schools offer broad ranges of GCSE subjects at Key Stage 4, to allow their pupils the greatest choice in preparing for the future. Offering a broad curriculum can also attract pupils, ensuring a school runs at full capacity and even help schools raise attainment by attracting more able pupils. However, questions remain about the costs associated with a broad curriculum. Fifty-seven per cent of the school business managers who took part in our survey believe that reducing the non-statutory curriculum has the potential to reduce costs.
We examined the breadth of entries in GCSE examinations as a measure of the breadth of curriculum offered by schools, as well as the breadth of the language offers. We modelled the relationship between curriculum offer and cost, and examined whether the curriculum offer was related to attainment or geography.

Schools offer on average 24.5 optional subjects at GCSE level. Both number of subjects and cost per subject have remained largely constant since 2006. We have not found a direct relationship between the breadth of GCSE entry and pupil attainment in schools. Schools with a smaller curriculum offer, on average, attain the same results as schools with a broader offer.

Curriculum breadth varies considerably between schools. While some schools enter their pupils in no more than eight subjects, others offer as many as 42 (Figure 3). The biggest explanatory factor for this variation is school size. Larger secondary schools are far more likely to offer a wide GCSE curriculum. On average schools with more than 1,200 pupils, offer 44 per cent more GCSEs than schools with less than 600 pupils. This relationship is ‘stepped’, meaning that, on average, a school with 160 more pupils than another will offer one more subject at GCSE. Deprivation has a small, though still statistically significant, negative impact on curriculum breadth. We also examined the impact of language GCSEs on the total range of GCSE subjects offered. We found that it does explain some of the variation between schools – more than deprivation does – but that it is less important than school size.

Schools with a sixth form are likely to offer more subjects, as are schools in London. Schools offering less than 20 GCSEs are not only smaller but have more pupils eligible for free school meals, with special educational needs and for whom English is an additional language.
Schools with high levels of pupils with English as an additional language (EAL) offer more language GCSE subjects than schools with no or lower proportions of EAL pupils. However, these schools, after taking account of the number of language subjects, offer fewer subjects in total at GCSE.

We have found that schools with a broader GCSE offer do not have a higher teacher cost per pupil. This is largely explained by school size – larger schools are better placed to offer a broader curriculum cost effectively. Reducing their curriculum would not necessarily help these schools to make savings.

Smaller schools typically offer fewer subjects at GCSE and have a higher cost per pupil. Although their curriculum offer appears to be less cost-effective, these schools may have little scope to reduce their curriculum while maintaining a balanced and broadly based offer to pupils. Smaller schools with a disproportionately broad curriculum, or those looking to add subjects without an increase in pupil numbers, should consider how they can do so without incurring significant costs.

In particular, schools can employ teachers to teach more than one related GCSE subject where they feel this will not be detrimental to the quality of their provision. School leaders indicated that they had recruited teachers with more than one specialism in order to maintain the breadth of the GCSE offer without increasing costs.
Head teachers and school business managers also told us about the importance of collaboration to reduce costs. Sixty-two per cent of respondents to our survey of school business managers believed that greater collaboration with others could reduce costs. Secondary schools may, for example, send pupils to a local college for language GCSE courses. Collaboration is already happening on the 14-19 curriculum including in the delivery of diplomas. School leaders indicated that they work successfully with other local providers to deliver vocational courses for pupils.

We found that some schools offer subjects for which only very few – as few as one or two – pupils actually sit the exam. For over 7 per cent of secondary schools, these ‘small’ exam entries accounted for 20 per cent or more of their total exam entries. The data does not capture the extent to which schools are already collaborating, but suggests that there is more room for schools to share staff in minority subjects and thus reduce teaching costs.

In summary, a school’s size largely explains the breadth of its curriculum, with deprivation and GCSE language offer having a smaller impact on the curriculum offer. So, for larger schools, narrowing the curriculum will not necessarily increase value for money. Smaller schools, and those teaching minority subjects to small numbers of pupils, should explore more cost-effective ways of delivering curriculum content. If a school does aim to reduce the curriculum offer to save money, it should be sure that this will lead to a direct fall in teacher costs.√

Tools such as those produced by the Association of College and School Lecturers (ACSL) can assist schools with these calculations.
Questions for school leaders, governing bodies and councils

- How have you reviewed the cost of your optional Key Stage 3 and Key Stage 4 subjects with small numbers of pupils? Are there subjects taken by a few pupils that are not financially sustainable?
- How have you used the Audit Commission workforce costing tool (secondary schools) to cost individual subject departments? Could you train teachers to teach more than one subject to save money?
- How have you analysed how the curriculum offer affects your ability to attract pupils to your school?
- How have you worked with the council school improvement team to get a better understanding about the cost of curriculum choices?

Bought-in curriculum services

26 Bought-in curriculum services are professional services purchased by schools to support the delivery of the curriculum. Services may include ICT consultancy, curriculum advice and specialised support from self-employed music teachers or exam invigilators. Some schools may use this spending to deliver or directly support teaching in areas where the permanent workforce has skill gaps. However, schools could achieve greater value for money if they check these services are necessary and do not cost more than alternatives that may be provided in-house.

27 We examined money spent on bought-in services since 2003, distinguishing between primary and secondary schools. Our analysis shows that primary and secondary schools have spent increasing amounts of money on bought-in professional curriculum services since 2002/03 (Figure 4). There is significant variation in spending between schools. In 2009/10 over 3,500 schools spent less than £1,000 on bought in services, (of which 2,100 schools spent nothing at all), whereas 850 schools spent over £100,000. Schools may buy these services from the local council or private sector providers.

28 Although a small part of overall school spending, it has increased from 0.75 per cent of total spending in 2002/03 to 1.23 per cent of spending in 2009/10. Below we show how spending per pupil has increased. However, it does not appear that schools are using this money to broaden the GCSE curriculum, as there is no relationship between GCSE entries and the amount spent on bought-in curriculum services. As a result, we believe schools may have scope to save money on these services without narrowing the GCSE curriculum.

i [http://www.schoolresources.audit commission.gov.uk/Resources/Workforce%20Tool.xls](http://www.schoolresources.auditcommission.gov.uk/Resources/Workforce%20Tool.xls)
Figure 4: Schools have spent increasing amounts on bought-in curriculum services

Spend per pupil on curriculum professional services

<table>
<thead>
<tr>
<th>Year</th>
<th>Primary schools</th>
<th>Secondary schools</th>
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<td>60</td>
</tr>
<tr>
<td>2009/10</td>
<td>55</td>
<td>65</td>
</tr>
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</table>

Source: Audit Commission analysis of DfE Consistent Financial Reporting data

Questions for school leaders, governing bodies and councils

- How has your spending on bought-in curriculum services changed over time? How do you know you are getting good value for money?
- How might you save money on bought-in curriculum services?
- In what ways could bought-in services be used to build your capacity to provide these services in-house in future?
- What scope do you have, given local labour market constraints, to use teacher recruitment to maximise the breadth of skills, and therefore curriculum in the school workforce?

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References
