



**JUNE 2008**

## **AREA COST ADJUSTMENT AND THE ADDITIONAL COSTS INHERENT IN SMALL SCHOOLS**

1. The argument for an area cost adjustment is that costs are higher in some areas of the country. The index is based on salary costs in different local authorities and each local authority is given an overall level on the index. There is a problem with assigning an overall level to an authority - authorities are either too large or too small

2. Hampshire gets an adjustment but the authority stretches from the edge of Surrey down to the border with Bournemouth. Bournemouth does not get an area adjustment but you could argue that there is no significant difference between costs in Bournemouth and in the abutting areas of Hampshire. This would, of course, be solved if Hampshire used its area cost adjustment in those areas of Hampshire that are more expensive – but I do not know of a local authority formula that has an area cost within it – please let know if there is one.

3. Then there are the London authorities; these are all very small (geographically) and patterns of travel to work are often across boundaries. There are very big cliff edges at the boundaries – so, for example, Tower Hamlets gets the maximum uplift of 28% but the neighbouring Newham gets only 10% uplift. The same argument about the boundary applies – made more complicated by the relative size of the uplifts and the patterns of travel in London. However we will leave the intricacies within London on one side, and look at the effects across the different regions of the whole country.

4. It is salary costs that are different across the country – utilities and resources are the same everywhere but anything that includes salary costs will vary. The teaching and support staff, site and grounds staff, catering, and cleaning are obvious examples, but any contract that includes a salary is involved – for example, curriculum support or staff training.

5. The major costs that are independent of salaries are energy, water, educational supplies and exam fees and together these account for about 10% of secondary school budgets leaving 90% that include salaries as at least a part of the cost. So, if an authority gets a 28% uplift for area costs, that assumes that salary costs are about 30% higher (to give a total uplift to the budget of about 28%). Across the whole London region the uplift is probably of the order of 12-14%, suggesting that salary costs would be 13-16% higher across the region.

6. First of all, look at the distribution of area cost uplifts across the regions. In the table I have used the colours of the rainbow (in the correct order!) to show the varying levels of uplift across the country.

- Red authorities do not get any uplift,
- Pale orange authorities get less than 3%,
- Yellow authorities get up to 6%
- Green authorities up to 9%
- Blue authorities 12%
- Pale violet authorities get up to 15%
- Deep violet authorities get the maximum 28%.

### Area Cost Adjustment by Region

North East	North West	West Midlands	Yorks/Humber	East Midlands	South West	East of England	South East	London
Newcastle	Lancashire	Staffordshire	Hull	Derbyshire	Dorset	Norfolk	East Sussex	Barking
North Tyneside	Blackburn	Stoke-on-Trent	East Riding	City of Derby	Poole	Suffolk	Brighton	Bexley
South Tyneside	Blackpool	Herefordshire	NE Lincolnshire	Nottinghamshire	Bournemouth	Southend	Kent	Bromley
Sunderland	Cumbria	Worcestershire	North Lincolnshire	City of Nottingham	Devon	Medway	West Sussex	Croydon
Hartlepool	Bolton	Shropshire	North Yorkshire	Lincolnshire	City of Plymouth	Essex	Hampshire	Enfield
Middlesbrough	Bury	Telford	York	Leicestershire	Torbay	Cambridgeshire	Portsmouth	Haringey
Redcar & Cleveland	Manchester	Birmingham	Bradford	Leicester City	Cornwall	Peterborough	Southampton	Havering
Stockton on Tees	Oldham	Coventry	Calderdale	Rutland	Somerset	Bedfordshire	Isle of Wight	Newham
Durham	Rochdale	Dudley	Kirklees	Northamptonshire	Gloucestershire	Luton	Oxfordshire	Redbridge
Darlington	Salford	Sandwell	Leeds		Wiltshire	Thurrock	Buckinghamshire	Waltham Forest
Northumberland	Stockport	Solihull	Wakefield		Swindon	Hertfordshire	Milton Keynes	Barnet
Gateshead	Tameside	Walsall			BANE		West Berkshire	Brent
	Trafford	Wolverhampton			City of Bristol		Reading	Ealing
	Wigan	Warwickshire			North Somerset		Wokingham	Harrow
	Cheshire				South Glos		Bracknell Forest	Hillingdon
	Halton						Windsor	Hounslow
	Warrington						Slough	Kingston
							Surrey	Merton
								Richmond
								Sutton
								Camden
								Greenwich
								Hackney
								Hammersmith
								Islington
								Kensington
								Lambeth
								Lewisham
								Southwark
								Tower Hamlets
								Wandsworth
								Westminster

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7. We can see easily that the north east gets no uplift, through to inner London where the uplift is 28% (although the uplift across the whole region of London will be significantly less than this – somewhere in the region of 12-14%).

8. Then I looked at salary costs for teachers across the regions. The first set of data refers to small 11-16 schools. The schools all have between 400 and 700 on roll and the data is taken from the 2006-07 financial returns on the CFR database. In each region I selected all the 11-16 schools (excluding special schools) in that size range.

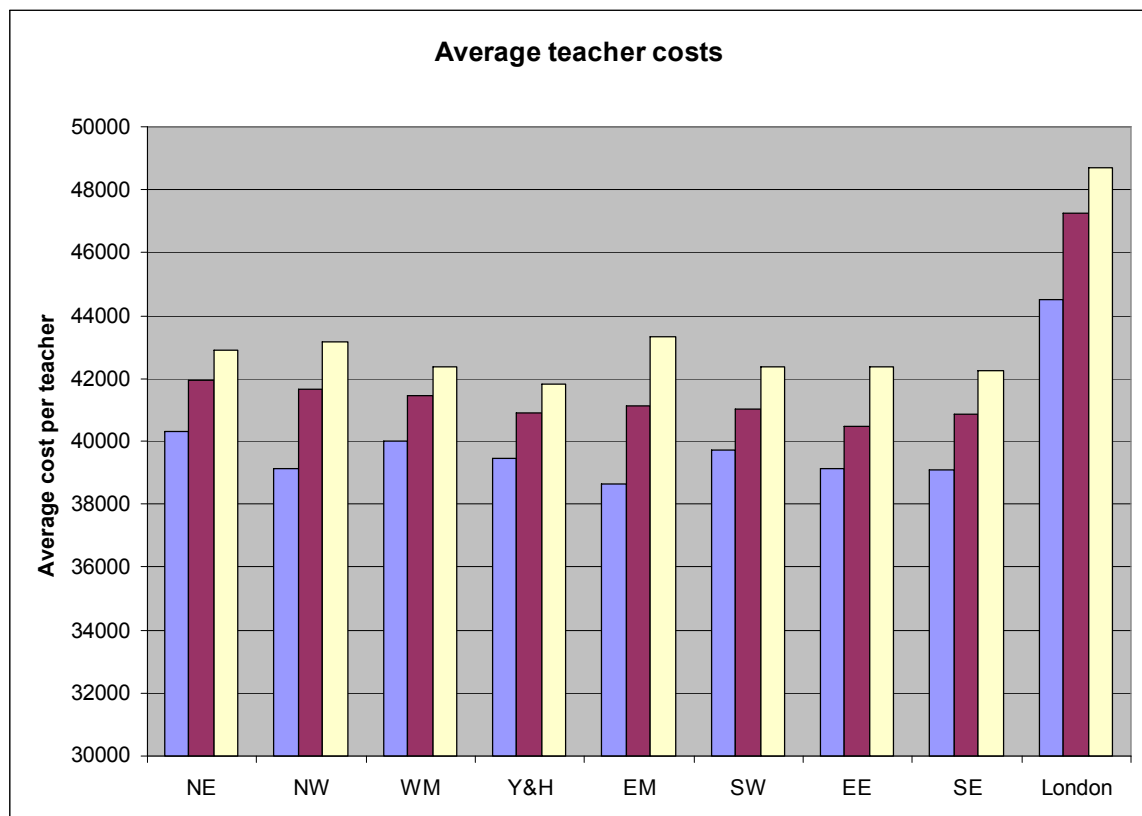
9. I looked at five pieces of data:

- The average teacher cost
- The total spent on teaching staff as an amount per teacher including supply costs
- The total amount spent on teaching, support and administrative staff
- The pupil teacher ratios and
- The teacher education support staff ratios.

10. Obviously the most direct cost is the average teacher cost in the schools. However in areas where teacher recruitment is difficult, you also need to look at the supply and agency teacher costs. If recruitment is difficult, it is likely that the schools will use supply, particularly agency supply, to cover teacher vacancies. The pupil teacher ratio will tell us if any particular region spends more on having more teachers, irrespective of the average teacher cost and the ratio of education support staff to teachers is an indicator of the relative importance of these staff costs and the total staff costs include all teaching, education support and administrative staff.

### Average Teacher costs

11. In the chart below the inter-quartile range for average teacher costs is shown for each region. The inter-quartile range covers 50% of schools in the group but excludes schools that are at the extreme of the range.

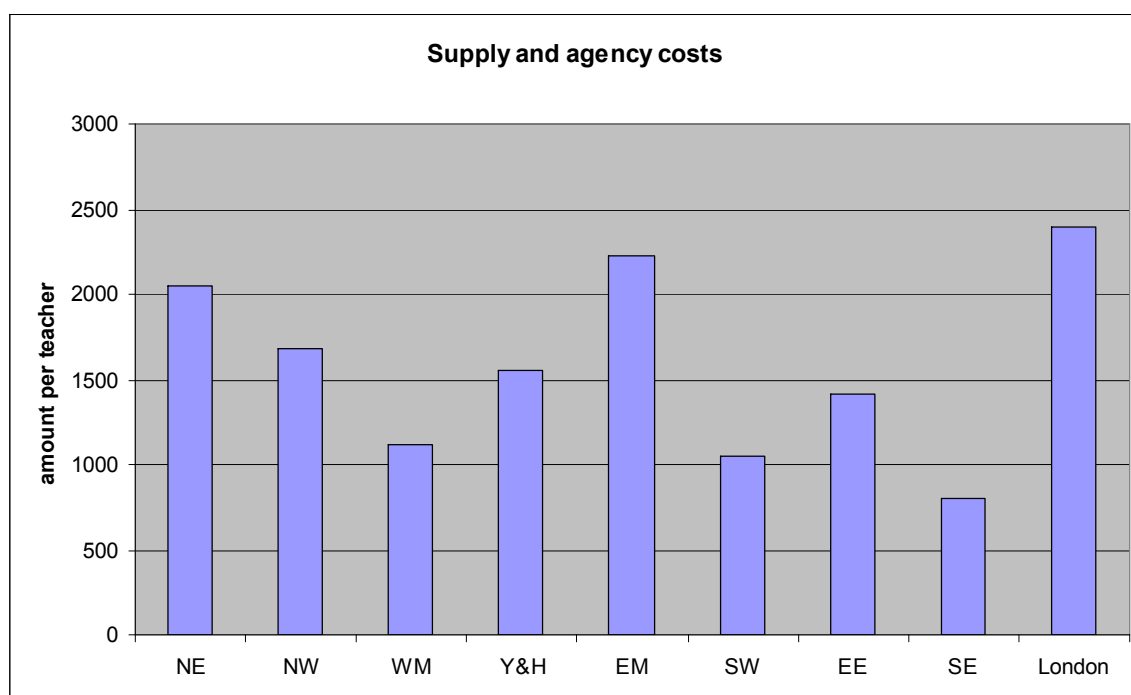


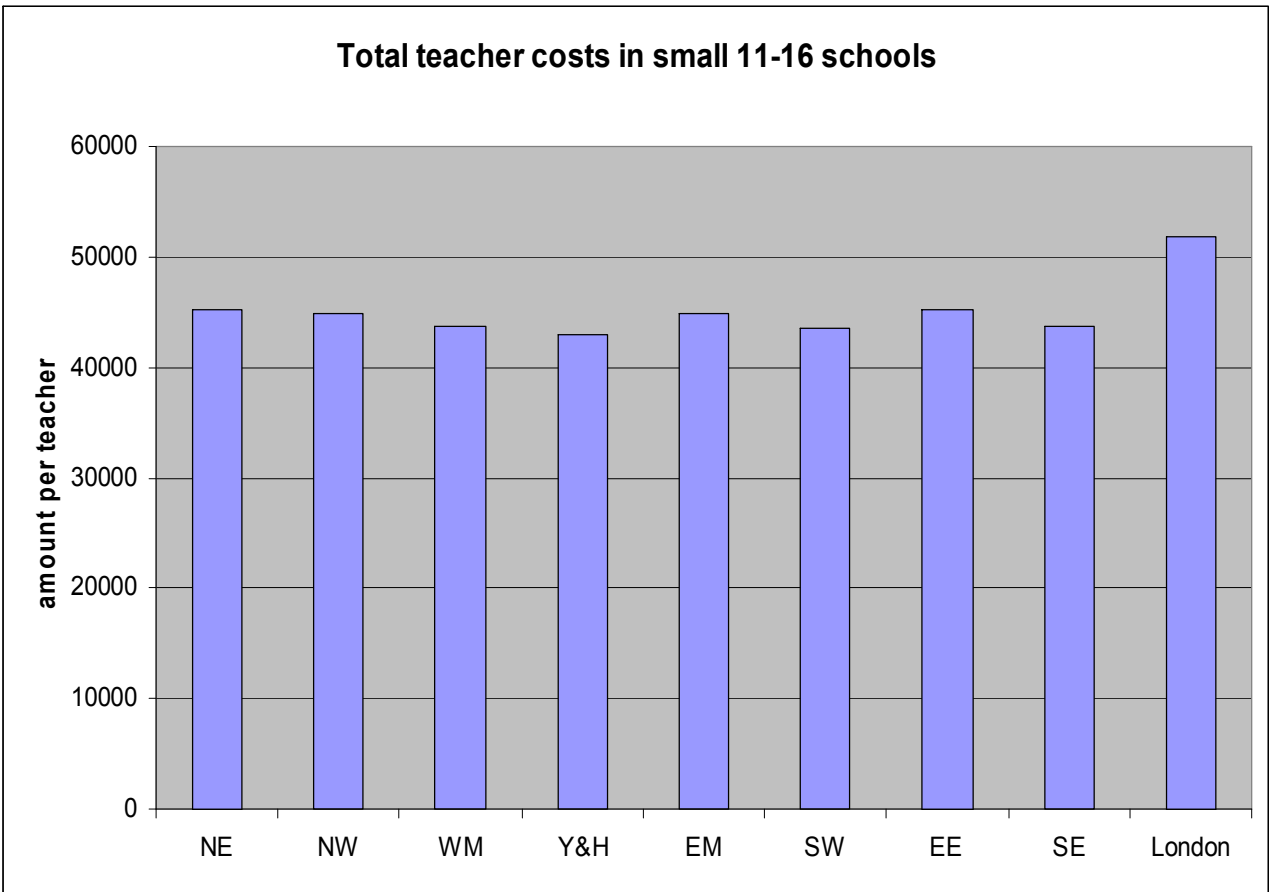
12. Please note that these are average teacher costs not salaries. About 22% of the cost is in employer contributions to pension and NI. Whilst it is clear in this data that the average costs in the London region are significantly higher, it is not possible to distinguish between all the other regions. The average teacher costs in the London region are approximately 15% higher than the rest of the country (representing a 13% increase in total budget).

13. The inter-quartile ranges for all authorities are quite large. If we look at the East Midlands, the region with the largest inter-quartile range, all the other regions (except London) are within its inter-quartile range. So this data does not demonstrate that the costs are necessarily higher in the North East than in the South East – but it does show that there are not, for this sample of schools, significant differences between the regions – yet the area cost adjustment in the regions does vary significantly.

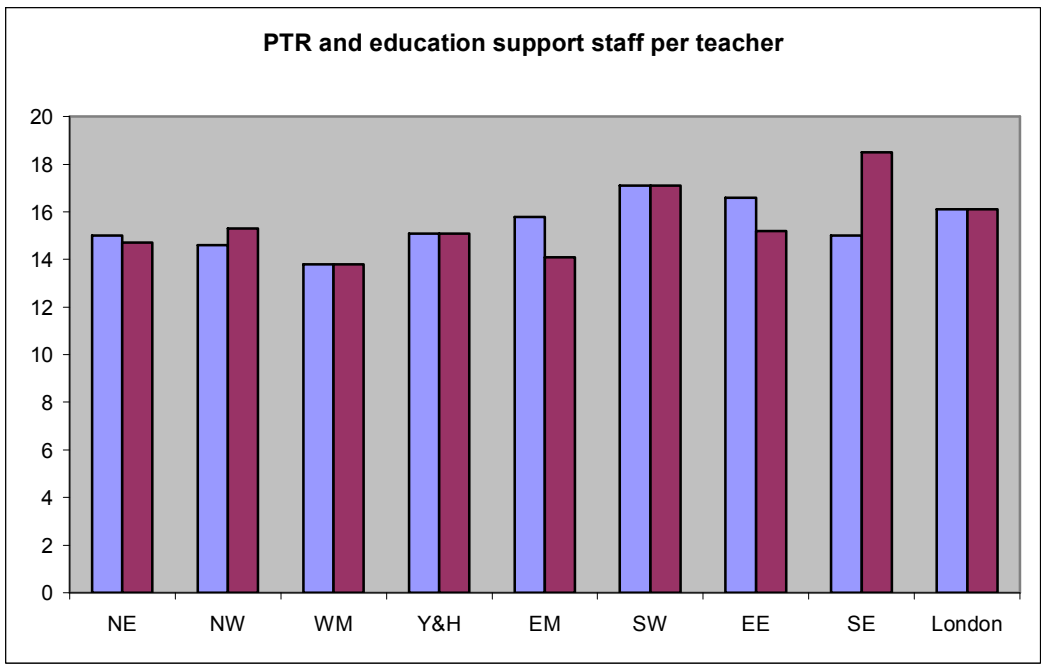
14. The amount spent per teacher on supply and agency supply also varies across the regions. The second chart shows only the median value for each region and shows the amount spent on supply and agency staff as an amount per teacher. Again it is obvious that London shows a different pattern from the other regions with a very low spend on supply but a very large spend on agency staff – probably reflecting the very different issues around teacher recruitment in London.

15. If we look at the combination of supply and agency costs and the average teacher costs across the regions, the picture in London is clearly more costly. The difference between the total spend on teaching between London and the average in the other regions is around 16.5% or 14% of the total budget – very close to the average uplift in the London region. Differences between the other regions do not, in this data, reflect the different area cost uplifts in the different regions. What this data suggests is that we need a much clearer understanding of the differences, if any, on staff costs across the country outside of London.



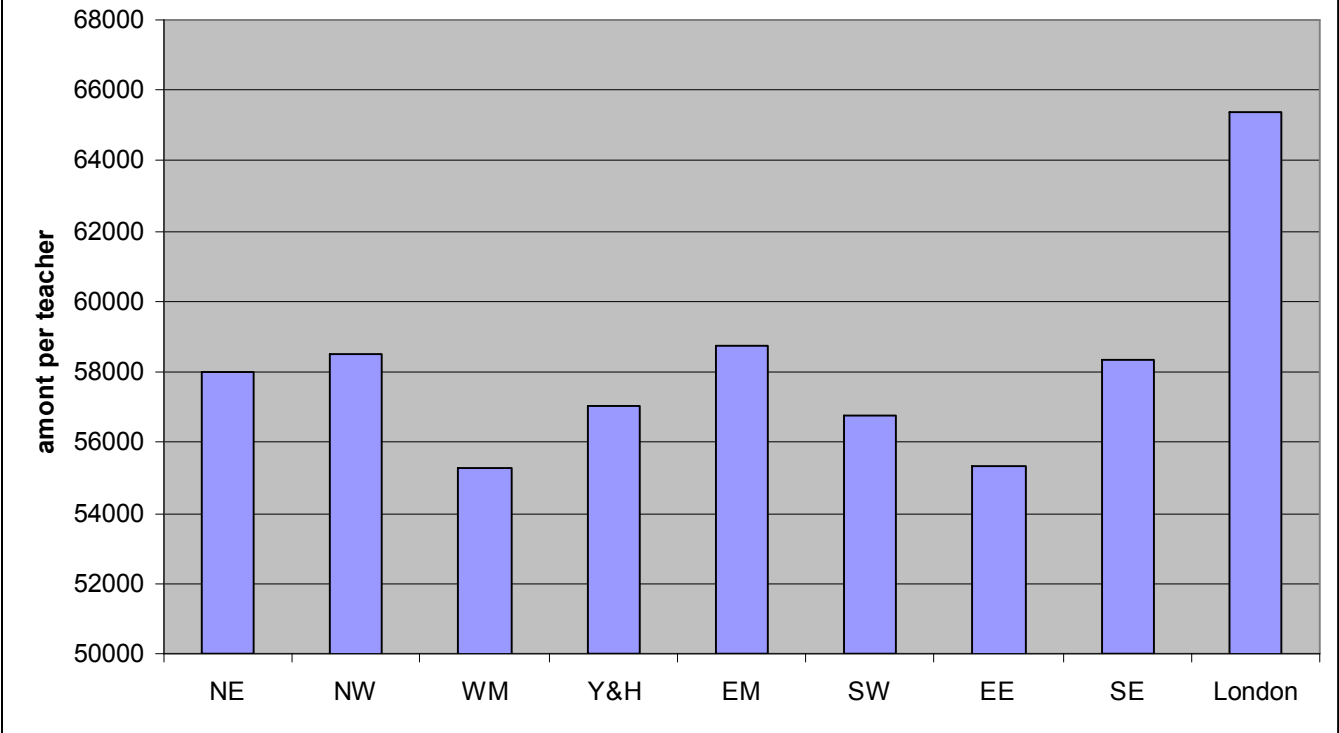


16. The pupil teacher ratios across the regions and the ratio of education support staff to teachers show no significant differences between the regions. Similar schools are using roughly the same number of teachers and having similar education support staff available. The only unusual region is the South East where there seems to be a more generous allocation of education support staff.



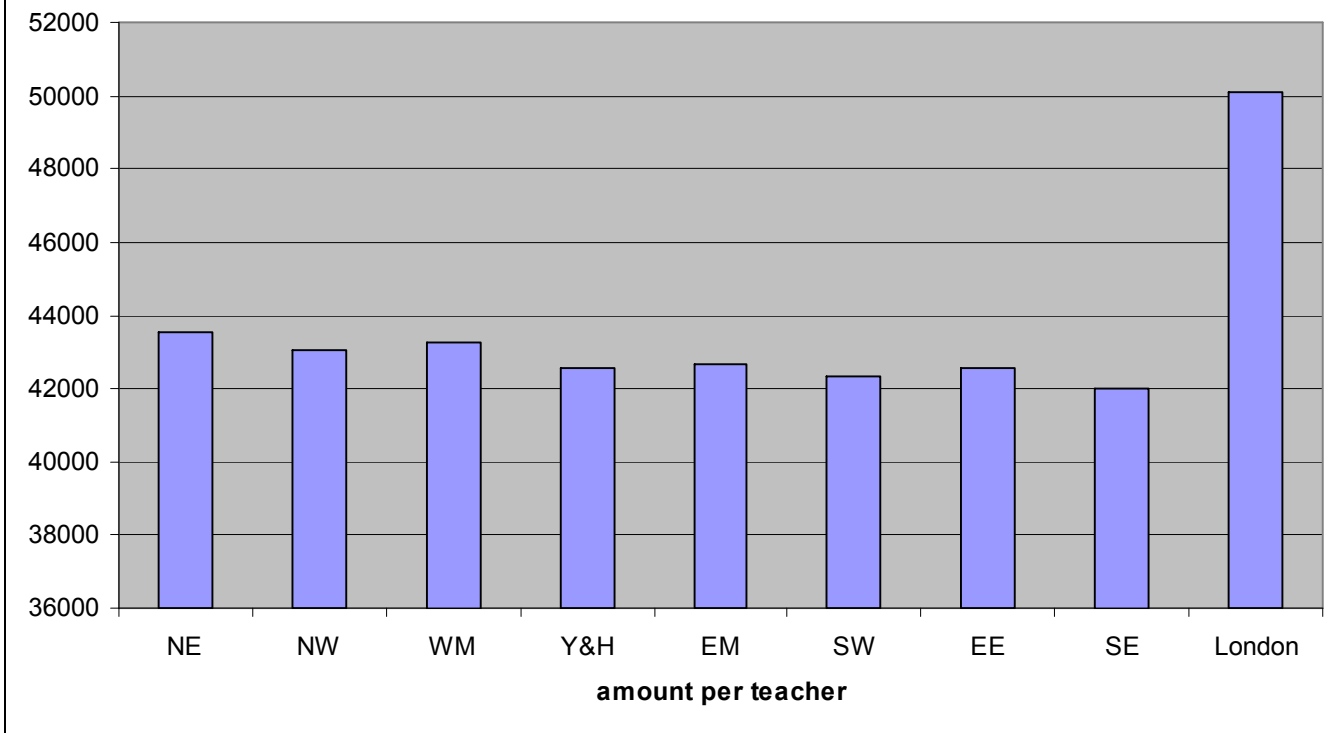
17. Looking at the total staff costs – again as an amount per teacher - this total includes teaching staff, all supply costs and all educational and administrative staff costs. It does not include the direct costs of site, cleaning or catering staff or any indirect staff costs in other contracts.

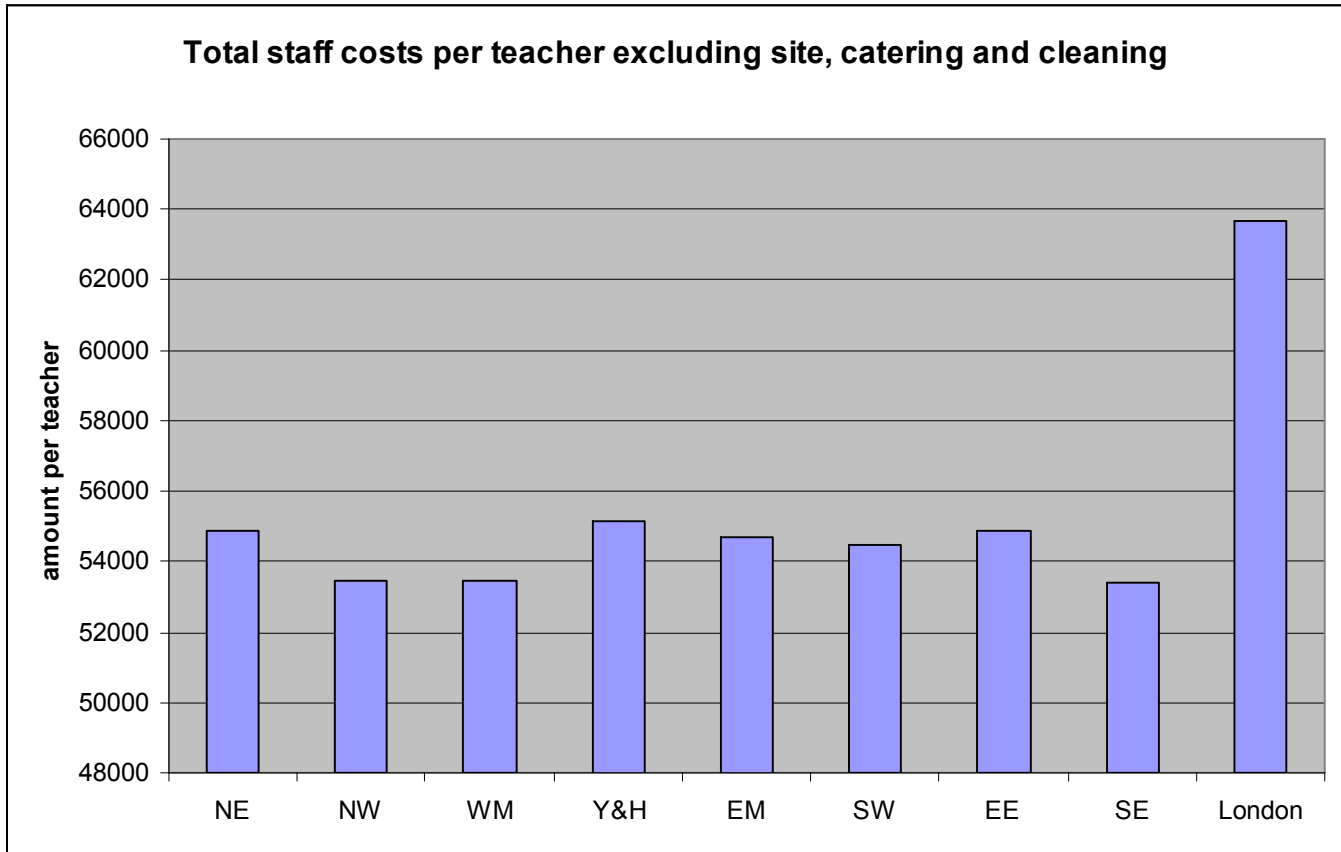
**Total direct staff costs excluding site, catering and cleaning**



18. In this data, the total costs in London are about 14% above the rest of the country. This data is from about thirty schools in each region, all 11-16 schools with between 400 and 700 pupils on roll. I repeated the exercise using large 11-16 schools – with between 1000-1500 pupils on roll. The charts below show the median value of the total teaching costs per teacher and then the median value of the total staffing costs per teacher in each region.

**Total teaching costs per teacher in large 11-16 schools**





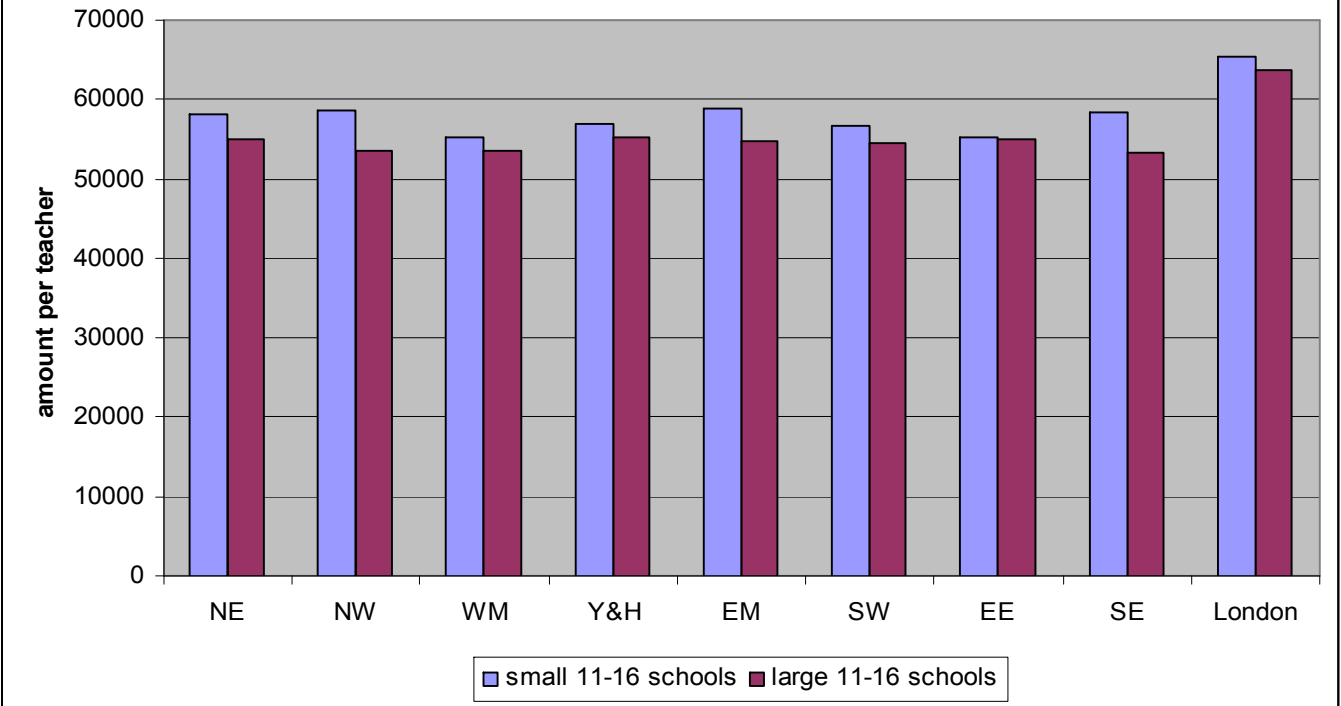
19. Again the total costs in London are higher than the rest of the country (about 17% for both teacher costs and staff costs including education support and administrative staff). There is also the same high expenditure on agency staff. Again it would appear that total costs in the North East exceed those in the South East – but the inter-quartile ranges are similar to the small school data, so all we can conclude is that this data does not demonstrate a difference in staffing costs in proportion to the differences in area costs.

20. What is also interesting is that in most (but not all) regions the inherent increased salary costs in small schools are apparent. In the chart below all regions show that smaller schools have higher per teacher salary costs. This of course is not unexpected. We are looking at the average costs across all the leadership and teachers.

21. Head-teachers and other senior leaders are paid more in larger schools – but not in direct proportion to the size of the school. A head-teacher has some load that is directly proportional to the number of pupils – but all schools have the same number of initiatives and pieces of paper from the local authority and the DCSF to deal with.

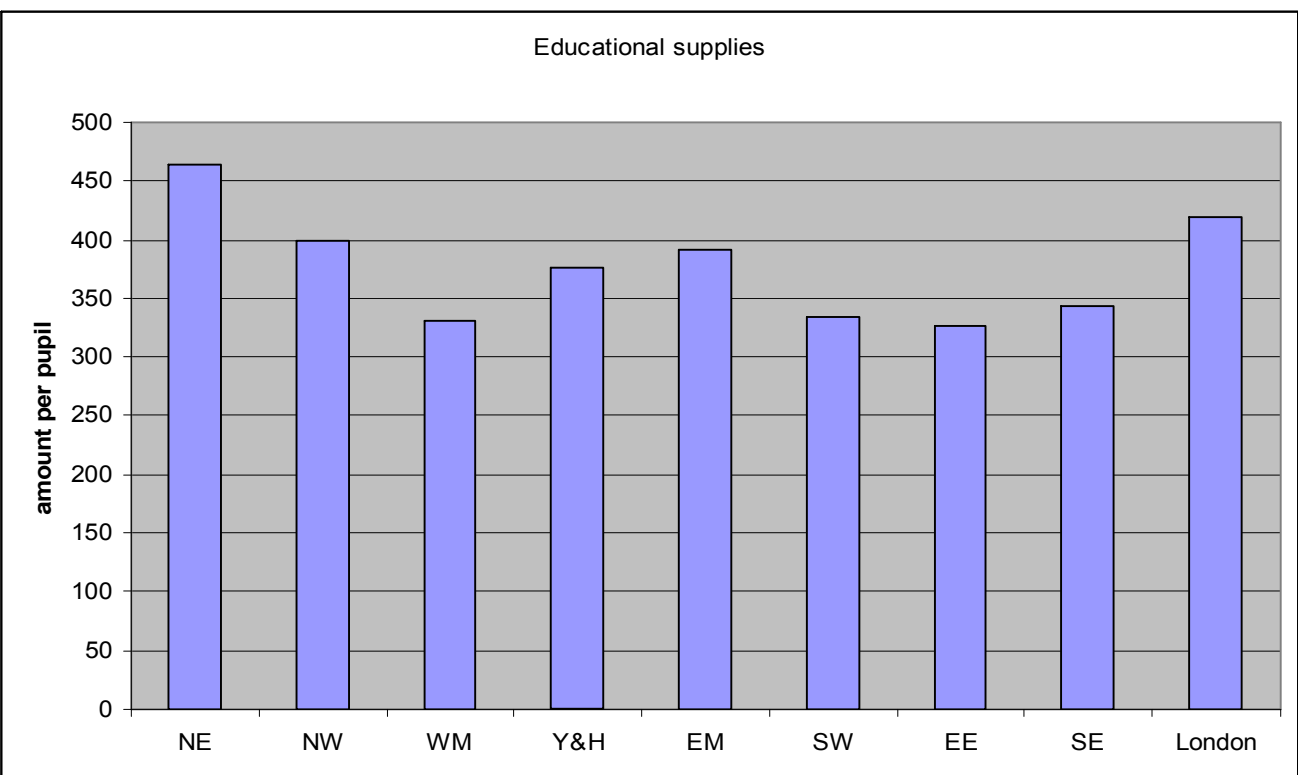
22. So a large part of the roles of senior leaders are independent of the size of the school. In a smaller school this proportionally higher cost of the senior leadership is spread over a smaller total staff so the average is higher. In the same way, all schools require a basic minimum of support and administration but this is shared over a smaller number of teachers. This gives a very neat way of looking at the inherent costs of small schools, particularly primary schools where the effect is even more noticeable. The chart shows median value of the total staff costs (teacher + support + administration) for small and medium schools in each region. The differences may not look very big but the average across all regions is over £2,800 – which is about £100,000 total additional cost for the smaller schools.

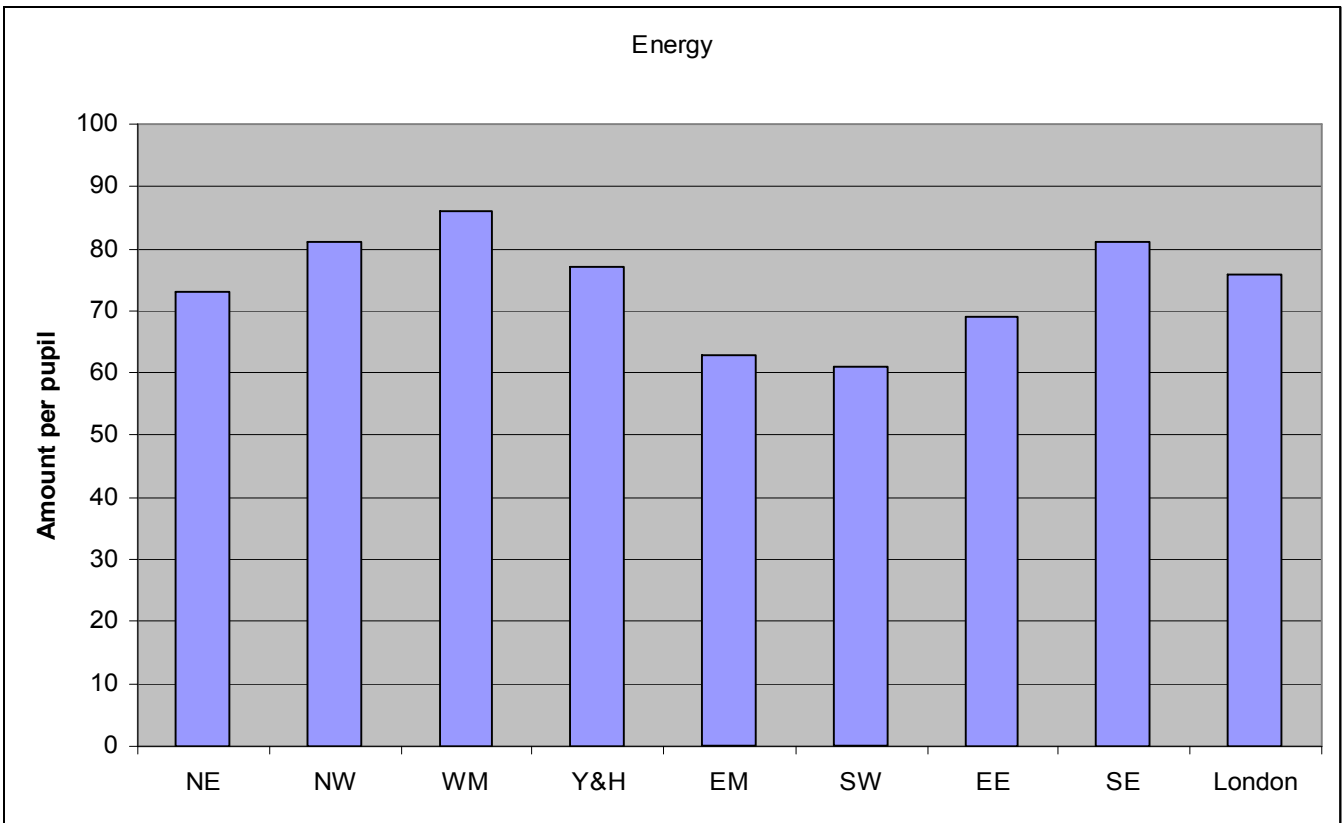
### Inherent increased staffing costs in small schools



23. Finally, it is worth looking at the amount spent per pupil in the different regions on the two main items, not including salaries – that is on educational resources and energy. The charts below show the median spend on educational resources and energy in the small 11-16 schools in each region. These two items together take about 10% of the budget and are independent of salary costs. The interesting point is that London is very similar to the other regions. The differences between regions are not large and there is considerable overlap when the inter-quartile ranges are considered. The difference in median energy costs between the extremes, South West and the West Midlands, is about £10,000 at school level.

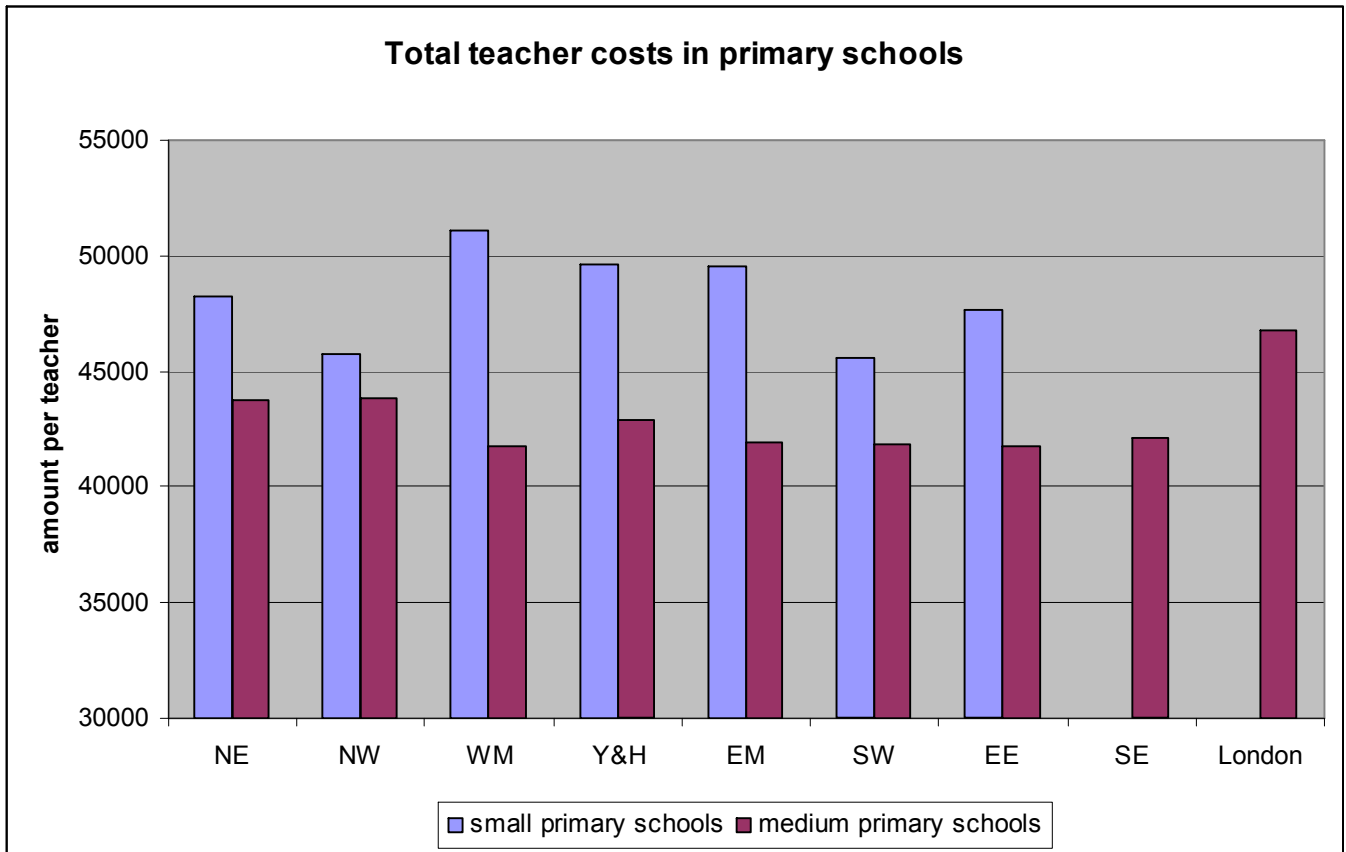
### Educational supplies





**Cost differences in medium and small primary schools**

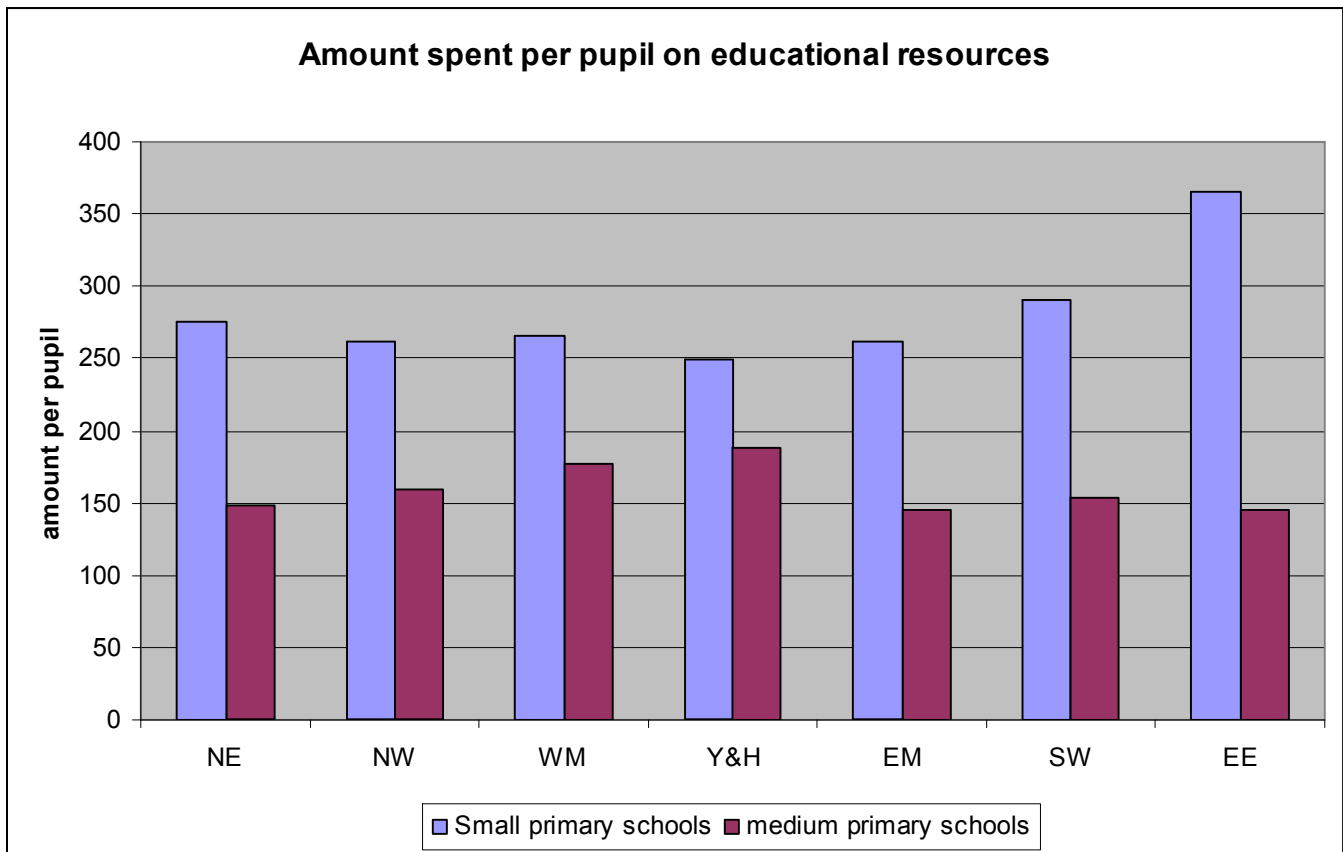
24. I did a similar exercise with primary schools. Again there are two groups of schools – both groups are primary schools with infant and junior. The first group has between 20 and 100 pupils and the second group has between 300 and 350 on roll. The first chart shows the total teacher costs (so including all supply costs) across the regions for the two groups of schools. Again the sample was all the schools in the region within these size ranges.



25. If we look at the medium primary schools (maroon) then we see, as with the secondary schools, that there is a variation across the regions but again, London is about 12% higher than the other regions. The same pattern is there with the small schools (blue) with London and the South East missing – because they have fewer than three schools in this group (London doesn't have any of these small infant + junior schools).

26. As we would expect, the differences between small and medium primary schools are clear and consistent across the regions. On average the difference appears to be about 13% - so it costs an additional 13% per teacher in a small primary school or about £5,500 per teacher. On the same basis the other staff costs will be proportionately higher as the basic minimum of site, support and administration has to be shared over fewer teachers.

27. What is also interesting is that there is a marked difference in the costs per pupil of educational resources between small and medium primary schools. The chart below shows this and again the outcome is not surprising. All schools need a basic number of computers and other technology (expensive) and a basic number of reference materials, and these are almost independent of the number of pupils in the school or, at least, not proportional to the number of pupils.



28. So the increased costs in running a small primary school are not only in the staffing costs but will be there in all the other costs including energy (it costs the same to heat a classroom whether there are 15 or 25 pupils in it).

29. Small schools are expensive so there have to be very good educational reasons for having these schools. In rural areas, where the alternative is to bus young children for long periods or distances, there is an obvious need for small schools - the arguments in favour of very small schools in urban areas are less clear.

## Conclusion

30. The school funding system should enable schools in all regions of the country to deliver a similar level of education. It is clear that the costs in London are significantly higher than in the other regions and there has to be an area cost adjustment within the funding formula to address this.

31. However, there is no evidence in the analysis of actual expenditure in small and medium sized primary schools, and small and medium sized 11-16 schools, that there are significant differences across the other regions. The area cost adjustment needs to reflect differences in costs to schools. This analysis uses four groups of representative schools but it is still a relatively small sample. We need to look at a larger sample, and probably at the local authority level rather than simply regional.

32. There are always problems in analysing expenditure and equating that directly to funding. Expenditure represents the choices schools make within the employment market – but there were not significant differences in pupil-teacher ratios across the country in the small 11-16 schools, suggesting that schools are employing roughly the same number of teachers irrespective of region.

33. There are difficulties in distributing an area cost within a large local authority (Hampshire for example) and within small adjacent authorities (inner London for example), and these also need to be looked at in more detail.

34. There are good educational arguments for small and for large schools. There are good economic reasons for ensuring that the schools are not too small. Whatever is the final decision on the average sized school that the country can afford, the reality will be some smaller schools for practical reasons, compensated by some larger schools to keep the overall unit cost at the affordable level.

35. If small schools are defined as those costing above the average unit cost, then there needs to be a distinction in the funding system between areas where small schools are a necessity and those where they are a choice. And there is scope for some large schools to compensate.

36. The sparsity measure should look at the distribution of pupils attending maintained schools in the area and the distance or time taken to travel to the next nearest school.