

# TEACHER QUALIFICATIONS



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## **Foreword**

Since setting up the Sutton Trust in 1997, we have funded many projects involving state and independent schools. One of the things that struck me as I visited these schools is that a far greater proportion of teachers in independent schools have degrees from top universities, and advanced degrees, compared to their counterparts in state schools. When I tried to find some hard data on which teachers were teaching where, and with what qualifications, to my surprise I found that none existed.

The Sutton Trust therefore commissioned the Centre for Education and Employment Research at the University of Liverpool, the leading group on teacher research, to conduct a survey to provide some answers. We are pleased to make the findings generally available.

The results are startling, though considering the contrasting provision and performance at state and private schools, perhaps not surprising. More than half of Oxbridge graduates in teaching are to be found in independent schools. The average independent school has seven times as many teachers with an Oxbridge degree and three times as many graduates from the top-ranked universities as the average state school. Pupils in independent schools are much more likely to be taught by a graduate in the subject. These figures are for the typical independent school; for the top schools the disparity is much greater.

The implications are, I believe, important and far-reaching. Students in state schools are being short-changed by not having access to the most highly qualified teachers. The best solution would be to extend our Open Access scheme - which opens up every place on merit, not money, on a means-tested basis - to a hundred or more of the top independent day schools. There would thus be the opportunity for all students from whatever background to attend these schools, not just the seven per cent whose parents can afford the fees.

These findings also explain to a large measure why students from state schools are under-represented at Oxbridge and other leading universities. They support the need for summer schools, admission officers and other activities which we and others have been funding at major universities to reach out to pupils and teachers in comprehensive schools.

But these measures can be no substitute for getting things right in schools. Teachers play a vital part in children's overall development. We all have stories to tell about teachers who inspired us. In my case a teacher at my state school, an Oxford graduate, inspired me to try for Oxford. Without him, it would not have occurred to me, and my life might have been very different.

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## Summary

The qualifications of teachers in representative samples of independent and maintained secondary schools have been compared. About 13 per cent of the teachers are in the independent sector, which takes about seven per cent of the pupils.

The main qualification of nearly three-quarters of teachers in independent schools is a subject degree compared with just over 60 per cent of the teachers in maintained schools.

Teachers in independent schools are more than twice as likely to have been awarded a first. Over 60 per cent have at least an upper-second compared with 45 per cent of the teachers in maintained schools.

Teachers in independent schools are five times more likely to hold a PhD as their highest qualification. Nearly a quarter of independent school teachers have obtained a higher degree, against 16 per cent of teachers in maintained schools.

Teachers in independent schools are seven times more likely than those in maintained schools to have graduated from Oxford or Cambridge - 13.0 per cent against 1.8 per cent. Nearly 30 per cent (29.4 per cent) come from the leading universities, as ranked by the major league tables, compared with 10.5 per cent in the maintained sector.

Among the maintained schools, the grammars stand out, with nearly a fifth (18.4 per cent) of their teachers graduating from the leading universities.

Of every 100 Oxbridge graduates in teaching, 54 are to be found in independent schools, 9 in grammars, 37 in comprehensives and none in secondary moderns. Of every 100 teachers, 13 are employed in independent schools, 4 in grammar schools, 79 in comprehensives and 4 in secondary moderns.

Teachers in independent schools are also much more likely to have a degree in the subject they are teaching. This is particularly the case in the shortage subjects of maths, physics, and design and technology. But it is also true in chemistry, biology, languages, English, history, music, art, religious education, and information and communications technology. The only notable exception is physical education where independent schools involve subject tutors extensively in games' provision.

In so far as qualifications are a proxy for the quality of teaching, they indicate considerable variation with type of school. Thus, while secondary education may be universal to age 16, opportunities are far from equal.

## 1. Introduction

1. The acknowledged difficulties of recruitment to teacher training mean that there are not enough well-qualified teachers to go round, particularly in mathematics, the physical sciences and modern languages. But little is known about how those well-qualified teachers who are in schools distribute themselves. Anecdotal evidence suggests that they are to be found mainly in independent schools and grammar schools, but this has not been backed by systematic surveys. Smithers and Robinson (2000, 2001) have, however, demonstrated that there is a net movement of teachers from the maintained to the independent sector.
2. In part, the lack of a quantitative description stems from the difficulty of collecting such information. Not all schools publish staff lists and some are noticeably reticent about the qualifications of their staff. The DfES, which is in a position to collect these data for the maintained sector, has not done so recently. It used to conduct a Secondary Schools Staffing Survey on a four-year cycle, but did not go ahead with the one due in 2000.

## 2. Methods

3. Details of qualifications and subjects taught were obtained by a questionnaire survey of staff through personal letters addressed to them at their schools.

### **Sample**

#### *Maintained Schools*

4. About a third of maintained secondary schools publish their staff lists in their prospectuses or on their websites. From among those, an initial sample of 1 in 2 was drawn to yield 514 schools (or 15 per cent of the total). The schools were contacted to see if they would be willing to participate in the study. Over 90 per cent (465) agreed to do so. These schools have been compared with the national distributions in terms of region, type, status, specialisation, sex, age range, religious affiliation and size. The tables in the Appendix show that there was generally good correspondence. Thus although it is recognised that schools that publish their staff lists may differ from those that do not, perhaps being more proud of their staff, they were found to be representative of the characteristics considered.
5. Participating schools were sent letters and questionnaires to be handed on to members of staff. These were individually addressed and had been chosen as a 1 in 10 random sample. When the member of staff had left, the school was asked to re-address the envelope to the replacement or next person on the staff list. In total, 2,959 letters were sent out and 1,258 completed questionnaires received. The response rate of 42.5 per cent implies there will be an element of self-selection, but comparison with national statistics shows that the replies came from teachers reflecting the population in terms of age and sex.

### ***Independent Schools***

6. About 70 per cent of independent senior schools publish their staff lists. These schools, 330 in total, were asked to participate in the study and 267 (80.9 per cent) agreed to do so. There are fewer national statistics for independent schools than maintained schools, but we have been able to compare those participating with the national picture in terms of whether the school is designated as selective, whether it is single sex or coeducational, and its age range. The Appendix shows that the schools' sample is acceptably representative in terms of all three. City Technology Colleges, which are classed as independent but state-funded, were not included.
7. As with the maintained schools, personally addressed letters were sent to a ten per cent random sample of teachers in each school to be handed on by the schools. A total of 1,427 teachers was approached in this way and 634 (44.4 per cent) returned completed questionnaires. Comparison with the population suggests that the female teachers were somewhat more inclined to respond (see Appendix, Chart A15).

### **Questionnaire**

8. The questionnaire consisted essentially of four parts:
  - details of the school - type, age range, sex, size;
  - personal details – age, gender, nationality, ethnic origin;
  - teaching and other duties – subject(s), periods, time spent on other tasks and duties;
  - qualification details – main teaching qualification, degrees, other qualifications.

### **Analysis**

9. In this paper we report comparisons between the different types of schools, in particular, between the maintained and independent sectors. Since both samples were arrived at in the same way and both completed the same questionnaire at the same time we are able to make direct comparisons. In both samples, those able to make a favourable report of themselves may have been more likely to have participated, since the responses came from schools that publish staff lists and just under half the teachers.
10. But there was little evidence of bias in the detailed comparisons with national statistics. The picture presented in maintained schools may, however, err on the side of the favourable because the survey captures only staff who had been in the schools for long enough to be recorded in the published staff lists. Turnover in secondary maintained schools reached 15.7 per cent in 2001 (Smithers and Robinson, 2001). According to Ofsted (2002), about a third of the vacant posts are covered by temporary and occasional staff, whose lessons on a number of occasions were judged to be of poorer quality.

11. In the first analyses the broad range of qualifications is compared. The results are set out in Charts 1-3, and also 8. But in the detailed examination of degrees - class, where obtained and relation to teaching - the focus is on subject degrees, so those holding education degrees or certificates are not included in Charts 4-7, nor Chart 9.

### 3. Findings

#### Teaching Qualifications

12. Chart 1 shows the main teaching qualification. Five main routes into teaching have been identified, with the others grouped as a sixth category. The major route into teaching in secondary schools is a traditional university degree followed by postgraduate training which is mainly, though not exclusively, delivered as a one year-course at university or with a training provider. It is also possible to become a teacher in an independent school on the basis of a degree alone. This used to be the case for maintained schools, but is no longer. However, there will still be some such teachers in the system.

**Chart 1: Main Teaching Qualification**

Qualification	Maintained		Independent	
	N	%	N	%
Degree+PGCE	734 <sup>1</sup>	58.9	396	62.7
Degree Only	17	1.4	75	11.9
Degree+QTS	84	6.7	42	6.6
BEd	196	15.7	64	10.1
Teacher's Certificate	201	16.1	49	7.8
Other <sup>2</sup>	15	1.2	6	0.9
Total	1,247	100.0	632	100.0

1. Includes four on Graduate Training Programmes.

2. Includes overseas qualifications, specialised subject diplomas as in music and masters degrees where no other qualification shown.

13. The other major routes into teaching are concurrent with teacher training and subject studies as part of the same course. Three types are distinguished. There is the old teacher's certificate, a dedicated but non-degree teaching qualification. This has been superseded, but it is still the main teaching qualification of many practising teachers. Following the James Report (1972), it was phased out and has been replaced by the BEd degree, which is similar in structure and content, and is mainly taught in the institutions that offered the teacher's certificate. Some of the universities created in the 1960s following the Robbins Report (1963), for example York, invented new concurrent degrees and to mark them out designated them as BA/BSc with QTS (qualified teacher status). The small other category includes overseas trained teachers, those qualifying on the basis of specialised subject diplomas, as for example in music, and master's degrees where no other qualifications were listed.

14. In subsequent analyses a distinction is drawn between subject degrees and education degrees since the two groups tend to have different entry requirements. (UCAS' *Annual Statistical Tables* consistently show education entrants to have the lowest average A-level scores of the 15 fields considered.) Chart 1 shows that nearly three-quarters of the teachers in independent schools had entered teaching on the basis of a subject degree compared with just over sixty per cent of teachers in maintained schools. Twelve per cent had entered independent schools without taking a PGCE, as they are free to do in this sector. Teachers in maintained schools were more likely to have qualified by taking an education degree or teacher's certificate.
15. Chart 2 shows how the teaching qualifications varied across the different types of maintained school. The grammar schools were similar to independent schools in having relatively fewer of their teachers qualified by BEd or teacher's certificate, but the difference from the other types of maintained school was more in the proportion qualified by concurrent BA/BSc than other degrees. The staffing of the grammar and secondary modern schools, to some extent, reflects their history since the degree plus PGCE was formerly the route into grammar school teaching and the teacher's certificate that into the secondary moderns. It also reflects the age profile of the profession, with approaching half aged 45 or more.

**Chart 2: Teaching Qualifications in Maintained Schools**

Qualification	Comprehensive		Secondary Modern		Grammar	
	N	%	N	%	N	%
Degree+PGCE	658	59.2	32	54.2	44	57.9
Degree Only	14	1.3	0	0.0	3	3.9
Degree+QTS	72	6.5	1	1.7	11	14.5
BEd	177	15.9	13	15.7	6	7.9
Teacher's certificate	181	16.3	12	20.3	8	10.5
Other	10	0.9	1	5.3	4	5.3
Total	1,112	100.0	59	100.0	76	100.0

16. When independent schools were divided into selective/non-selective on the basis of the DfES's classification, Chart 3 shows there was some tendency for the selective schools to recruit more teachers with traditional university degrees and the non-selective schools to make more use of the concurrent route and teacher's certificate. Nevertheless, the non-selective schools tended to recruit proportionally more graduates (including those without teacher training) than schools in the maintained sector, even the grammar schools.
17. Independent schools were also divided into boarding and non-boarding, but no differences were found in the pattern of qualifications. Similarly, there were few differences between boys', girls' and coeducational schools other than that teachers in boys' schools were more likely to be traditional graduates. Over 80



per cent had entered on a degree, with or without a PGCE, compared with 71.9 per cent in girls' schools and 74.2 per cent in coeducational schools.

**Chart 3: Teaching Qualifications in Independent Schools**

Qualification	Selective <sup>1</sup>		Not Selective	
	N	%	N	%
Degree+PGCE	357	63.5	39	55.7
Degree Only	68	12.1	7	10.0
Degree+QTS	36	6.4	6	8.6
BEd	55	9.8	9	12.9
Teacher's certificate	42	7.5	7	10.0
Other	4	0.7	2	2.9
Total	562	100.0	70	100.0

1. Self-description provided by the school to the DfES.

### Degree Classification

18. The degree classes of graduate teachers (degree plus PGCE and traditional degree only) are shown in Chart 4. Proportionally over twice as many of the independent school teachers had a first-class honours degree and more also held 2.1s. Approaching two-thirds (61.9 per cent) of the independent school teachers had good degrees compared with under half (45 per cent) in the maintained sector. The distribution of degree classes for maintained schools corresponds closely with DfES's national data (which do not divide the second-class) reinforcing confidence that our sample is representative.

**Chart 4: Degree<sup>1</sup> Classification**

Class	Maintained		Independent	
	N	%	N	%
First	28	4.2	42	9.8
2.1 <sup>2</sup>	272	41.0	223	52.1
2.2	308	46.5	119	27.8
Third/Pass/Other <sup>3</sup>	55	8.3	44	10.3
Total	663 <sup>4</sup>	100.0	428 <sup>5</sup>	100.0

1. Does not include education degrees – BA/BSc+QTS or BEd.

2. Includes undivided seconds from Oxford.

3. Includes aegrotat.

4. 88 did not give degree class.

5. 43 did not give degree class.

19. When the maintained schools are separated into the three broad groupings of comprehensive, secondary modern and grammar, as in Chart 5, there is an echo of the independent/maintained differences. The grammar schools have the best-qualified teachers and secondary moderns – by some distance – the least. The qualifications of the grammar school teachers approach, but do not match, those in independent schools. They were most like those of the non-selective

independent schools, where a similar proportion had obtained good degrees but with more firsts.

**Chart 5: Degree Class by Maintained School**

Class	Comprehensive		Secondary Modern		Grammar	
	N	%	N	%	N	%
First	25	4.2	0	0.0	3	6.7
2.1	244	41.3	6	22.2	22	48.9
2.2	270	45.7	20	74.1	18	40.0
Third/Pass/Other	52	8.8	1	3.7	2	4.4
Total	591	100.0	27	100.0	45	100.0

### Awarding Institution

20. The differential distribution of teachers is also brought out when we consider where the degrees were obtained. In Charts 6 and 7 the universities are grouped partly by their standing and partly by their history. Oxbridge is self-explanatory. The next group includes the other eleven institutions which the Sutton Trust identified as leading universities from average rankings published in *The Times*, *Daily Telegraph*, *Sunday Times* and *Financial Times* (Sutton Trust, *Entry to Leading Universities*). It comprises three London colleges, University, Imperial, and LSE, and eight universities, Durham, York, Nottingham, Birmingham Warwick, Bristol, Edinburgh and St Andrews. ‘Civics’ includes the other pre-1960 universities. The Robbins group is those established on green-field sites, like Lancaster and Kent, which are not included in the Sutton Trust group.
21. The ex-CATs group includes those colleges of advanced technology which were made up to universities post-Robbins and have remained true to those roots, like Bradford and Salford. Like the next group, the former polytechnics, they had their origins in the technical colleges and had emerged at the apex of various reorganisations of that sector. About 12 per cent of degrees are awarded outside the universities in colleges of higher and further education. The group of ‘other’ universities includes the Open University, the independent University of Buckingham and Cranfield University, formerly the College of Aeronautics.
22. The major difference in university background is that, as a proportion of the subject graduates, teachers in independent schools were six times more likely to have taken their degrees at Oxford or Cambridge. Chart 6 shows 17.6 per cent were from Oxbridge against 3.1 per cent in maintained schools. Teachers in independent schools were also more likely to come from the other leading universities – 22.4 per cent against 14.8 per cent. Altogether 40 per cent of the subject graduates in independent schools came from the leading 13 universities - more than double the proportion in maintained schools.
23. If we consider the proportion of all the teachers, not just those with subject degrees, the differences between the sectors are even greater. Over seven times

as many teachers in independent schools had taken an Oxbridge degree – 13 per cent against 1.8 per cent. Nearly three times as many came from the leading universities - 29.4 per cent compared with 10.5 per cent. There was also sharp variation with type of maintained school. Nearly a fifth of the teachers in grammar schools (18.4 per cent) came from the leading universities, but none had in the remaining secondary moderns.

**Chart 6: Higher Education of Graduate Teachers**

University/College	Maintained		Independent	
	N	%	N	%
Oxbridge	23	3.1	82	17.6
Other Leading Unis <sup>1</sup>	108	14.8	104	22.4
Civics	299	40.8	151	32.5
Robbins	57	7.8	32	6.9
Ex-CATS	34	4.6	16	3.4
Former Polytechnic	139	19.0	29	6.2
HE or FE College	34	4.6	15	3.2
Other <sup>2</sup>	14	1.9	19	4.1
Overseas	24	3.3	17	3.7
Total	732 <sup>3</sup>	100.0	465 <sup>4</sup>	100.0

1. Three London colleges, LSE, Imperial and University, and eight universities, Durham, York, Nottingham, Birmingham, Warwick, Bristol, Edinburgh and St Andrews.

2. Open University, Buckingham, Cranfield.

3. 19 did not specify university.

4. 6 did not specify university.

24. Chart 7 displays the higher education background of teachers with subject degrees in the maintained sector. It shows that 10.6 per cent had graduated from Oxford or Cambridge, nearly four times as many as in comprehensive schools.

**Chart 7: Higher Education of Graduate Teachers in Maintained Schools**

University/College	Comprehensive		Secondary Modern		Grammar	
	N	%	N	%	N	%
Oxbridge	18	2.8	0	0.0	5	10.6
Other Leading Unis	99	15.1	0	0.0	9	19.1
Civics	269	41.1	13	44.8	17	36.2
Robbins	51	7.8	2	6.9	3	6.4
Ex-CATS	32	4.9	1	3.4	1	2.1
Former Polytechnic	121	18.5	12	41.4	5	10.6
HE or FE College	32	4.9	0	0.0	2	4.3
Other	12	1.8	1	3.4	1	2.1
Overseas	20	3.1	0	0.0	4	8.5
Total	654	100.0	29	100.0	47	100.0

25. Nearly 30 per cent of those with subject degrees had taken them at the leading universities (including Oxford and Cambridge) compared with 17.9 per cent in comprehensive schools and none in secondary moderns.
26. Over half the Oxbridge graduates in teaching are in independent schools. In our sample of 1,879 teachers, 105 had taken their first degree at the two ancient universities. The great majority, 82 (78.0 per cent), were in independent schools against 23 (22 per cent) in maintained schools. When the proportions are adjusted to take account of the different sampling fractions in the two sectors, it emerges that independent schools, which employ 13 per cent of teachers, take 54 per cent of the Oxbridge graduates.
27. Moreover, the remaining Oxbridge graduates in teaching were not uniformly distributed across maintained schools. We have already seen there were none in the secondary modern schools. But our sample also shows that five of the 23 were in grammar schools. Taking into account the different sampling fractions it thus appears that nearly 20 per cent of Oxbridge graduates teaching in the maintained sector are to be found in the surviving 161 grammar schools.
28. Putting the analyses for the independent and maintained sectors together suggests that out of every 100 Oxbridge graduates in teaching 54 are to be found in independent schools, 9 in grammar schools, 37 in comprehensive schools and none in secondary moderns. In contrast, of every 100 teachers, 13 work in independent schools, 4 in grammar schools, 79 in comprehensives and 4 in secondary moderns.

### Highest Qualification

29. The first section reported on the teaching qualifications of the respondents. In Chart 8 we compare the highest qualification attained by the teachers in maintained and independent schools.

**Chart 8: Highest Qualification**

Qualification	Maintained		Independent	
	N	%	N	%
PhD	16	1.3	43	6.8
MA/MSc/MPhil	145	11.7	101	16.0
MEd	34	2.7	9	1.4
BA/BSc	677	54.4	366	57.9
BA/BSc+QTS	67	5.4	29	4.6
BEd	170	13.7	46	7.3
Teacher's certificate	124	10.0	33	5.2
Other <sup>1</sup>	14	0.9	5	0.8
Total	1,247	100.0	632	100.0

1. Includes overseas degrees, specialised diplomas and MBAs.

30. It is evident that a number of the teachers have continued to study and achieved awards beyond the initial qualification with which they entered teaching. Thus although they are the same people as in Chart 1 we can see the pattern of qualifications is rather different. Over a third (92 out of 249) of those entering teaching on a certificate, for example, had gone on to get a degree.
31. Chart 8 shows that teachers in independent schools were five times more likely than those in maintained schools to have attained a PhD. About a quarter, including the PhDs, had a higher degree compared with 16 per cent in maintained schools. About double the number of teachers in maintained schools held a teacher's certificate or BEd as their highest qualification – a quarter against 12.5 per cent.

### Relationship between Qualification and Subject Taught

32. Chart 9 shows the proportion of teachers with a degree (other than in education) in the subject(s) they are teaching.

**Chart 9: Degree in Subject(s) Taught**

Subject(s) Taught	Maintained				Independent	
	Teachers	Degree in Subject <sup>1</sup>		Teachers	Degree in Subject <sup>1</sup>	
		N	%		N	%
Maths	183	69	37.7	93	59	63.4
IT	112	8	7.1	36	6	16.7
Chemistry	22	15	68.2	40	30	75.0
Physics	25	8	32.0	34	27	79.4
Biology	26	22	84.6	43	39	90.7
Science	164	137	83.5	24	21	87.5
Languages	137	95	69.3	73	55	75.3
English	164	97	59.1	102	69	67.6
History	84	55	65.5	47	38	80.9
Geography	98	62	63.3	46	29	63.0
RE	86	23	26.7	25	8	32.0
D&T	84	32	38.1	18	12	66.7
Art	45	18	40.0	16	12	75.0
Music	30	19	63.3	14	11	78.6
PE	133	26	19.5	124	16	12.9
Total	1,393 <sup>2</sup>	686 <sup>3</sup>	49.2	735 <sup>2</sup>	432 <sup>4</sup>	58.8

1. Degree in subject or closely related subjects; does not include education degrees.

2. Do not correspond with teacher totals in Chart 1 because some teachers reported teaching more than one subject.

3. Does not include 67 graduates teaching social sciences, commercial and business studies, SEN and learning support, careers etc.

4. Does not include 39 graduates teaching other subjects.

33. In maths, nearly two-thirds of the teachers in independent schools had a first degree in the subject compared with only just over a third in maintained schools. In physics, the difference was even greater – 79.4 per cent to 32.0 per cent. There were big differences also in design and technology, history, art, and

music. In addition, independent schools held an appreciable advantage (at least five percentage points) in chemistry, biology, languages, English, religious education, and information and communications technology. In fact, the only subject in which there was a reversal was physical education, where subject tutors in independent schools often also take some games periods.

34. Overall, nearly sixty per cent of the teachers in independent schools were graduates in the subject they were teaching compared with just under half those in maintained schools. (This is less than the proportions with degrees, shown in Chart 1, because teachers may take more than one subject and some teach subjects not included in the listing.) Chart 9 records only those with a first degree in the subject taught. It does not measure mismatch as it is conventionally defined, when those holding an appropriate PGCE or education degree would also be included among those considered to be qualified in the subject. But it does bring out clearly that in most subjects, particularly in the shortage subjects of maths, the physical sciences, and design and technology, independent schools are able to appoint more graduates.

#### **4. Conclusion**

35. Previous research has shown that independent schools enjoy a relative advantage in teacher recruitment. Smithers and Robinson (2000) found that in 2000 whereas 28.5 per cent of teachers appointed to independent schools had come from maintained schools only ten per cent moved in the opposite direction. Teachers leaving for the independent sector cited as reasons: the learning environment; the standard of behaviour; smaller class sizes and more preparation time; better facilities; and comparative freedom from government interference (Smithers and Robinson, 2001). By being a small part of the overall system independent schools are able to pitch salaries and other benefits to attract the people they need.
36. The present paper details the consequences in terms of the distribution of teachers. Teachers in independent schools are generally better qualified. More have degrees and higher degrees, more have good degrees and more obtain their degrees at Oxford and Cambridge and other leading universities. In independent schools also, more of the teachers hold a degree in the subjects they are teaching. This was particularly the case in the shortage subjects of maths, physics, and design and technology, further emphasising that when there are not enough teachers to go round independent schools are able to recruit more than their fair share.
37. Among the maintained schools, the staffing of grammar schools is closest to that of independent schools, but there is still a considerable difference. Grammar schools were nevertheless much better provided for than the general run of comprehensives and particularly the surviving secondary moderns.
38. In so far as qualifications are a proxy for the quality of teaching, they indicate considerable variation with type of school. Although there is universal education to the age of 16, educational opportunities are far from equal.

## References

- DES (1972). *Education: A Framework for Expansion*. London: HMSO.
- DFES (2002a). *Teachers in Service and Teacher Vacancies January 2002*. National Statistics First Release SFR 18/2002.
- DFES (2002b). *Evidence from the Department of Education and Skills to the School Teachers' Review Body on the Pay and Condition of Employment of School Teachers*. September 2002.
- James Report (1972). *Teacher Education and Training*. London: HMSO.
- Ofsted (2002). *Schools' Use of Temporary Teachers*. London: Ofsted.
- Robbins Report (1963). *Committee on Higher Education Report*. Cmnd 2154. London: HMSO.
- Smithers, A. and Robinson P. (2000). *Attracting Teachers*. Liverpool: Carmichael Press.
- Smithers, A. and Robinson, P. (2001). *Teachers Leaving*. London: NUT.
- Sutton Trust (undated), *Entry to Leading Universities*. London: Sutton Trust.

## Appendix

This appendix presents comparisons between the school and staff samples and national statistics where they are available. As we saw in the description of the methods, there are two elements which could make the samples unrepresentative: they are taken from those schools which publish staff lists and the response rate was somewhat below 50 per cent. Nevertheless, the tables below demonstrate they correspond closely with the population patterns. The comparisons are presented in the order: maintained schools; independent schools; maintained staff; and independent staff. More statistics are available for national comparisons in the maintained sector than in the independent sector.

### SCHOOLS

#### Maintained

**Chart A1: By Region**

Region	Sample		National <sup>1</sup>	
	N	%	N	%
North East	28	6.2	160	5.1
North West	65	14.3	480	15.2
Yorks & Humber	54	11.9	319	10.1
East Midlands	44	9.7	294	9.3
West Midlands	43	9.5	376	11.9
East of England	46	10.1	340	10.8
Inner London	10	2.2	135	4.3
Outer London	24	5.3	274	8.7
South East	79	17.4	478	15.1
South West	62	13.6	301	9.5
<b>Total</b>	<b>455</b>	<b>100.0</b>	<b>3,157</b>	<b>100.0</b>

1. *Statistics of Education. Schools in England*, 2002, p. 18.

**Chart A2: By Type**

Type	Sample		National <sup>1</sup>	
	N	%	N	%
Comprehensive	408	87.7	2,836	90.7
Grammar	29	6.2	161	5.1
Secondary Modern	28	6.0	130	4.2
<b>Total</b>	<b>465</b>	<b>100.0</b>	<b>3,127<sup>2</sup></b>	<b>100.0</b>

1. *Statistics of Education. Schools in England*, 2002, pp 28-29.

2. Does not include technical and other.



**Chart A3: By Status**

Status	Sample		National <sup>1</sup>	
	N	%	N	%
Community	278	60.8	2,278	65.9
Voluntary Aided	89	19.5	549	15.9
Voluntary Controlled	13	2.8	129	3.7
Foundation	77	16.8	501	14.5
Total	457	100.0	3,457	100.0

1. *Statistics of Education. Schools in England, 2002*, p.44, also includes middle schools.

**Chart A4: By Specialism**

Specialism	Sample		National <sup>1</sup>	
	N	%	N	%
Technology	50	41.7	409	49.0
Sports	23	19.2	141	16.9
Arts	20	16.7	143	17.1
Languages	27	22.5	141	16.9
Total	120 <sup>2</sup>	100.0	834	100.0

1. [www.dfes.gov.uk](http://www.dfes.gov.uk) specialist schools site (25 April 2002).

2. Not specialist 342; 3 no information

**Chart A5: By Sex**

Sex	Sample		National <sup>1</sup>	
	N	%	N	%
Coeducational	387	83.2	3,044	88.1
Girls'	36	7.8	228	6.6
Boys'	42	9.0	185	5.4
Total	465	100.0	3,457	100.0

1. *Statistics of Education. Schools in England, 2002*, p.31, includes middle schools.

**Chart A6: By Age Range**

Age Range	Sample		National <sup>1</sup>	
	N	%	N	%
Up to 16 years	198	42.6	1,410	44.7
Up to 18 years	267	57.4	1,747	55.3
Total	465	100.0	3,157	100.0

1. *Statistics of Education. Schools in England, 2002*, p.43.

**Chart A7: By Religious Affiliation**

Affiliation	Sample		National <sup>1</sup>	
	N	%	N	%
Church of England	36	7.8	192	5.6
Roman Catholic	55	11.9	357	10.3
Other <sup>2</sup>	4	0.9	37	1.1
No Affiliation	369	79.5	2,871	83.0
Total	464	100.0	3,457	100.0

1. *Statistics of Education. Schools in England*, 2002, p. 45; includes middle schools.

2. Includes other Christian faith, Jewish, Muslim, Sikh.

**Chart A8: By Size**

Size	Sample		National <sup>1</sup>	
	N	%	N	%
Up to 400	10	2.2	85	2.7
401 to 700	86	18.5	550	17.4
701 to 1000	186	40.0	1,062	33.6
1001 to 1300	123	26.5	866	27.4
1301 to 1600	43	9.2	444	14.1
1601 or more	17	3.7	150	4.8
Total	465	100.0	3,157	100.0

1. *Statistics of Education. Schools in England*, 2002, p. 43.

## Independent

**Chart A9: By Region**

Region	Sample		National <sup>1</sup>	
	N	%	N	%
North East	8	3.1	20	3.4
North West	21	8.0	53	9.1
Yorks & Humber	18	6.9	37	6.4
East Midlands	10	3.8	27	4.6
West Midlands	24	9.2	51	8.8
East of England	33	12.6	75	12.9
London	35	13.4	88	15.1
South East	75	28.7	156	26.9
South West	37	14.2	74	12.7
Total	261	100.0	581	100.0

1. *The ISC Guide to Accredited Independent Schools*, Independent Schools Council, 2002.

**Chart A10: By Selection**

Age Range	Sample		National <sup>1</sup>	
	N	%	N	%
Selective	228	85.4	460	79.2
Non Selective	39	14.6	121	20.8
Total	267	100.0	581	100.0

1. [www.dfes.gov.uk](http://www.dfes.gov.uk) (Nov 2002).

**Chart A11: By Sex**

Sex	Sample		National <sup>1</sup>	
	N	%	N	%
Coeducational	111	42.2	278	47.8
Girls'	111	42.2	217	37.3
Boys'	41	15.6	86	14.8
Total	263	100.0	581	100.0

1. *The ISC Guide to Accredited Independent Schools*, Independent Schools Council, 2002.

**Chart A12: By Age Range**

Age Range	Sample		National <sup>1</sup>	
	N	%	N	%
Up to 16 years	12	4.5	70	12.0
Up to 18 years	254	95.5	511	88.0
Total	266	100.0	581	100.0

1. *The ISC Guide to Accredited Independent Schools*, Independent Schools Council, 2002.

## TEACHERS

### Maintained

**Chart A13: By Age**

Age	Sample		National <sup>1</sup>	
	N	%	N	%
20-29	217	17.2	31,200	17.5
30-39	308	24.5	39,700	22.3
40-49	354	28.2	63,900	35.9
50-59	363	28.9	41,400	23.3
60 and over	14	1.1	1,600	0.9
Total	1,256	100.0	177,800	100.0

1. *Statistics of Education. Teachers in England 2001 edition*, p. 56.

**Chart A14: By Sex**

Sex	Sample		National <sup>1</sup>	
	N	%	N	%
Male	549	44.6	82,200	46.2
Female	683	55.4	95,700	53.8
Total	1,232	100.0	177,900	100.0

1. *Statistics of Education. Teachers in England 2001 edition*, p. 56.

## **Independent**

**Chart A15: By Sex**

Sex	Sample		National <sup>1</sup>	
	N	%	N	%
Male	277	44.3	15,577	48.1
Female	348	55.7	16,795	51.9
Total	625	100.0	32,372	100.0

1. *Annual Census, Statistical Survey of Independent Schools*, Independent Schools Council.