

ATTRACTING TEACHERS
Past Patterns, Present Policies, Future Prospects

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FOREWORD

In *Attracting Teachers* we take the long view. We recall something that is often overlooked in these times of continual teacher shortage: in the Seventies there was a surplus of teachers and there was no difficulty in attracting some 80,000 applicants to about 50,000 training places. Teacher training offered the only hope of higher education to many students and the qualification obtainable only really led to teaching. When it was realised that the birth rate projections were wrong and the demand for teachers had been grossly over-estimated, the training capacity was cut sharply. This had two effects. First, it sent out signals about the need for teachers. But, secondly, it freed up a lot of institutional capacity into which higher education could expand. People who in the past might have worked towards the teacher's certificate were now able to take a degree of their choice.

Teaching instead of having a dedicated access channel found itself competing on an open market for graduates. This occurred at a time when the development of comprehensive secondary education led to the expectation that previous grammar school quality in staffing could be scaled up to the whole system. Our argument is that the pay and conditions of the teaching profession have not adjusted to take account of these changing circumstances and that is why in the recent past, except for brief remissions in recessions, teacher supply has lurched from crisis to crisis.

We develop that argument by first attempting to get the numerical picture clear. We review the factors that have to be taken into account in projecting the demand for teachers. Settling the size of the training capacity is a fine balancing act between shortage and surplus. Early attempts were caught out by a failure to notice for eight years that the post-war baby boom had come to an end. But since more careful calculations were instituted in 1983, it has been striking that, in all but a few years of limited opportunities elsewhere, the secondary targets have not been met.

Recruitment difficulties show up in the characteristics of the trainees. They tend to be less well qualified than those going into other professions. But again, taking the long view, there are more graduates in schools than ever before. Many of the trainees come to teaching having tried something else, but the evidence suggests that schools are less inclined to employ older entrants. They also tend to be less enthusiastic about returners than the young newly-trained. Teaching is becoming increasingly a female profession. Contrary to impression, however, the ethnic minorities are not under-represented with respect to the population - it is just that they are over-represented on degree courses.

The Government's main public response to suggestions that the shortfalls to teacher training pose a threat to school standards has been to point to vacancies. In the way that these have been recorded they emerge as generally very low - only about one per cent of the teaching force. If not enough teachers are being trained and yet the schools are fully staffed something does not quite add up. A likely explanation is that in order to avoid sending children home schools are making do as best they can. We explore the various means by which schools contrive to have someone in front of their classes.

If the present Government has sought to downplay talk of crisis, it has recognised that there are shortages in some subjects at the secondary level in some parts of the country. Its policies consist essentially of incentives to train as teachers and the 'modernisation' of the profession through performance-related pay.

We examine those policies by reference to what has been tried previously in this country, the experience of other countries, and any lessons that can be learned from the independent sector. We suggest that incentives to train will only work if what is being trained for is sufficiently attractive. Previous attempts at incentives have tended to give only a temporary boost before their effects faded away.

The Government's view is that its restructuring addresses the fundamental issue of making teaching more attractive. But we would question that. The experience of America, where school districts pushed by taxpayers have been making determined attempts to introduce merit pay during the last two decades, is that it is very difficult to come up with fair and accurate methods for deciding who should be rewarded and who should not. Politicians feel that it ought to be possible and press on in the expectation that it is. The sheer difficulty then leads to the schemes becoming transmuted to rewarding something else: more work, different levels of work, participating in restructuring; or they loosen up to, in effect, reward everyone.

The British Government has been no more successful than others in establishing clear criteria for effective teaching. The sheer variety and complexity of the standards, objectives, competencies and activities that are proposed is not a hopeful sign. Performance-related pay could therefore become a time-consuming digression from the real business of giving the profession a reasonable chance of recruiting enough people of the calibre it needs.

We suggest that there are lessons to be learned from the independent sector both in terms of making teaching more enjoyable and pitching salaries appropriately. We look at teaching from the point of view of occupational values. Studies over a long period suggest that people drawn to teaching are motivated mainly by two values 'helping children' and 'using special abilities'. What the independent sector manages to do more successfully than its maintained counterpart is to enable people to express these values through teaching – through smaller classes, more preparation and marking time, better facilities and less bureaucracy.

But salary is also important. However much they enjoy their work, teachers have to be able to afford to do it. The teaching profession is up against all the other opportunities open to graduates. It needs more than ten per cent of the entire UK university output each year and it wants some of the best. You would expect it therefore to command above average salaries. But unlike many other graduate occupations, maintained education is not income generating but a charge on the taxpayer. The strong downward pressure exerted by governments seeking to keep taxes within bounds means that the salaries currently offered are not competitive.

The recruitment problem cannot be solved by throwing money at it, but some clear principles for fairly rewarding teachers have to be derived. Those principles also need to take into account the interests of the taxpayer. A Royal Commission on the Civil Service some fifty years ago gave detailed consideration as to how an appropriate balance might be struck. It suggested that somewhere between the median and upper quartile of a ranking of graduate salaries would be fair to all parties. We commend this principle to the Government and the School Teachers' Review Body.

**Alan Smithers
Pamela Robinson
December 2000**

CONTENTS

<i>Foreword</i>	i
1. Introduction	1
2. Projecting Teacher Demand	3
3. Teacher Training	8
4. The Trainees	18
5. Recruitment to Schools	24
6. Staff Profiles	31
7. Retirements and Resignations	35
8. Vacancies	38
9. Modernising the Profession	43
10. Lessons from Abroad	49
11. Lessons from the Independent Sector	55
12. Attracting Teachers	58
References	63

1. INTRODUCTION

- 1.1 England and Wales have for many years been struggling to find enough teachers. They are not alone. The United States, Australia and New Zealand all have been having their difficulties. UNESCO's World Education Report 1998 concluded on the basis of a survey by the International Bureau of Education that "only in a handful of wealthy industrial countries with relatively stable teaching forces and a few others was it claimed that the general standing and remuneration of teachers was not a cause for anxiety." The report cites as examples of countries that were relatively sanguine Austria, Finland, Germany and Switzerland. But the list also included Canada and that, too, is now experiencing teacher shortages.
- 1.2 Why should it be apparently so difficult to recruit teachers? On the face of it, passing on to young people the accumulated wisdom of the generations and preparing them for what lies ahead would seem a supremely satisfying way of spending one's life. You would think people would be fighting for the privilege. But they are not, and it seems to be ever more difficult to get enough of the right calibre to take it on.
- 1.3 Our report attempts to get to the bottom of teacher scarcity in England and Wales. This geographical territory was chosen because, until the Welsh National Assembly was established, the remit of DfEE and its predecessors was the two countries combined, and it published statistics on both together. These have included the annual *Statistics of Education: Teachers in Service England and Wales* and, since 1991, the *Statistical Annex* to the Department's evidence to the School Teachers' Review Body. Unfortunately, like many official statistical compilations, the figures are not as readable as they might be, and in the first part of this report we attempt to breathe some life into them by setting out the dynamics of teacher demand and supply. We do so both for the most recent statistics available which in many cases is the year 2000 and by looking at the trends, where possible going back to 1950.
- 1.4 The numerical picture we have uncovered is set out in the next seven chapters. We begin by looking at the parameters which establish the demand for teachers – pupil numbers, government policies, the numbers of teachers leaving and how many teachers can be afforded. We recognise that if too many teachers are trained this will lead to teacher unemployment and if too few it will be difficult to staff the schools. Since 1983 the DfEE and its predecessors have been evolving a method of arriving at targets which strike the right balance.
- 1.5 In Chapter 3, we demonstrate that, remarkably, apart from a very few years in the early Nineties, the targets for secondary trainees have never been met. Moreover, as the School Teachers' Review Body (1999c) has calculated "around 40 per cent of those who enter training do not become teachers". This raises interesting questions, which we take up in Chapter 4, about who actually are the teacher trainees.
- 1.6 We then turn to recruitment by schools. The indications of a teacher crisis are mainly at the training stage. If too few new teachers are being trained - and this is a situation that has obtained over many years - who are the schools appointing?

Chapter 5 examines the relative importance of the main sources of teacher supply – new entrants, returners, overseas recruits and supply cover. It looks at the movements to and from schools and, in particular, the wastage of trained staff. As well as maintained schools, we also look at independent schools. What this means in terms of staffing we consider in Chapter 6.

- 1.7 In its submissions to the Review Body the DfEE generally takes comfort from the fact that its annual January surveys reveal so few vacancies - generally of the order of one per cent. This is what could be expected from the normal processes of teacher turnover. Vacancies mainly arise through retirements and resignations and, in Chapter 7, we consider the trends.
- 1.8 If according to official figures not enough people are being trained and yet the schools are still able to make appointments, what is going on? In Chapter 8, we explore the issue of vacancies and describe some of the coping strategies that schools have been adopting to ensure that there is at least someone in the classroom.
- 1.9 In spite of the play made with the vacancy figures, the Blair Government does accept that there is a problem with teacher supply. Since the election it has introduced a raft of measures designed to make teaching more attractive. In fact, it has attempted so much that it is not always possible to see the wood from the trees. In Chapter 9, we set out as simply as we can the essence of these policies ranging from ‘golden hellos’ and networks of regional advisers to performance-related pay.
- 1.10 Having described the Government’s measures, we then assess them by reference to what has happened in the past, the experience of other countries, and any lessons from the independent sector. In Chapter 10 we look abroad. In particular, we consider the American experience with what it calls ‘merit pay’. We then go on, in Chapter 11, to see how the independent schools are managing to find and keep the staff that they need.
- 1.11 In the final chapter we consider, mainly from the perspective of occupational values, how teaching might be made more attractive. Clearly, many the Government’s aspirations for education depend on ensuring a continuing supply of able and enthusiastic teachers. We suggest that the answer lies in recognising that there are no longer ‘reserved’ routes into teaching, but that the profession has to compete on an open market for graduates against all the other options available to them.

2. PROJECTING TEACHER DEMAND

- 2.1 Projecting demand for teachers is somewhat easier than for most other areas of employment. The main elements which have to be forecast are shown in Chart 2.1. Demand is essentially an amalgam of pupil numbers, government policies, teachers leaving, and affordability. Conveniently, from the point of view of a neat diagram, that demand can be met by four types of supply: newly-trained teachers, those returning from being out of service, teachers recruited overseas and temporary cover. If too many teachers are trained, there is a surplus leading to teacher unemployment, and if too few, this leaves schools struggling to staff their classes.

Chart 2.1: Teacher Provision

<i>Demand</i>	<i>Supply</i>
• Pupil Numbers	• New
• Policies	• Returners
• Exits	• Overseas
• Affordability	• Cover
	<i>Balance</i>
	• Surplus
	• Shortage

- 2.2 Fortunately, given the difficulty of striking balances of this kind, most of the elements are potentially knowable some time in advance.

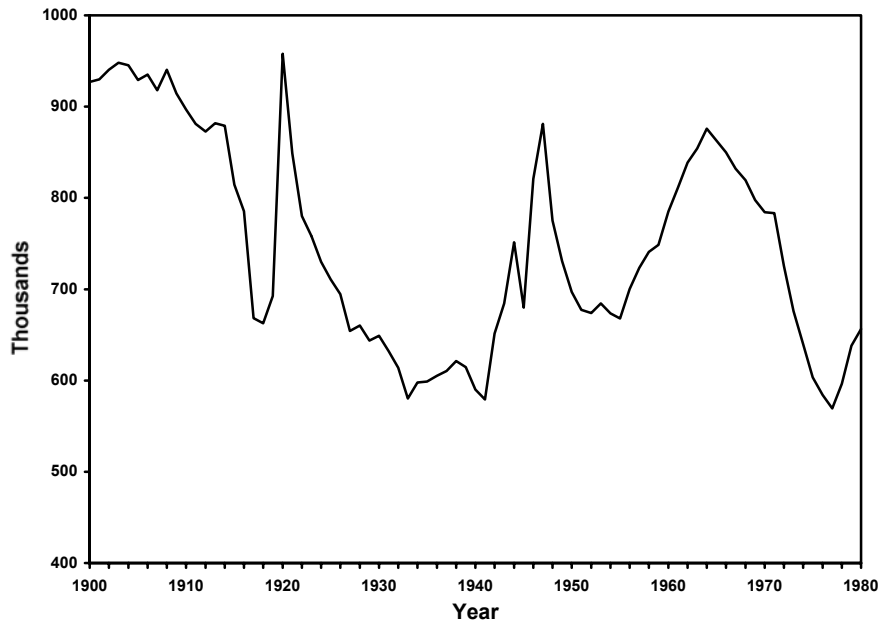
Pupil Numbers

- 2.3 The element which can most readily be forecast is pupil numbers since they will be determined mainly by live births (but also by subsequent deaths and immigration). There will therefore be some five years notice of the primary provision required and eleven years of the secondary. As we can see from Chart 2.2, the numbers of live births have fluctuated by as much as 50 per cent during the twentieth century, with peaks associated with the two world wars and a post-second-world-war baby boom. The failure to spot that the boom was coming to an end led to a gross over-supply of teachers in the Seventies which entailed a rapid restructuring of the training system. The James Report (1972) makes for unfamiliar reading:

To put it bluntly, the supply of new teachers is now increasing so rapidly that it must soon catch up with any likely assessment of future demand, and choices will have to be made very soon between various ways of using or diverting some of the resources at present invested in the education and training of teachers.

This warning was heeded and, as we shall be seeing, the training capacity was drastically cut in the wake of two White Papers – the first disarmingly called *Education: A Framework for Expansion* (1972), followed a decade later by *Teaching Quality* (1983).

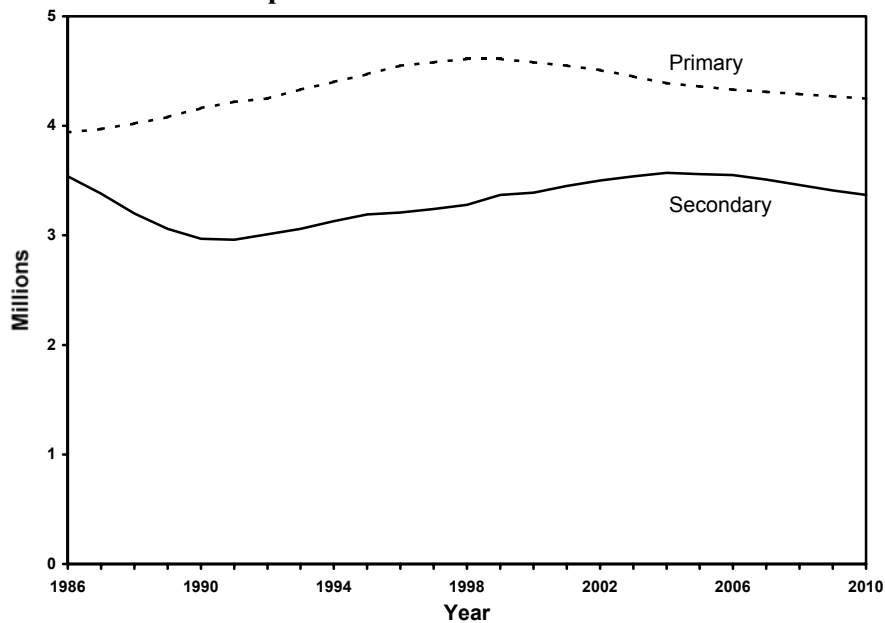
Chart 2.2: Live Births England and Wales 1900-1980



Source: Office of Population Censuses and Surveys, *Birth Statistics, Series FM1 no 13*, London: HMSO.

2.4 In contrast to the sharp annual fluctuations of the past century, Chart 2.3 shows that pupil numbers (smoothed by aggregation over the year groups) are expected to vary relatively little over the next decade. In nursery and primary schools they are projected to fall by about seven per cent. In secondary schools, numbers are expected to rise by about five per cent to 2005, after which to fall back to the 2000 level. This leaves the requirement for teachers to be set mainly by policies, exits and affordability.

Chart 2.3: Pupil Numbers¹ 1986-2010



1. Pupil numbers in FTEs 1986-1999, and projections 2000-2010.

Source: *Statistical Annex to Written Evidence from DfEE to STRB, September 2000*.

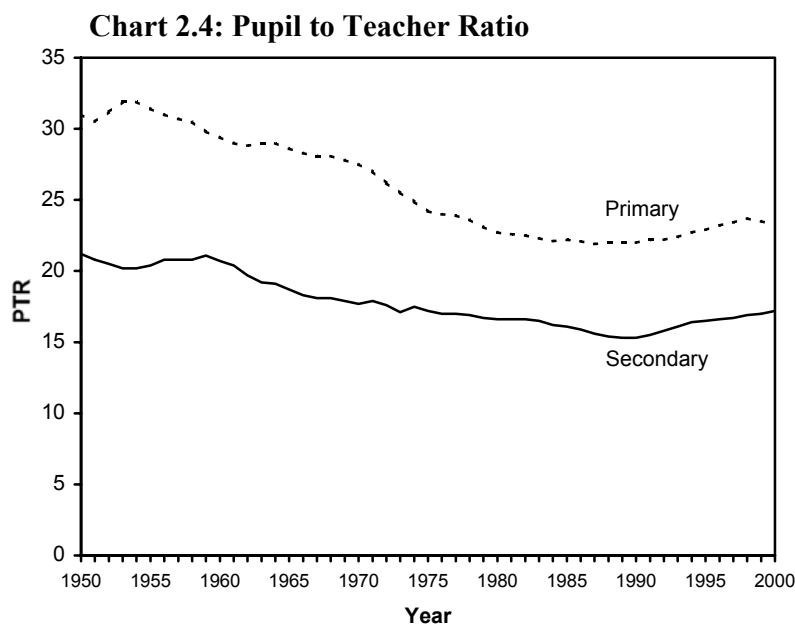
Government Policies

2.5 Most government policies for education impinge to some extent on the requirement for teachers, but amongst those which have had the most direct effects have been:

- the lengthening of the period of compulsory education by the raising of the school leaving age to 16 in 1972-3;
- extending the years of schooling by increasing participation post-16 and more nursery provision;
- the introduction of the national curriculum which made some subjects like design and technology (and Welsh in Wales) compulsory and re-defined the sciences as science.

2.6 More recently policy changes with a direct bearing on teacher requirements have included;

- the reduction of class sizes for 5 to 7-year-olds to 30 or under;
- the reform of A-levels, with the encouragement to take more subjects;
- the creation of a nursery place for all 3-year-olds whose parents want one;
- changing the Teachers' Pension Scheme from 31 August 1997 making it less financially attractive for the over 50s to leave the profession.



Source: *Statistics of Education, Teachers, England and Wales, DfEE Evidence to STRB.*

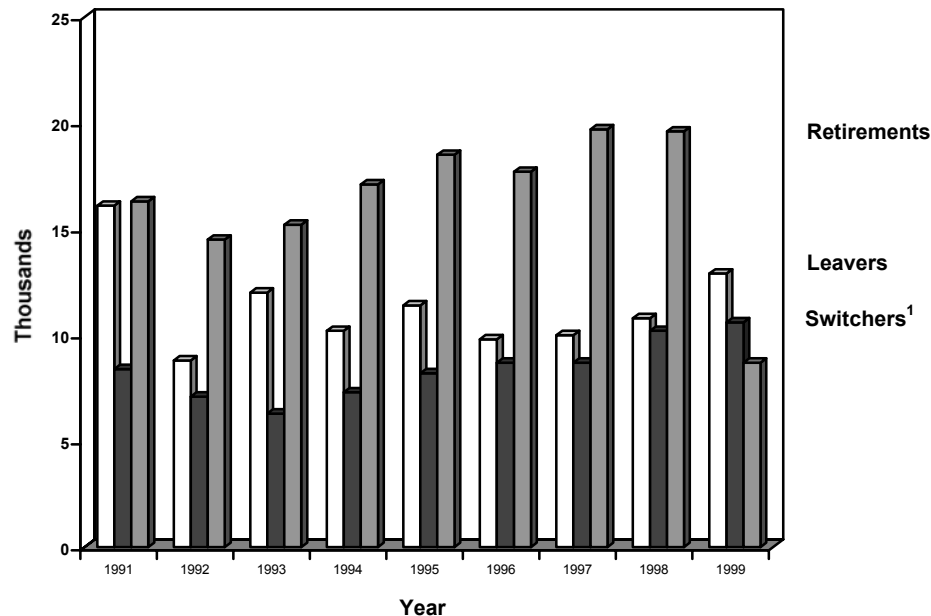
2.7 A number of the policy changes have impacted on the ratio of pupils to teachers. Chart 2.4 shows that from the Fifties onwards the PTR was reduced continuously through to the end of the Eighties, since when it has been allowed to rise. The present Government set the maximum class size for 5 to 7-year-olds at 30, nudging the PTR down once more. Nevertheless, for all that has been achieved in reducing the primary PTR from over 30 in the Fifties to 23.3 now, it has never matched the

secondary PTR which at 17 is considerably more favourable. These staffing ratios reflect the differential funding of the two phases, which to many lacks logic since it can be argued that young children require more individual attention.

Exits

- 2.8 The third important element affecting the requirement for teachers is the number leaving each year. This comprises retirements and resignations and in the past decade it has varied between about 30,000 and 40,000. Retirements include normal-age retirements and those leaving prematurely through ill-health or on the grounds of efficiency or redundancy. Resignations include those leaving and those switching to part-time teaching or another maintained sector, but not moves between maintained schools. Their respective contributions over the past decade are shown in Chart 2.5.

Chart 2.5: Retirements and Resignations



1. Moves to part-time and other parts of the maintained system as, for example, sixth-form colleges. Does not include moves between schools.

Source: *Statistical Annexes to DfEE Evidence to STRB*.

- 2.9 The most striking change concerns retirements. The pension regulations were altered with effect from 1998 boosting early retirements in the years immediately preceding, to be followed by a subsequent sharp fall. This has brought down retirements from 16,000 in 1990, and which rose to 19,600 in 1998, to 8,700 in 1999.
- 2.10 Resignations occur for a variety of reasons. Considering only loss from the system as a whole (that is leaving aside between-school moves), they fall into three main categories: loss to the service; transfers to part-time or occasional teaching; and, thirdly, movements to other maintained sectors like further education. In total, they have fluctuated between 16,000 and 25,000 in the Nineties. An emerging trend is for there to be more transfers to part-time teaching.

2.11 The upshot of the various retirements and resignations is that somewhere between 30,000 and 40,000 teachers leave the maintained nursery, primary and secondary sectors of education (MNPS) each year. Whether or not they are replaced will depend on whether appointable staff are available, whether the system is expanding or contracting, and whether new staff can be afforded.

Affordability

2.12 In the recent past not all posts falling vacant have been replaced, even if *prime facie* there has been a need for them, because there has not always been the money to do so. The funding arrangements for teachers in England and Wales are little short of byzantine. Teachers' salaries are determined centrally by Government on the advice of the School Teachers' Review Body. But how many can be afforded depends on the budgets of individual schools.

2.13 The amount of money allocated to schools comes at the end of a long process:

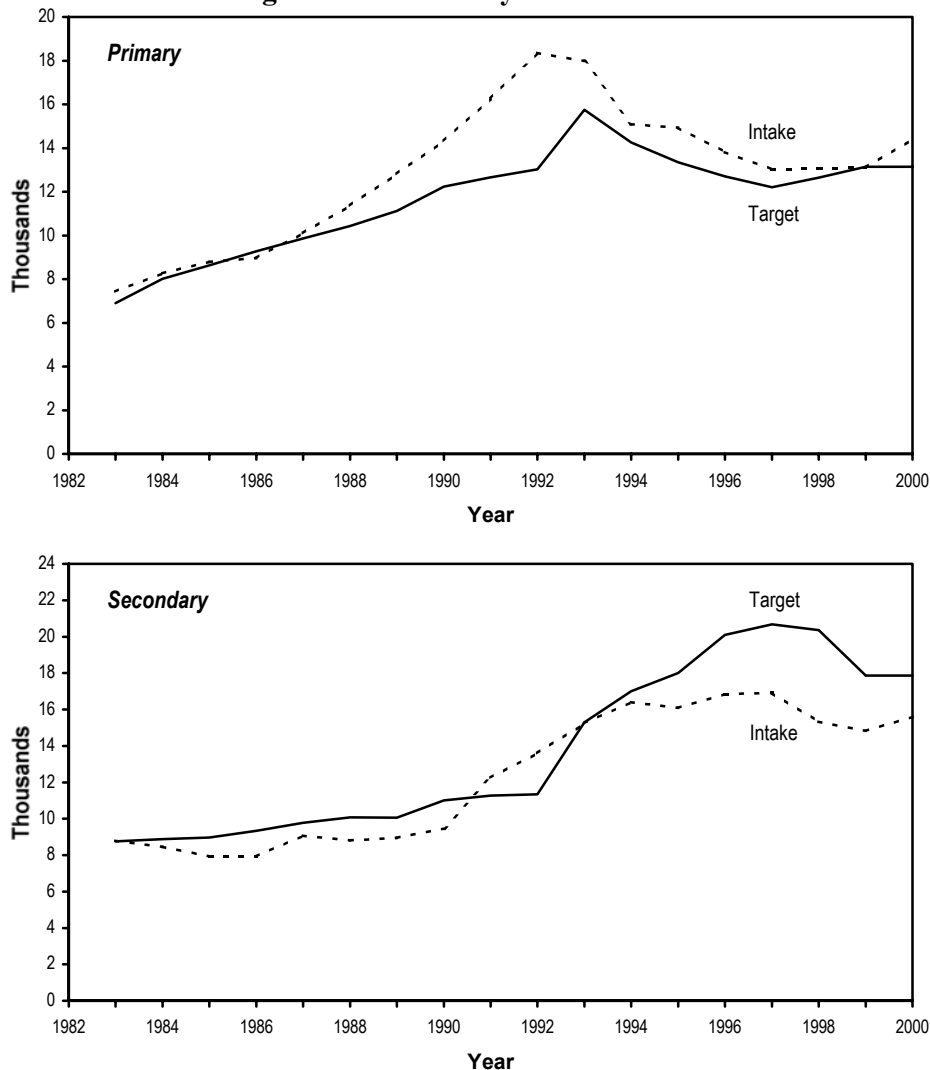
- the Government decides what local authorities need in order to be able to provide a standard level of service across education and other areas of responsibility, including, for example, care in the community and highways;
- the Government distributes money from the Revenue Support Grant and the local authority decides what Council Tax to levy;
- the local education authority decides how much is to go to education bearing in mind the Government's standard spending assessments (a planning figure which varies from authority to authority);
- the local education authority decides how much of the education budget is to be allocated to schools and other areas of education for which it is responsible;
- the funding available is distributed according to a formula which each local authority has agreed with the Government and which depends mainly on pupil numbers, but which can vary widely from authority to authority;
- the Government from time to time makes special grants directly to schools which can be spent on staffing, but which are in the first instance for a limited period.

2.14 Out of all this schools have to decide how many and what kinds of teachers they can afford. Whether those appointments can, in fact, be made will depend on the supply that is available. The appointments advertised by schools are mainly filled by newly qualified teachers, but there are also teachers who rejoin the service after a spell out of full-time service (perhaps as a part-time teacher), those who qualified overseas, and those providing temporary cover. In the next chapter, we consider new supply and in the following one (Chapter 5) staffing in general.

3. TEACHER TRAINING

3.1 The Department for Education and Employment is responsible for ensuring continuity of new supply. Through a model it has developed, taking into account factors such as those discussed in Chapter 2 (DES, 1990; DfEE 1998b), it has set targets for teacher training places since 1983. The places are allocated by the Teacher Training Agency, established in 1994, to the training providers. These are mainly universities and colleges, of which 80 were engaged in teacher training in 1999-2000. But there is also a growing school-based route. Thirty schemes were running in 1998-99, six more opened in 1999-2000, and a further 14 are scheduled for next year. They, however, as yet take only a few trainees. In 1999, there were 719 which was fewer than the Institute of Education alone took and that is not by no means the biggest individual provider – which honour falls to the Manchester Metropolitan University with over 1,200 trainees (TTA, 2000b). Providers are funded on the basis of places filled.

Chart 3.1: Targets and Intakes by Phase



Source: School Teachers' Review Body Reports 1995-2000, Welsh Assembly for data in 2000-2001, DfEE personal communication 11.7.00.

- 3.2 The remarkable thing about the DfEE's training targets is that, apart from a brief period in the early Nineties, those for the secondary phase have never been met. During the Eighties, Chart 3.1 suggests that the secondary target may even have been held down by the difficulty of meeting it. From the first signs that it might be attainable it was increased appreciably. Between 1992 and 1997 it was doubled. However, from 1994 onwards there again have been shortfalls, with recruitment in 1998 a quarter below target. In 1999 it was 17 per cent below in spite of an incentive scheme for science and maths trainees (see page 44 for details) and the target itself having been reduced. Some improvement was discernible in 2000 with the introduction of training salaries and the extension of the revised incentive scheme to languages and technology, but even so there was a shortfall of 2,200 (13 per cent). Chart 3.1 shows that, in contrast, there has been no difficulty in achieving the target for the primary phase in spite of its having being raised more rapidly. In fact, there has tended to be over-recruitment.
- 3.3 The secondary target is, of course, an aggregate of individual subject targets. There is considerable variation in the extent to which they are met. Chart 3.2 shows that, in 1999, the PE target was exceeded and that for history met, but there were severe shortfalls in maths, modern foreign languages and technology (a combined figure for design and technology and information technology). Recruitment to geography, art, music and RE was also ten per cent or more down.

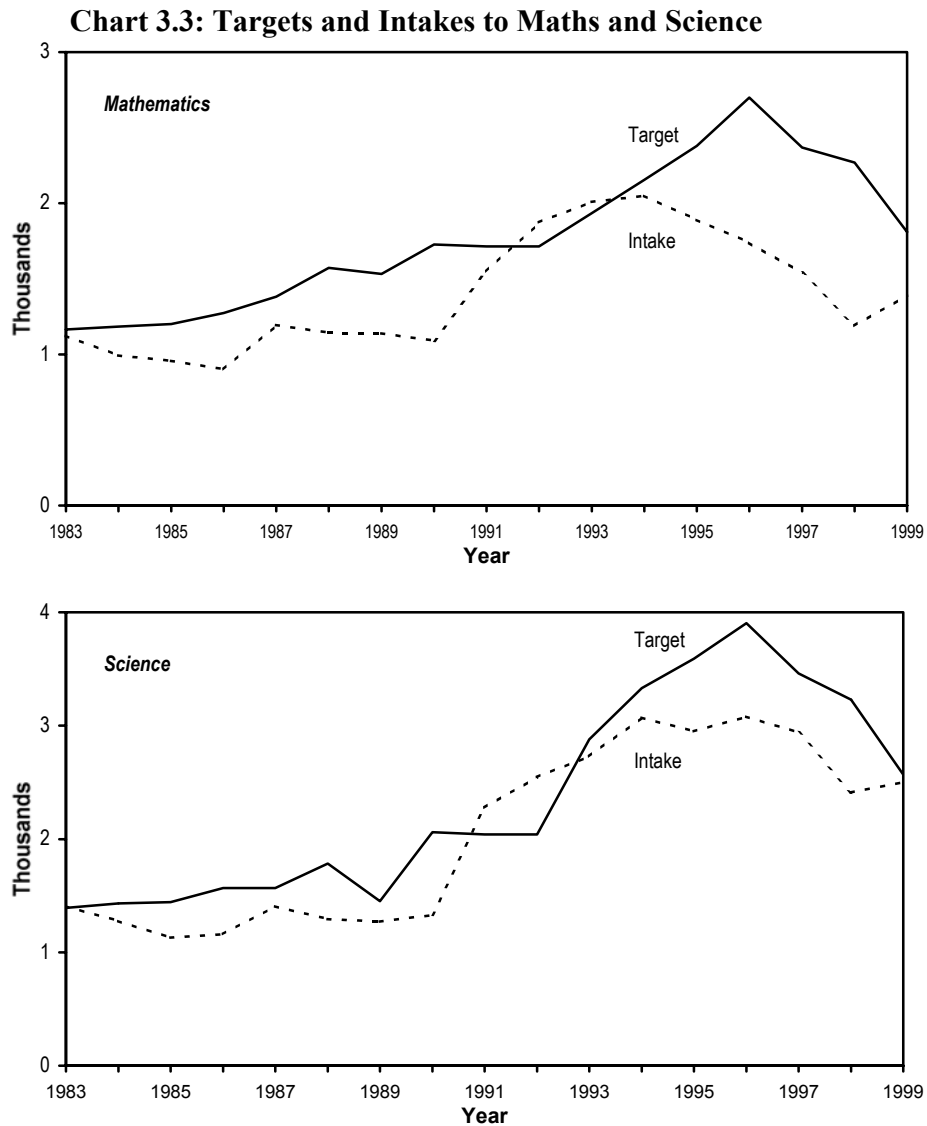
Chart 3.2: Achievement of Targets, 1999

Subject	Target	Intake	Per Cent
English	2,320	2,170	-6.4
Maths	1,810	1,390	-23.2
Science	2,570	2,500	-2.7
IT Technology	3,060	1,820	-40.5
Modern Languages	2,400	1,610	-32.9
Geography	1,100	920	-16.4
History	860	880	+2.3
Art	1,010	850	-15.8
Music	610	550	-9.8
PE	1,120	1,290	+15.2
RE	640	570	-10.9
All	17,870	14,820	-17.1

Source: STRB 2000.

- 3.4 The trends for the individual subjects contribute to the overall pattern. Taking maths and science as examples, we can see from Chart 3.3 that the curves for the shortage subjects have the same general shape, but are more extreme. The mathematics intake in 1998 reached only about half the target in spite of the target itself having been sharply reduced. In science, three-quarters of a reduced target was met. As with the overall target, it was only in the brief period around 1992 that the planned places in the individual subjects were filled.
- 3.5 The situation improved somewhat in 1999. 'Golden hellos' boosted applications in maths and science and led to increases of respectively 200 and 84 in the intakes.

The targets had also been lowered allowing the claim to be made that the science intake fell only three per cent short. However, even with the adjustments, the maths intake was still nearly a quarter below.



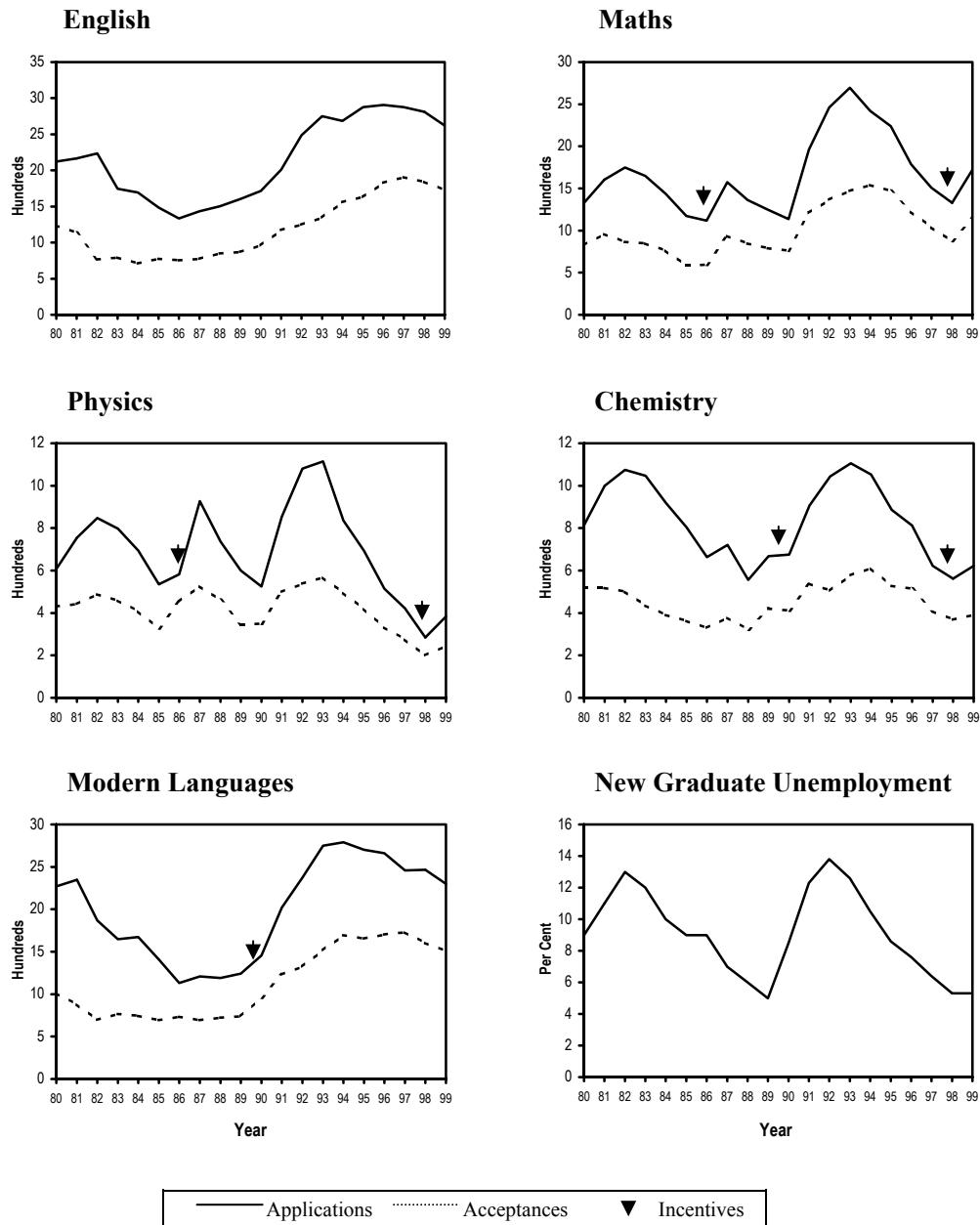
Source: TTA (1996). *A Strategic Plan for Teacher Supply and Recruitment. A Discussion Document*. London: TTA; STRB (1999). *School Teachers' Review Body Eighth Report*. London: SO; and DfEE personal communication.

Applications and Acceptances

- 3.6 Comparisons of intakes with targets are only one way of gauging the state of recruitment to teacher training. Since the targets can be adjusted up or down any shortfalls or surpluses may merely reflect adjustments to the targets. A better idea of the attractiveness of teaching over time can be gained from looking at the trends in applications and acceptances.
- 3.7 Chart 3.4 shows applications and acceptances to selected PGCE courses over the past twenty years. The application curves to the main subjects turn out to be very much alike, apart from the odd bump or two associated with the incentives of the

earlier bursaries and the recent ‘golden hellos’. In each case there is a peak in applications around 1982 and another (from a much larger pool of graduates) around 1992.

Chart 3.4: Recruitment to PGCE Courses



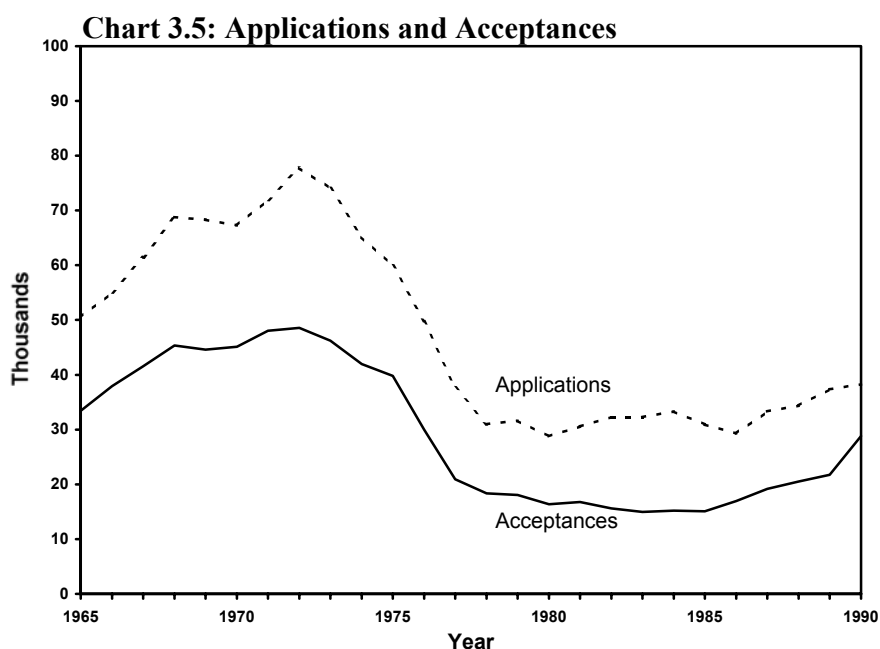
Source: Updated from Smithers, A. and Robinson, P. (1991). *Teacher Provision: Trends and Perceptions*. Manchester: CEER.

3.8 The application pattern is very similar to that for new graduate unemployment, also shown in Chart 3.4 (bottom right). It appears that teaching can attract applications when opportunities elsewhere are limited, but as soon as the economy picks up the training providers struggle to fill their places. The economic recession of the early Nineties explains rather well the brief respite which secondary recruitment enjoyed and which is brought out in Chart 3.1.

3.9 Chart 3.4 also shows that the curves for acceptances follow those for applications, to some extent, but are less pronounced. The proportion of applicants accepted can vary considerably from year to year. In the applications boom year of 1993 only about half those seeking places in maths, physics and chemistry were accepted, but in leaner times the proportion has risen to 70 per cent or more, suggesting that the quality of the intake is likely to fluctuate from year to year.

A Longer View

3.10 Taking a longer view, this difficulty in attracting applicants seems rather strange. Chart 3.5, for example, shows that during the 1970s there were upwards of 70,000 applicants for about 40,000 teacher training places. In the peak year of 1972 there were 78,000 applications for 48,000 places. But, by 1983, the training capacity had been reduced to only about 15,000 places and applications fell sharply in tune with availability.



Source: Smithers and Robinson (1991). *Teacher Provision: Trends and Perceptions*. Manchester: CEER for DES.

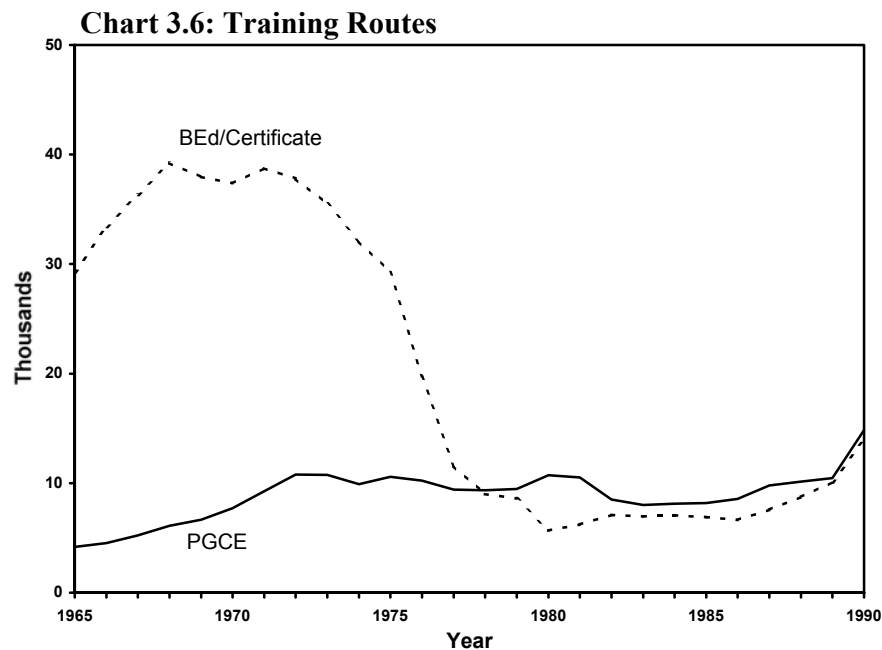
3.11 It was a planned reduction. Reports from the National Advisory Council on the Training and Supply of Teachers published in the 1950s and 1960s projected teacher demand on the basis that the post-war increase in births would continue. The Ninth Report (DES, 1963) covering 1963 to 1986 commented:

Since 1957 there has been a steady annual rise in the number of births which is expected to continue throughout the period of our review (to 1986). Births have considerably exceeded the estimates adopted for the Seventh Report (covering 1960-80).

3.12 In response to the advice that more and more teachers would be required, the provision in teacher training colleges was greatly increased both through raised intakes and the building of new colleges. It was not until the James Report of 1972 that the implications of the downturn in births from 1964 onwards (which at first

was regarded as a temporary blip) were fully recognised. Concerns about over-supply were addressed in the *Framework for Expansion* White Paper of 1972, but during the 1970s estimates of the required capacity were continually revised downwards. By 1977 the 180 teacher training colleges had been reduced to 84. On the re-cast projections, the universities and colleges together were expected to produce no more than 17,000 teachers a year.

- 3.13 But, as drastic as this was, it was still not thought to be enough, and the 1983 White Paper, *Teaching Quality*, called for a further reduction of six per cent on 1981 admissions. Within this overall figure the balance between primary and secondary places was adjusted to take account of the now rising birth rate. For the first time some slimming down of university PGCE courses was envisaged.



Source: Smithers and Robinson (1991). *Teacher Provision: Trends and Perceptions*. Manchester: CEER for DES.

- 3.14 The impact of these policies can be clearly seen in Chart 3.6. Following the restructuring foreshadowed in *Education: A Framework for Expansion* the capacity of the teacher training colleges was reduced by about 85 per cent between 1972 and 1980. During this time university PGCE courses remained largely unaffected until, following the recommendations of *Teaching Quality*, they too were cut back. Nineteen-eighty-three thus marks the nadir for teacher training places and the targets post-1983 - also a consequence of the White Paper - have to be seen as starting from this lowest-ever point.

- 3.15 The fact that the training places for both the primary and secondary phases have subsequently been doubled suggests that with the benefit of hindsight the initial pruning has come to be seen as too severe. However, the restructuring of the training colleges has had lasting consequences since it contributed to the rapid expansion of higher education in the 1980s. Many students therefore who, in the past, would have had to enter teacher training in order to obtain a higher education were now able to take the degree courses of their choice. No longer were they

trapped in teaching by a non-negotiable certificate, but they had the whole range of graduate occupations open to them. Applications to teacher training have never recovered and there has been continuing difficulty in recruiting. Neither has the salary fully taken into account that the profession is now having to compete on the open market for graduates rather than receiving the protection of dedicated supply through the training colleges.

Current Applications

- 3.16 The latest PGCE application figures, shown in Chart 3.7, indicate that the training places remain difficult to fill. The financial incentive to train and teach in maths and science boosted applications in 1999, and that has been sustained, but not further improved, in 2000. Extending the incentive to modern languages has also raised applications for this subject. Secondary applications generally seem to be benefiting from the decision to go beyond ‘golden hellos’ and pay a training salary (DfEE, 2000a; TTA 2000a). It was, however, introduced in some haste in March 2000 midway through an applications cycle and its effects remain to be monitored.

Chart 3.7: PGCE Applications¹

Subject	1998	1999	2000	% Change	
				1998-1999	1999-2000
English	2,449	2,409	2,458	-1.6	+2.0
Maths ²	956	1,416	1,408	+48.1	-0.6
Science ²	2,247	3,058	3,171	+36.1	+3.7
Modern Languages ³	2,087	2,072	2,427	-0.7	+17.1
Secondary	16,018	17,679	18,605	+10.4	+5.2
Primary	12,478	12,963	12,583	+3.9	-2.9

1. As of week 41 (end of July).

2. Incentive scheme introduced 1998-99.

3. Scheme extended to cover MFL in 1999-2000.

Source: TTA (GTTR Weekly data), personal communication.

Chart 3.8: Subject Balance in Science PGCE Intakes *per cent*

Year	Physics	Chemistry	Biology	Other ¹
1983	32.0	30.1	28.6	9.2
1986	34.1	24.8	32.0	9.2
1989	24.3	29.3	36.2	10.1
1992	27.3	25.6	34.4	12.7
1995	16.7	20.9	31.4	31.0
1997	11.4	16.9	37.2	34.4
1998	9.9	18.2	40.2	31.7 ²

1. General and combined science, environmental/rural, geology, technology.

2. Excludes technology.

Source: GTTR Annual Reports Autumn Entry.

- 3.17 Much of the increase in science applications has come from biologists. The national curriculum re-defined the sciences as ‘science’, so measures designed to improve applications from physicists and chemists have also become applied to biologists, where there has been no lack of interest. The effects can be seen in

Chart 3.8. There has been a swing which has seen the physics ‘share’ of the science intake fall from 32.0 per cent in 1983 to 11.7 per cent in 1999. Over the same period the chemistry ‘share’ has fallen from 30.1 per cent to 17.7 per cent, but biology’s has gone up from 28.6 per cent to 38.4 per cent. The boosts to science applications of 1999 and 2000 have continued these trends.

Graduate Output

3.18 The scale of the challenge posed by the teacher training targets can be gauged from the proportion of graduates from even the expanded higher education system that is required each year to meet them. The overall total teacher training target for England and Wales in 1999, including both undergraduate and PGCE for both primary and secondary, was about 31,000. This amounts to nearly 12 per cent of the graduate output for the whole of the UK (that is, including Scotland and Northern Ireland) for that year, which was 263,671. In individual subjects, even taking only the PGCE targets and a broad view of eligible degrees, the proportion required is daunting.

Chart 3.9: Targets in Relation to Graduate Output, 1999

Subject	PGCE Target	Graduate Output	Per Cent
English	1,927	6,275	30.7
Maths	1,577	4,250 ²	37.1
Science	2,355	24,119 ³	9.8
Languages	2,106	4,932 ⁴	42.7
History	872	5,862 ⁵	14.9
Geography	1,062	4,536	23.4
Music	555	2,521	22.0
RE	639	1,339	47.7

1. Personal communications from TTA and Higher Education Funding Council for Wales.

2. Mathematical Sciences Subject Group.

3. Includes Biological Sciences Subject Group without psychology, Physical Sciences Subject Group without geography, and combined or general science subjects. For chemistry N = 3624, and physics N = 2320.

4. French, German, Spanish and balanced combinations within languages.

5. History, and economic and social history.

Source: Graduate output figures from *Students in Higher Education Institutions 1998/99*, Cheltenham: HESA, 2000.

3.19 Chart 3.9 shows that to meet the PGCE targets in modern foreign languages and religious education over 40 per cent of the graduate output for the UK in those subjects is required each year. In maths, the proportion is almost as great. In English it is over 30 per cent. The science target of 2,355 can be compared with the total physics output of 2,320 and the total chemistry output of 3,624. But in biology it was 11,636, which in part explains why the subject has come to dominate science teacher training applications.

Completions

3.20 Not all those recruited to training enter teaching. Chart 3.10 shows that about a fifth of the final-year primary trainees and about a quarter the secondary trainees do

not make it to the classroom. But, again, there were big differences with subject. History and maths provide an interesting contrast. In maths, where there is a major shortfall and the entrants have relatively low attainment, about 20 per cent do not achieve qualified teacher status. But only a further ten per cent do not go into teaching straightway. In history, which is over-subscribed with well-qualified entrants, over 90 per cent qualify, but nearly 20 per cent do not obtain employment in schools, perhaps reflecting some over-supply.

Chart 3.10: Completers Entering Teaching

Phase and Subject	QTS ¹	Employment ²
<i>Secondary PGCE</i>		
English	87.3	79.5
Maths	79.6	69.5
Science	83.5	70.6
IT	82.9	75.9
D&T	83.9	76.6
Languages	84.1	75.5
Geography	92.7	77.1
History	91.6	73.7
Art	92.5	76.0
Music	85.3	78.8
PE	95.0	79.6
RE	85.7	72.5
<i>Primary</i>		
Undergraduate	90.9	81.5
PGCE	87.4	80.5

1. Percentage of students (final year students of undergraduate courses) successfully completing.

2. Percentage of final year students entering teaching.

Source: Adapted from TTA (1998). *Initial Teacher Training Performance Profiles*. London: TTA.

Chart 3.11: Destinations of Completers

Destination	N ¹	Per Cent
Nursery and Primary	9,480	33.5
Secondary	9,450	33.4
Special	180	0.6
Independent	930	3.3
Other ²	210	0.7
Not in Service	8,040	28.4
Total	28,280	100.0

1. In full or part-time service as at 31 March 1998.

2. Includes sixth form colleges, further and higher education.

Source: *Statistics of Education: Teachers England and Wales, 1999*; data refer to 1997 completers and service in year 1998.

3.21 There is also substantial loss of completers. Chart 3.11 confirms that nearly 30 per cent do not enter teaching. Of the rest, about a third take up posts in secondary

schools and another third enter nursery and primary schools. Nearly a thousand are lost to independent schools (including the City Technology Colleges), and about 200 each to special schools and further education including the sixth-form colleges.

Conclusion

- 3.22 The picture that emerges of the two decades since the precipitate contraction of the training system is one of a continuing struggle to fill the secondary places. The downsizing seems to have both sent a message to potential applicants about prospects in the profession while at the same time creating the opportunity to expand higher education so that students could take degrees of their choice rather than being locked into teaching. Schools do not look to have been very successful in attracting those graduates. In contrast to the secondary targets those for the primary phase have been consistently met or exceeded. If the targets are well judged, there should be less difficulty in recruiting to primary schools. The primary target is, however, a general target and since the introduction of the national curriculum primary schools have been increasingly looking to recruit specialists of one kind or another.
- 3.23 Not only is it difficult to recruit to secondary teacher training, but well over a third of the trainees do not make it to the classroom. The School Teachers' Review Body (1999c) noted in its Eighth Report that

as a consequence of in-course and subsequent wastage, around 40 per cent of those who enter training do not become teachers.

This will exacerbate the consequences of the recruitment shortfalls unless this huge dropout is so persistent that it has been factored into the targets (which would itself be a counsel of despair). Recruitment difficulties could be expected to show up the profiles of the trainees and it is to those we now turn.

4. THE TRAINEES

- 4.1 Trainee teachers have a distinctive profile. They tend to be less well-qualified, more likely to be female, less likely to come from an ethnic minority, and to be older than most other student groups. Although this is true in broad-brush terms there are also interesting sub-patterns.

Qualifications

- 4.2 The qualifications of postgraduate teacher trainees vary considerably with subject. Chart 4.1 shows the proportion embarking on PGCE courses with a first or upper-second ranges from about two-thirds in history down to a third or less in maths, design and technology and IT. In part, this reflects the number of applicants coming forward. As we have seen, history PGCE courses tend to be over-subscribed, while there have been continuing severe shortfalls in maths. But Chart 4.1 also shows that the proportion of good degrees awarded varies widely across the subjects, again from history down to maths and the technologies. Looked at in these terms, it is apparent that maths isn't doing quite as badly as might at first seem. But it also emerges that even in history the proportion of good degrees falls below that for the subject. The fact that all of the secondary courses recruit a below-average proportion of good graduates says something about the attractiveness of teaching relative to other graduate opportunities.

Chart 4.1: Qualifications of PGCE Entrants

per cent 'firsts' and '2(1)s'

Subject/Phase	PGCE Entrants	Graduates in Subject ¹
English	58.7	64.8
Maths	33.4	48.2
Science	41.2	47.6
IT	31.9	42.4
D&T	31.7	42.3
Languages	43.4	63.1
Geography	46.9	55.4
History	64.0	66.6
Art	48.5	53.0
Music	42.1	57.0
PE	41.3	45.5
RE	52.4	57.1
Primary	48.7	47.8

1. 1996 ITT entry compared to 1996 graduates.

Sources: TTA (1998). *Initial Teacher Training Performance Profiles*. London; TTA; UCAS (1997). *Annual Report 1996 Entry*. Cheltenham: UCAS.

- 4.3 Primary PGCE courses recruit at somewhat above the average for good degrees across the subjects, and again this reflects the demand for these courses. But it has also to be borne in mind that relatively few of the primary PGCE trainees come from subjects like maths, science and the technologies which award fewer good degrees. In primary training, the postgraduate route is also still the junior partner to BEd and other undergraduate courses. In 1999, less than half (45 per cent) of the

13,800 primary trainees took postgraduate courses, and even this represents a continuing shift to this route.

- 4.4 In contrast to the postgraduate primary trainees, entrants to undergraduate education courses tend to hold below-average qualifications. In fact, the A-level scores are the lowest for all the 19 subject groupings used by the Higher Education Statistics Agency. Chart 4.2 shows that in the case of the primary courses about 15 per cent of the entrants had the equivalent of a B and 2Cs against more than twice as many of those entering comparable courses. The comparisons were even less favourable for the secondary courses where only a handful were entering on good A-levels, in contrast to 40 per cent or more, in most cases, for the equivalent subject degree.

Chart 4.2: Undergraduate Entry Qualifications
per cent 20+ points

Subject/Phase	Education Degrees	Subject ¹ Degrees
Secondary		
English	7.0	56.7
Maths	11.0	65.2
Science	4.0	47.7
D&T	4.0	41.0
Geography	15.0	47.1
Music	7.0	39.6
RE	12.0	35.7
Primary	15.0	36.6

1. 21+ points.

Sources: TTA (1998). *Initial Teacher Training Performance Profiles*. London: TTA; UCAS (1997). *Annual Report 1996 Entry*. Cheltenham: UCAS.

- 4.5 However, this has to be seen against a background where the major route into teaching (apart from grammar schools) was the teacher's certificate. The entry requirements here were only five O-levels or their equivalent. Although BEd degrees were introduced in the 1960s, certificates continued to be awarded till 1980. As we shall be seeing in Chapter 6, a surprising proportion of the profession is still non-graduate. What many would see as the modest entry qualifications of present-day teachers does therefore represent a considerable improvement over what obtained in the recent past. It is nevertheless odd that we are content to staff our schools with the second rank of students. Farmers look to the best as their seed-corn for the next generation.

Gender

- 4.6 Teaching is mainly and increasingly a female profession. Women are both more likely to apply for teacher training and to be accepted. In part this explains the recruitment difficulties in some subject areas. Four-fifths of the students on physics degree courses are men, but 43 per cent of the applicants to teacher training come from the one-fifth who are women. Applications to train as English teachers are always much healthier than those for physics because over 70 per cent of the

undergraduates are women. The proportion among teacher training applicants is even higher at over 75 per cent.

Chart 4.3: Applications and Acceptances by Gender, 2000

Subject/Phase	Men			Women		
	Applied	Accepted	%	Applied	Accepted	%
Secondary	8,241	4,091	50	12,591	7,770	62
English	658	323	49	2034	1257	62
Maths	967	453	47	713	459	64
Physics	232	112	48	100	63	63
Chemistry	326	162	50	319	192	60
Biology	566	256	45	1004	540	54
French	266	134	50	990	575	58
Geography	577	340	59	596	452	76
History	845	406	48	879	531	60
Primary	2,120	1,055	50	10,702	5,716	53

Source: Graduate Teacher Training Registry.

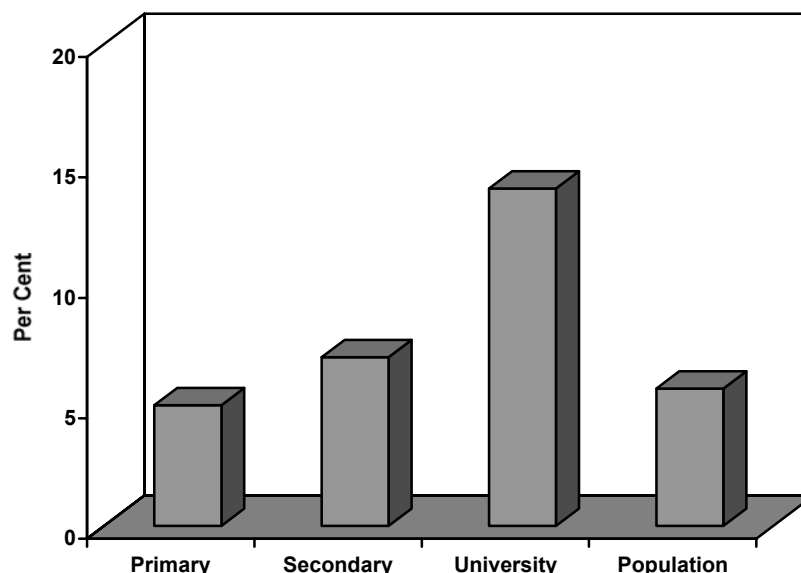
- 4.7 Physics and English are, however, alike in that the women in both cases are more likely to be accepted. Chart 4.3 shows that whether the female applicants come from a minority or majority they are more likely to get in. This is true even of primary education where women applicants outnumber men by five to one. The eventual ratio of trainees is more like six to one. In Chapter 6, we chart the gradual feminisation of the profession, but we can see that it has its roots not only in the extent to which men and women are attracted to teaching, but also the differing response of the training institutions to those applications.

Ethnicity

- 4.8 Whereas students from the ethnic minorities comprise over 14 per cent of full-time university students, they amount to only about six per cent of those opting to train as teachers. This is viewed as a source of concern by the Teacher Training Agency (TTA, 2000), since it is felt that it must necessarily limit the range of role models available to the children. However, set in a wider context, the position emerges as more complex.
- 4.9 Chart 4.4 shows that the proportion of teacher trainees from the ethnic minorities is *not* out of line with the population. The difference between the teacher trainee and university populations stems mainly from the ethnic minorities being considerably *over*-represented at university. Disaggregating what is a heterogeneous group reveals that there are three times as many UK domiciled students from Asian backgrounds at university as to be expected from their proportion in the population and twice as many Blacks. It is the Whites who are under-represented.
- 4.10 It remains a distinct possibility therefore that the seemingly low proportion of ethnic minority teacher trainees comes from disinclination on the part of those students to become teachers. Anecdotally, ethnic minority students, particularly Asians, are said to predominate on professional courses at university with the clear

intention from the outset of becoming doctors, lawyers or accountants. Whatever concerns the TTA may have about the overall composition of the teaching force, it appears that, in this respect at least, ethnic minority pupils are not being disadvantaged by it.

Chart 4.4: Ethnicity



Sources: TTA (1998). *Initial Teacher Training Profiles*; HESA (1999). *Students in Higher Education Institutions*; *Social Trends, 1996*. London: CSO.

Age

- 4.11 More than half the PGCE trainees are mature in the sense that they are 25 or over. Chart 4.5 shows that, in 1997, about a quarter were aged between 25 and 29, of whom nearly 40 per cent had had a gap of five or more years since taking their degree. About a fifth were aged 30-39, of whom 60 per cent had graduated at least five years earlier. A similar proportion of those aged 40+ had so delayed. This suggests that for many teaching is a second-choice occupation, turned to after trying something else.

Table 4.5: Age and Gap between Degree and PGCE

Age	PGCE Completers		Delay ¹	
	N	%	5+Years	% ²
Under 25	8,330	47.1	10	-
25-29	4,620	26.1	1,770	38.3
30-39	3,340	18.9	2,020	60.5
40-49	1,300	7.3	720	55.8
50 Plus	100	0.6	60	60.0
Total	17,690	100.0	4,580	25.9

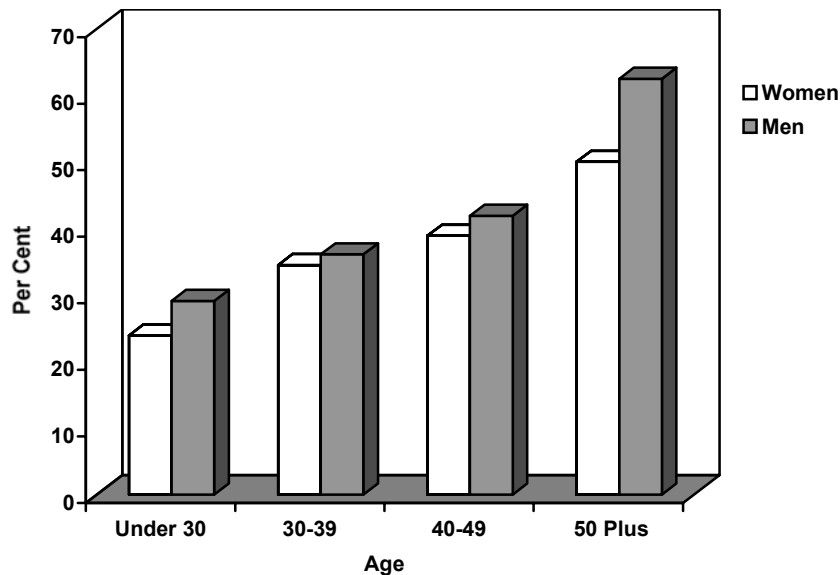
1. Length of time between taking degree and completing PGCE.

2. Per cent of completers with at least five years delay.

Source: *Statistics of Education, Teachers, England and Wales, 1999*; data refer to 1997 completers.

4.12 Although the training institutions are content to fill their places irrespective of age, there are indications that schools in many cases prefer to appoint younger staff (Smithers and Robinson, 1991). The statistics on PGCE completers not in service by March of the following year are very revealing.

Chart 4.6: PGCE Completers Not in Service



Source: *Statistics of Education, Teachers, England and Wales, 1999*; data refer to 1997 completers and service in year 1998.

4.13 Chart 4.6 shows that the chances of obtaining a teaching post reduce with age. While just under 30 per cent of the male trainees under 30 do not make it to the classroom, the proportion rises to 40 per cent for those in their forties, and to over 60 per cent of the few trainees in their fifties. Women are not only more likely to apply and be accepted, but also to take up posts at all ages. Just under a quarter (23.9 per cent) of those in their twenties, rising to 50 per cent of those in their fifties, were not in service in the year after completion. Patterns like this have led to cries of ageism, something we will explore when we come to look at the staffing of schools in Chapter 6.

Conclusion

4.14 Teacher trainees are a distinctive group. How much this is due to the attractiveness of teaching and how much it due to the training institutions sometimes having little choice over whom to recruit is not easy to disentangle. The relatively poor entry qualifications probably do reflect the lack of competition for places. But there seems no doubt that teaching does appeal more to women than men. They are more likely to apply, to be admitted and to enter teaching after completing. Subjects with women in the majority find it easier to fill their teacher training places than those where men predominate.

4.15 The ethnic minorities are under-represented in relation to the population of university graduates, but not with respect the general population (they are especially likely to go to university). Over half teacher trainees are mature. This

might be thought of as an advantage since they could be expected to bring greater experience of life to the classroom, but their chances of employment in schools diminish appreciably after 40. Whether the ethnic minority and age balances are considered appropriate, there will be little opportunity to make adjustments until the training places are over-subscribed and the providers are in a position to select.

- 4.16 The characteristics of the trainees will gradually feed into the teaching force. This year's students will affect its composition thirty years hence, and today's schools bear the imprint of the recruits of thirty years ago. What this means in terms of who is currently teaching in our schools, we take up in Chapter 6. But first we consider the dynamics of school appointments.

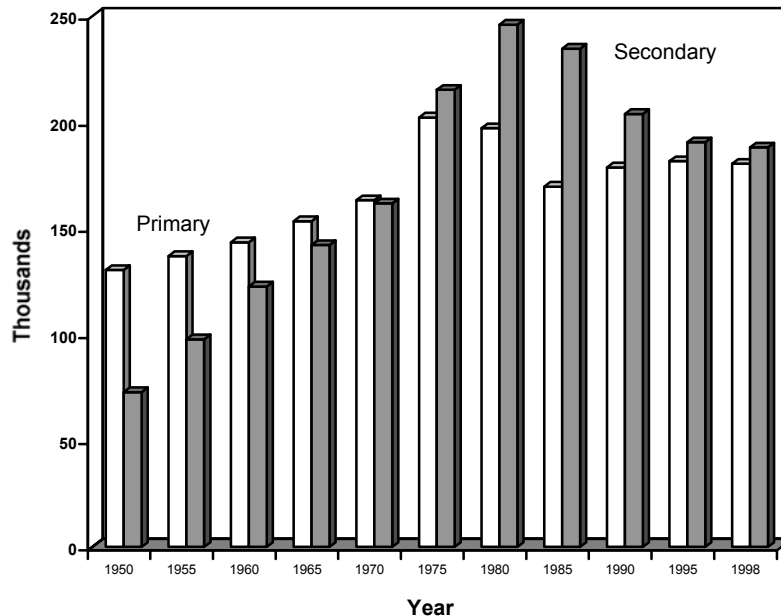
5. RECRUITMENT TO SCHOOLS

- 5.1 In order to staff maintained schools, according to current policies and at present levels of funding, England and Wales require just under half a million teachers. Not large perhaps in comparison with the 3.5 million that America has to find, but nevertheless larger than the population of some major cities like Liverpool where we are based.

Teacher Numbers

- 5.2 Currently, in the year 2000, there are about 488,300 teachers in maintained schools in England and Wales (STRB, 2000d). This is a headcount which includes full-time, part-time and occasional teachers in nursery, primary, secondary and special schools, and in referral units and home tuition services. In terms of full-time-equivalents it comes to 449,200, of whom 211,700 are in nursery and primary schools and 205,700 are in secondary schools.

Chart 5.1: Full-Time Teachers



1. Includes heads, deputies and classroom teachers, but excludes sixth-form colleges from 1993 when they became part of the FE sector.

Source: *Statistics of Education, Teachers, England and Wales, 1986-1999.*

Full-Time Teachers

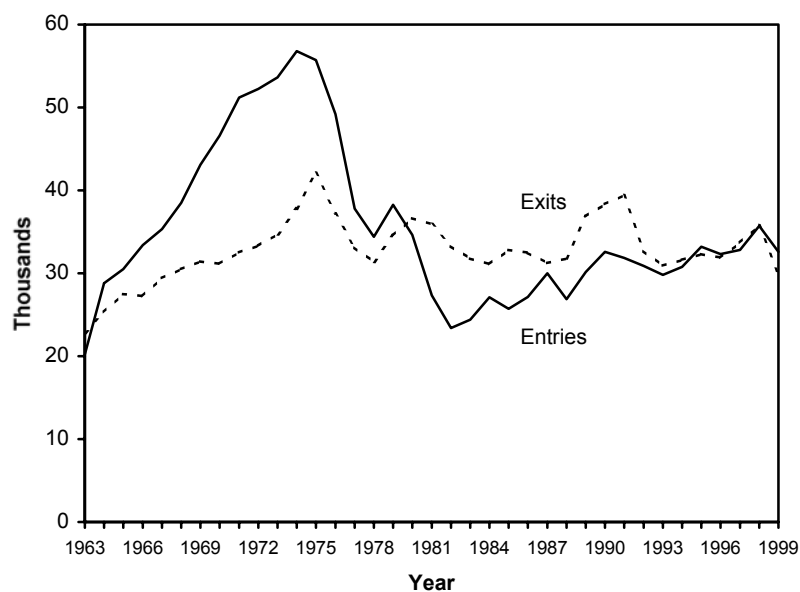
- 5.3 Regular full-time teachers form the backbone of the profession. According to the DfEE's statistical evidence to the School Teachers' Review Body (STRB, 2000d) there were, in January 2000, 182,968 in nursery and primary schools and 184,399 in secondary schools. These numbers do not exactly tally with the DfEE's *Statistics of Education* volumes but are near enough. From these volumes we can get a continuous run of data on the same basis from 1950 to 1998. Chart 5.1 brings out the great growth in full-teacher numbers over this period.

- 5.4 From the 72,900 full-time secondary teachers in 1950 there was more than a threefold increase to 246,000 in 1980. As might be inferred from Chart 2.1, this

was to accommodate rising pupil numbers, the raising of the school leaving age in 1973, and progressively reducing class sizes. Since 1980 the teaching force in secondary schools has fallen back to 188,200 (excluding sixth-form colleges). The drop has been occasioned mainly by a fall in pupil numbers, but also other factors such as cost constraints.

- 5.5 The number of full-time primary school teachers has also increased appreciably during the second half of the twentieth century. From 130,400 in 1950 it reached 202,300 by 1975, only to fall as the decline in births worked its way through the schools. Nevertheless, as we saw in Chart 2.4, the continual reduction of the pupil-teacher ratio was sustained through to the end of the Eighties since when it has risen somewhat.

Chart 5.2: Entries and Exits



Source: *Statistics of Education, Teachers, England and Wales, 1986-1999; DfEE Evidence to STRB, 1999 and 2000.*

Entries and Exits

- 5.6 The size of the teaching force in any one year is determined by the relative extent of entries and exits. Chart 5.2 shows that during the Sixties and early Seventies, when the pupil numbers were rising and the pupil-teacher ratio was being reduced, entries greatly exceeded exits. But when the implications of the falling birth rate from 1964 were appreciated entries were curtailed, leaving exits to contract the system. The sharp reduction in demand led to the severe pruning of the training capacity in the late Seventies and early Eighties that we have described in Chapter 3.
- 5.7 Over the period covered by Chart 5.2 exits have remained steadier than entries, but there was a significant fall in the wake of the Houghton pay award of 1974, and the haemorrhaging of the late Eighties was stemmed by the economic recession of the early Nineties. More recently, in spite of all the various changes in the parameters affecting the demand for teachers, the system has come into something like a steady state. The upshot of the DfEE's complicated modelling system is that, in

effect, finding that about 30,000 teachers leave each year, it is decided that the schools will need about 30,000 to replace them.

Teacher Supply

5.8 The details of the turnover for 1998-99 are shown in Chart 5.3. The inflow of that year came from three main sources: new entrants, returners and those transferring from part-time or another sector.

Chart 5.3: Movements in Maintained Schools, 1998-99

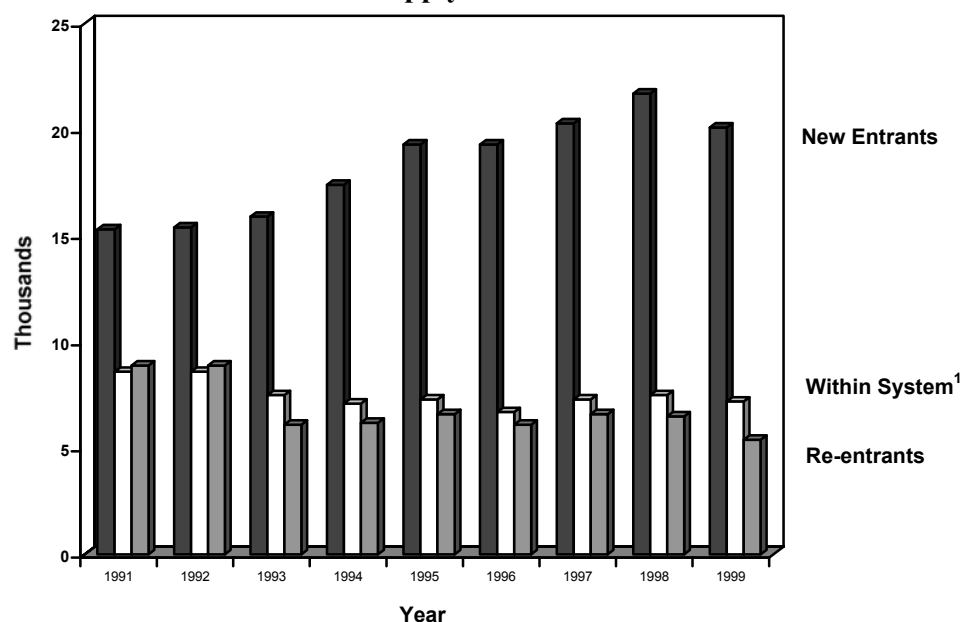
	Coming From		Going To	
	N	%	N	%
New Entrants	20,100	62	-	-
Full-Time ¹	1,100	3	2,200	8
Part-Time ²	5,900	18	8,400	28
Out of Service	5,400	16	12,900	43
Retirement	200	1	5,800	19
Other	-	-	600	2
Total	32,600	100	29,900	100

1. Other maintained sectors, including special schools.

2. Including MNPS, special schools, other sectors and occasional.

Source: Written evidence from the DfEE to STRB (2000) based on 162 LEAs grossed up to England and Wales.

Chart 5.4: Teacher Supply



1. Moves from part-time and other maintained sectors as, for example, from sixth-form colleges. Does not include moves between schools.

Source: *Statistics of Education, Teachers, England and Wales.*

New Entrants

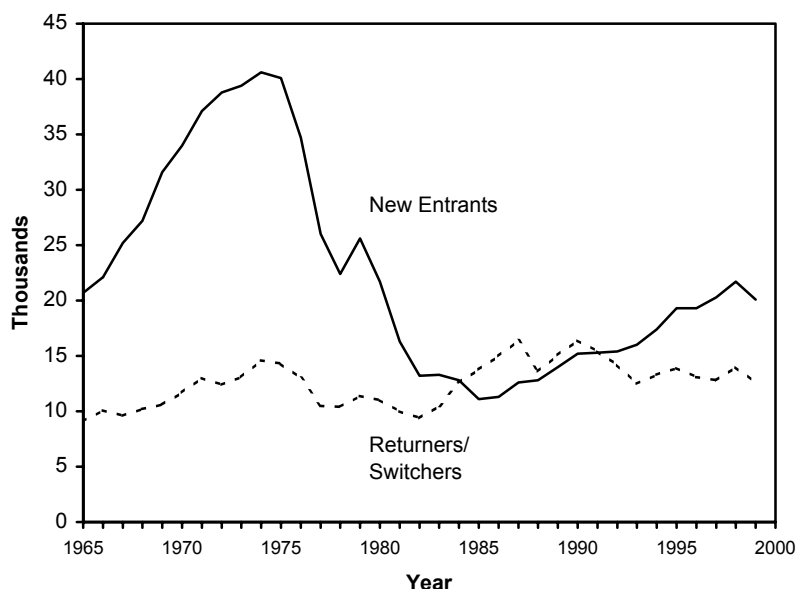
5.9 Nearly two-thirds of the recruits in 1998-99 were new entrants. This, as Chart 5.4 shows, is typical. It is this seemingly recurring requirement that leads to a target for about 30,000 new teachers to be trained each year. As we saw in Chapter 3, the expectation is that about 20,000 of the newly trained will take up vacancies in maintained schools.

5.10 With the system in a relatively steady-state the number of new recruits always exceeds the number of retirements. The gap is due, as Chart 5.3 shows, to upwards of 20,000 a year who leave full-time teaching either to go part-time or to another maintained sector or to leave the service completely. Of the leavers, as Charts 5.3 and 5.4 show, only about 10,000 come back and hence the need for the continuing new input.

Re-entrants

5.11 That so many leave never to return can be taken as a comment on teaching as a career. During the Eighties it was noticed that there seemed to be as many trained teachers outside schools as in them. It was felt that if more teachers could be attracted back from the so-called Pool of Inactive Teachers (PIT in the black humour of the time), any training shortfalls could be covered (Gooding, 1989). Since there seemed to be only about 12,000 teachers registered as unemployed and claiming benefit this may have been overly optimistic, but it was given some substance by data like those of Chart 5.5.

Chart 5.5: Inflow



Source: Statistics of Education, Teachers, England and Wales, to 1999; DfEE Evidence to STRB, 2000.

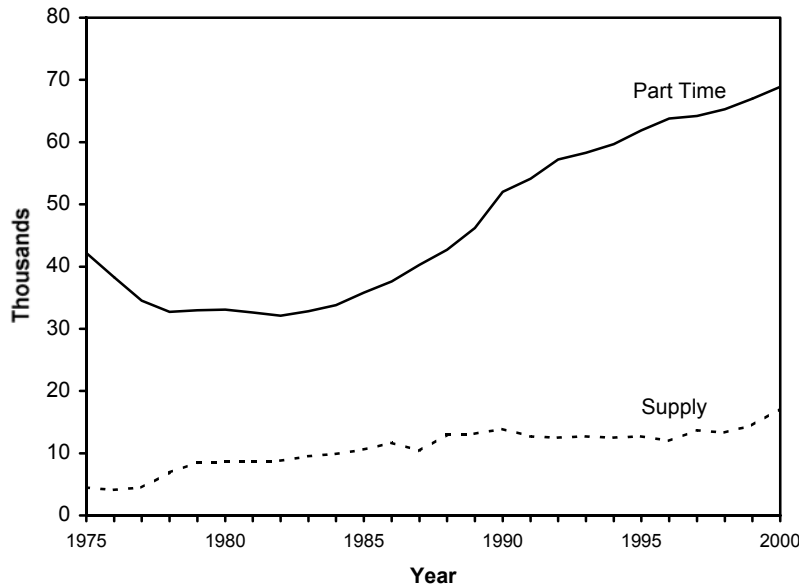
5.12 Chart 5.5 shows that as the teacher shortages of the Eighties began to bite, schools increasingly looked to returners to fill vacancies. Briefly returners came to be in the majority. But as the flow of newly trained staff picked up they were once more taken in preference to returners. Schools, it seems, appoint younger staff when they are available.

5.13 In contrast to the availability of new entrants, which has varied considerably with the number of places and success in filling them, Chart 5.5 shows that the number of re-entrants has been relatively stable. Returners here covers both those coming back into teaching and those moving from other types of service within the system. As Chart 5.4 showed, returners *per se* make up less than half this category. Most of those giving up teaching seem lost to schools for ever.

Part Time, Temporary and Supply Staff

5.14 In addition to full-time teachers, schools employ part-time, temporary and supply staff. Currently in maintained nursery, primary and secondary schools there are 68,900 part-time teachers amounting to 33,900 full-time equivalents or 7.6 per cent of the teaching force. Chart 5.6 shows that since 1985 numbers have doubled. In part this has been to give schools flexibility to cope with a rapidly changing policy context, but it has also been, as we shall be seeing in Chapter 8, a response to teacher shortages.

Chart 5.6: Part-Time and Supply



1. Includes qualified teachers in special schools from 1985, excludes sixth form colleges from 1994.

Source: *Statistics of Education, Teachers in Service, England and Wales, 1986; DfEE Evidence to STRB, 2000.*

5.15 Schools also draw on temporary and supply staff to plug gaps. Chart 5.6 shows the number of teachers employed on day-to-day or short-term contracts of less than one month has quadrupled since 1975 from 4,500 to 17,200. In addition, there are supply staff employed for longer periods, but in national statistics they are included with the full-time staff.

Overseas Staff

5.16 In order to bridge the gap between the staff required and those available, it seems that schools are increasingly looking overseas. However, one of the major gaps in the statistics available is just how many teachers from abroad are working in English and Welsh schools. Very few show up in one of the major sources of data about teachers, the pension records. Only 1,633 (0.4 per cent) of the regular full-time teachers were reported in *Statistics of Education, 1994*, as having been trained outside the UK, after which the entry was dropped as not being very informative.

5.17 Three conditions have to be met to appear in the overseas-trained category. The teachers have (1) to be trained outside the UK; (2) to have their qualifications recognised by the DfEE; and (3) to make pension payments. Any whose qualifications are not recognised would have to obtain qualified status in order to

be employed as a teacher and, if successful, would appear as trained in England and Wales. In the meantime, they could be employed as instructors or registered trainees.

- 5.18 The apparently large influx of Australians, New Zealanders, Canadians and South Africans would not show up in these statistics since their qualifications would not be recognised. In the first instance, they will most likely appear in the supply staff statistics and if and when they achieve UK Qualified Teacher Status, among the home trained. Statistics on teachers in England and Wales are generally good, but overseas entry is one area where better information is needed.

Independent Schools

- 5.19 In addition to the 367,000 full-time teachers in maintained schools there are, according to the Information Schools Information Service (2000), over 40,000 in independent schools. On DfEE figures this is an under-estimate. The Department's statistics show 56,000. But this is on a slightly different definition of independent education including, for example, the City Technology Colleges, and it is in full-time equivalents rather than a headcount of full-time teachers.
- 5.20 Teachers in independent schools are largely drawn from the same pool as their state colleagues. Although the PGCE is not a formal requirement, many independent schools like their staff to have it. Many independent schools play their full part in teacher training. They offer places for student teachers, they are organised to provide the formal induction programme for newly qualified teachers, and they have links with various providers so as to be able to offer on-the-job teacher training.

Chart 5.7: Full-Time Staff in Independent Schools

Association	Men		Women		Total
	N	%	N	%	
HMC ¹ (242)	10,824	(70.1)	4,620	(29.9)	15,444
SHMIS ² (90)	1,880	(57.5)	1,390	(42.5)	3,270
GBGSA ³ (213)	1,334	(15.3)	7,398	(84.7)	8,732
IAPS ⁴ (517)	4,320	(38.6)	6,869	(61.4)	11,189
ISA ⁵ (289)	1,539	(31.2)	3,387	(68.6)	4,926
Total ⁶ (1279)	18,271	(45.0)	22,302	(55.0)	40,573

1. Headmasters' and Headmistresses' Conference – boys' and co-educational senior schools.
2. Society of Headmasters and Headmistresses – boys' and co-educational senior schools with tradition of boarding.
3. Governing Bodies of Girls' Schools Association – girls' senior schools.
4. Incorporated Association of Preparatory Schools – boys', girls' and mixed preparatory schools to age 12/13.
5. Independent Schools Association – preparatory and senior schools and schools for children of all ages.
6. Schools totals do not match column totals because some schools belong to more than one association.

Source: ISIS Annual Census 2000, *Statistical Survey of Independent Schools*, London: Independent Schools Council.

- 5.21 Independent schools tend to have fewer recruitment difficulties than state schools, but that depends to some extent on their standing and requirements. Although the independent sector tends to be thought of as homogenous it, in fact, consists of a great variety of schools. They do, however, fall into a number of broad groupings defined in part by the association to which they belong. The main categories and the distribution of staff across them are shown in Chart 5.7.

5.22 Many of the schools usually thought of as independent schools are members of either the Headmasters' and Headmistresses' Conference (HMC) for senior boys' and coeducational schools' or the Girls' Schools Association (GSA) for senior girls' schools. But, in addition, there are the Society of Headmasters and Headmistresses (SHMIS), mainly for smaller schools with a tradition of boarding, the Incorporated Association of Preparatory Schools (IAPS) and the Independent Schools Association (ISA). Preparatory education is sometimes separated into pre-prep for the 2 to 7-year-olds and prep for the 7 to 13-year-olds. The ISA includes schools for all ages.

Chart 5.8: Movements in Independent Schools¹

Source/Destination	Coming From		Going To	
	N	%	N	%
Independent Schools	1768	(33.2)	1355	(28.6)
Maintained Schools	1522	(28.5)	469	(9.9)
Initial Teacher Training	591	(11.1)	61	(1.3)
New Graduates	397	(7.4)	14	(0.3)
Industry/Employment	140	(2.6)	178	(3.8)
Other (inc Retirement)	915	(17.2)	2660	(56.2)
Total ²	5333	(100.0)	4737	(100.0)

1. Full-time teachers only.

2. Includes some double counting, but it will have little effect on the proportions.

Source: ISIS *Annual Census 2000, Statistical Survey of Independent Schools*, London: Independent Schools Council.

5.23 Chart 5.8 shows that during 1999 there was about 12.5 per cent turnover in the staff of independent schools, with rather more joining than leaving. A notable source of recruitment, accounting for over a quarter of the intake, was from state schools. Over three times as many were joining from the maintained sector as were leaving to go to it. About 600 of the newly trained staff were also taking up careers in independent schools. Even these may be under-estimates. Data from the DfEE's Statistics of Education shown in Chart 3.11 indicate that the figure is over 900. Loss of staff and newly trained teachers to the independent sector is something which has to be factored into the training targets for maintained schools.

Conclusion

5.24 Staffing schools is a bit like a leaky pool that has to be continually topped up. The inflow of newly trained staff exceeds by at least a quarter outflow through retirements. Part of that 'leakiness' is due to staff changing from full-time to part-time or moving into sixth-form colleges and other parts of the maintained system, but about half represents actual loss (some of which is to independent schools).

5.25 Less than half those leaving the service return and, indeed, there are indications that schools are reluctant to take them. When the output from the training system falls short of what is required the schools can make up the difference in various ways. They will take potential re-entrants if they are available, they will make temporary appointments and draw on supply staff, and they will look abroad. One of the gaps in national statistics is just how many teachers from overseas are employed in English and Welsh schools.

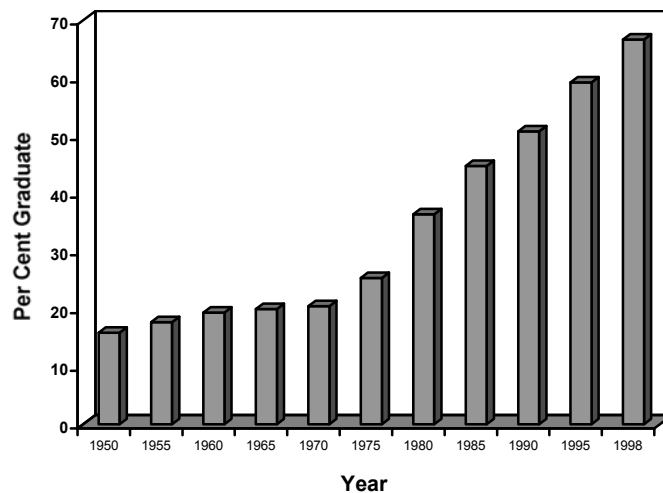
6. STAFF PROFILES

- 6.1 In Chapter 4, we looked at the profiles of teacher trainees. Over time the trainees will, of course, determine the nature of the teaching force. In this chapter we consider how the characteristics of the teachers themselves have been changing. Taking the long view there are some surprises.

Qualifications

- 6.2 Current teacher trainees, as we saw in Chapter 4, are relatively poorly qualified in relation to other students. All subjects of the postgraduate route attracted a below-average proportion with good degrees. The A-level qualifications of those on undergraduate education courses were far below those for other subjects. The impression of relatively poorly qualified teachers is reinforced by the detailed statistics. When the Universities Council for the Education of Teachers (UCET, 1993) last released the qualifications of PGCE students by subject, over a third of the maths, physics and chemistry trainees had entered on a third-class degree or lower. The run of statistics was discontinued when the polytechnics became universities so the qualifications could be expected to be even poorer now.
- 6.3 The DfEE (STRB, 2000c) takes encouragement from the fact that the proportion of those successfully completing PGCE courses with a first-class or second-class honours degree has increased by ten per cent during the Nineties, but this has to be seen against a background of a decade where the proportion of pass degrees has been reduced by almost a third (Smithers and Robinson, 1996).

Chart 6.1: Teachers by Qualification

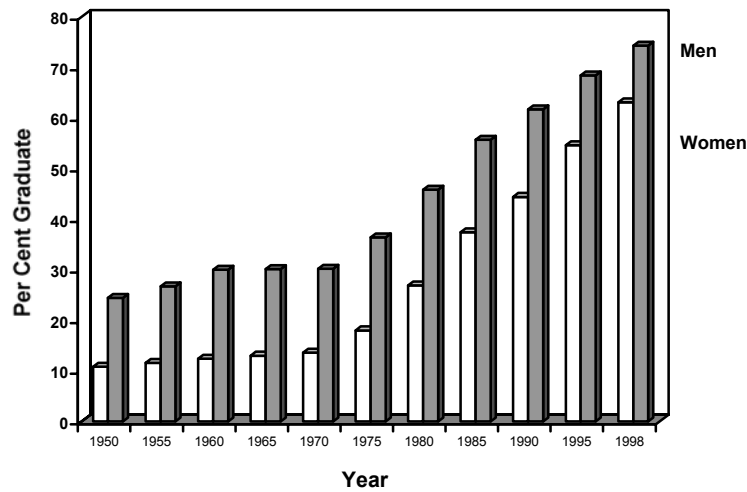


Source: *Statistics of Education, Teachers, England and Wales, 1986-1999*.

- 6.4 Nevertheless, over a longer time span, a quite different picture emerges as in Chart 6.1. In 1950, less than a fifth of teachers were graduates (actually only 16 per cent), whereas in 1998 two-thirds were. It is still surprising perhaps that a third of teachers are non-graduates, but the aim of an all-graduate profession was not declared till 1980. The apparently poor qualifications of present-day trainees therefore represent a vast improvement over a time when grammar schools were

staffed by graduates and the secondary moderns by teachers certificated on the basis of two year's training (one-year for the emergency trained).

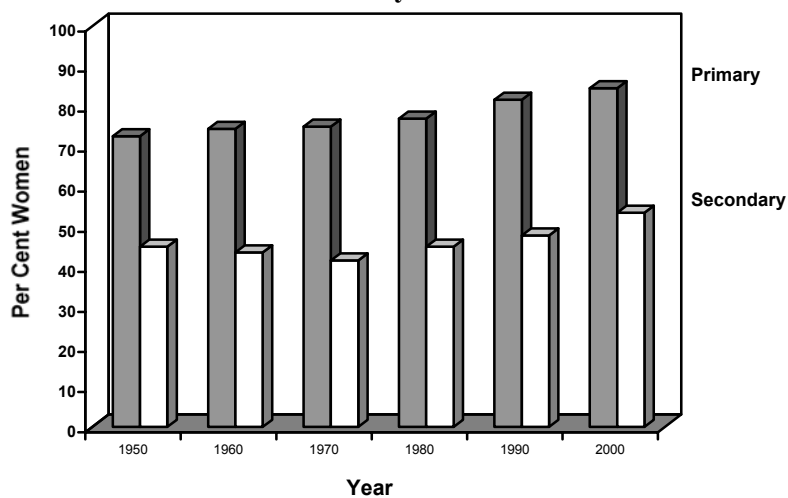
Chart 6.2: Teachers by Qualification



Source: *Statistics of Education, Teachers, England and Wales, 1986-1999*

6.5 Chart 6.2 shows that the qualifications of women teachers have improved particularly. In 1950, a quarter of the male teachers were graduates compared with only ten per cent of the women. That difference remained through to 1975, but in the last quarter of the century women have been catching up. In 1998, 63 per cent of the women teachers and 74 per cent of the men were graduates. In part, this difference stems from the different proportions in primary and secondary schools, but not entirely so. In 1996, for example, the last year the statistics were published in this form (DfEE, 1996), 55 per cent of the men in primary schools held degrees compared with 47 per cent of the women (31 per cent in nursery schools). At the secondary level, the proportions were 72 per cent and 65 per cent for men and women respectively.

Chart 6.3: Teachers by Gender



Source: *Statistics of Education, Teachers, England and Wales, 1986-1999*

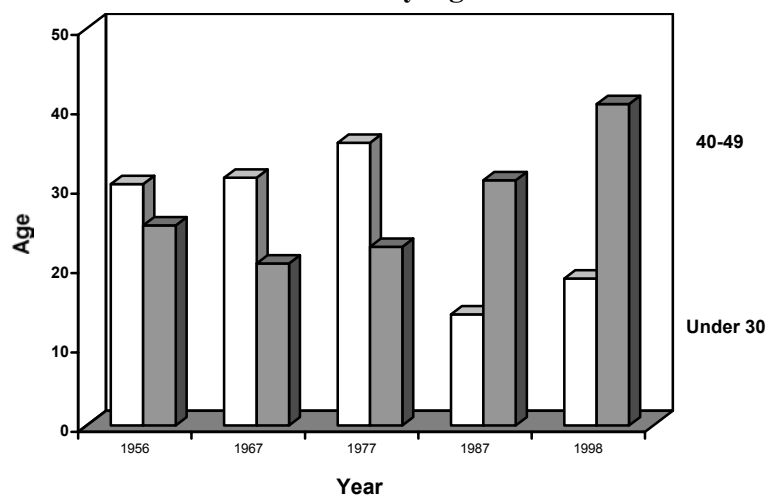
Gender

- 6.6 As well as becoming better qualified in degree terms, the profession has also been becoming more female. Chart 6.3 shows that the proportion of primary teachers who are women has steadily risen - from 73 per cent in 1950 to 85 per cent in 2000. In secondary schools, the proportion fell from 45 per cent in 1950 to 42 per cent in 1970, since when it has risen year by year, so that women are now in the majority at 53 per cent.

Age

- 6.7 Teachers are also getting older. Chart 6.4 shows that until the training capacity was slashed in the late Seventies (see Chapter 3) teaching was predominantly a young person's profession. Between 1956 and 1977 the proportion of those aged 30 or under rose from 30 per cent to 36 per cent. But with the turning off of the training tap it plummeted to 14 per cent in 1987, from which it has only recovered to 19 per cent in the most recent figures. Meanwhile, those in the profession have grown older. As the Seventies bulge has worked its way through, those in their forties rose from 20 per cent in 1967 to 31 per cent in 1987, and to 41 per cent in 1998.

Chart 6.4: Teachers by Age



Source: *Statistics of Education, Teachers, England and Wales.*

Conclusion

- 6.8 A bottle-half-empty person would say that it is astonishing that at the turn of the millennium a third of teachers do not hold degrees, but a bottle-half-full person would point to the considerable improvement in qualifications in the last two decades. The attempt has been made to extend the availability of academically well-qualified staff from the few grammar schools to the whole system. Chapter 4 indicated that teaching is still finding it difficult to attract well-qualified graduates in the numbers that it needs and it has to become competitive with other graduate occupations. But across the system qualifications have improved considerably since the Fifties.

- 6.9 It is also clear that, over the years, teaching has recruited ever more women. In part, this growth reflects changing entry to university – in 1980 only 40 per cent of undergraduates were women compared with 52 per cent twenty years later (Smithers and Robinson, 1996). But there are other possible reasons. Teaching may be more attractive to women because they have traditionally tended to take (across nearly all societies) the more nurturing roles. It could also have something to do with the relative attractiveness of the salary. A third possibility is that school hours fit in very well with the lifestyles of mothers.
- 6.10 We saw, in Chapter 5, that the boys' and coeducational independent schools tended to have a higher proportion of male teachers than did their state counterparts. We will explore the reasons for this in Chapter 11, but it may have something to do with the higher salaries on offer, but it could also be that women find it harder to accommodate to the unsocial hours of boarding schools. Whether the progressive feminisation of teaching poses a problem in terms of role models for boys is something to be researched.
- 6.11 Teaching is also an ageing profession. In part, this reflects the sharp reduction in training capacity twenty years ago, but also the increasing reluctance of young people to train as teachers. The profession is now top heavy with older staff and, while their experience is welcome, many will be coming up to retiring age at the same time. Unless teaching can be made more attractive present problems will be exacerbated over the next decade as more and more teachers come up to retirement.

7. RETIREMENTS AND RESIGNATIONS

7.1 According to the latest DfEE figures (STRB, 2000d) about 61,000 full-time teachers left their jobs between 31 March 1997 and 31 March 1998. This, however, includes teachers resigning from one maintained school to take a job in another, as well as the retirements and departures. It therefore represents a turnover rate, rather than a wastage rate. In 1997-98 while turnover was of the order of 16 per cent, actual loss from the profession was about ten per cent or 38,000. A significant component in that loss is retirements. In 1998, for example, the wastage rate among the 50s and over was 20 per cent compared with 7 per cent for those under 50.

Retirements

7.2 Retirements include normal age retirements and those leaving prematurely through ill-health or on the grounds of efficiency or redundancy. Chart 7.1 sets out their relative contributions over the past decade. The conditions for governing ill-health retirements were tightened up in 1997 reducing the numbers leaving for this reason. The pension regulations were changed with effect from 1998 boosting early retirements in the run-up to be followed by a subsequent sharp fall.

Chart 7.1: Retirements

Year ¹	Age	Early	Ill-Health
1990	3,600	8,800	3,600
1991	3,500	8,500	4,300
1992	3,200	7,100	4,100
1993	3,300	7,800	4,100
1994	3,500	8,700	4,900
1995	3,500	7,700	5,300
1996	3,400	9,100	5,200
1997	3,600	10,700	5,400
1998	3,400	12,600	3,600
1999	3,700	2,500	2,500
2000	4,100	2,800	2,400

1. Financial Year to 31 March.

Source: Statistical Annex to Written Evidence from DfEE to STRB, September 2000.

Resignations

7.3 Resignations occur for a variety of reasons, including to take a post at another school. But if we ignore between-school moves to consider only those generating teacher demand, they fall into four main categories: loss to the service, transfers to part-time or occasional teaching, movements to other maintained sectors like further education, and departures for other reasons. Chart 7.2 shows how these various components have varied over the past decade. Perhaps the most notable trend is the progressive shift to part-time teaching.

Chart 7.2: Resignations

Year ¹	Leavers	Part Time	Other Sector	Other
1991	16,100	5,800	2,600	700
1992	8,900	6,000	1,100	-
1993	12,000	5,100	1,200	400
1994	10,200	5,500	1,800	400
1995	11,400	6,200	2,000	400
1996	9,800	6,500	2,000	300
1997	10,000	6,900	1,800	300
1998	10,800	8,200	2,000	300
1999	12,900	8,400	2,200	600

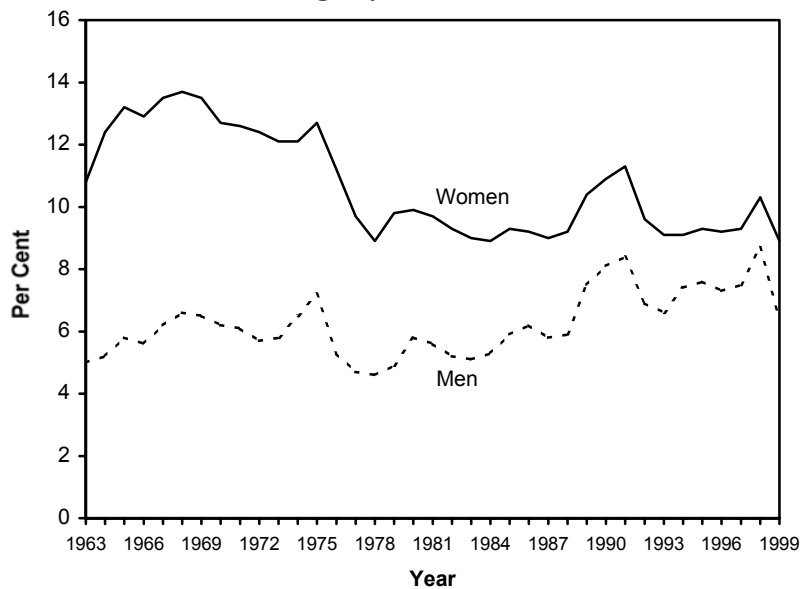
1. Financial Year to 31 March.

Source: Statistical Annex to Written Evidence from DfEE to STRB.

Wastage

- 7.4 Retirements and departures together amount to what in DfEE's terms are called wastage. Chart 7.3 shows how this has varied since 1983. The effects of the favourable Houghton salary settlement of 1974/75 are evident. But the patterns for men and women are somewhat different. In 1983, the wastage rate for women was about twice that for men, but over the years the trend has been for the former to come down and the latter to rise, so that by 1998 they were not very different - ten per cent for women against nine per cent for men. In 1999, the new pension arrangements kicked in and this seemed to affect men more than women. In 1998 wastage among the 50s and over was 20 per cent for men and 19 per cent for women, but in 1999 this had come down to nine per cent for men and 11 per cent for women. In consequence, the gap has opened up once more.

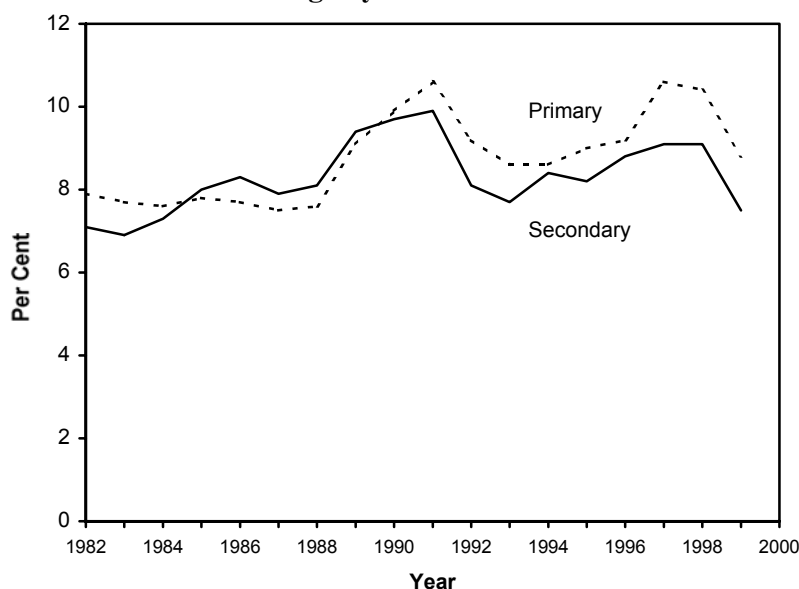
Chart 7.3: Wastage by Gender



Source: Statistics of Education, Teachers, England and Wales, DfEE Evidence to STRB.

7.5 Wastage from the primary phase over the past decade (although not the previous one) has tended to be higher than from the secondary. In part, this is because the teachers are more likely to be women. But not exclusively so because the resignation rate among male teachers is also higher from primary schools. In 1999, for example, it was seven per cent against the six per cent for secondary.

Chart 7.4: Wastage by Phase



Source: DfEE Evidence to STRB.

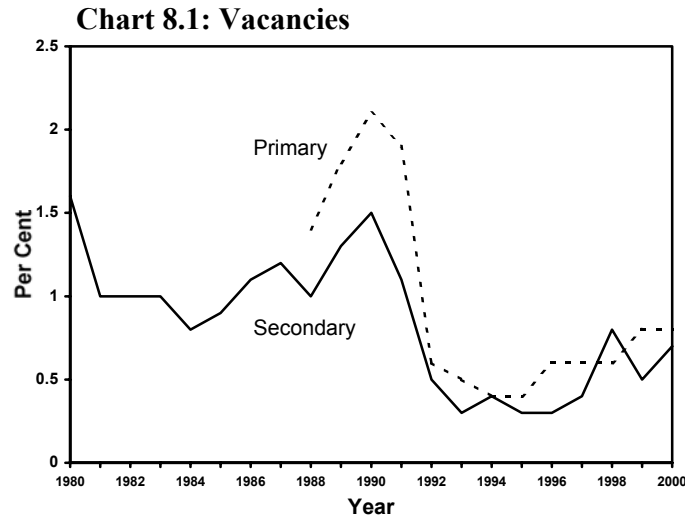
Conclusion

7.6 Currently, the maintained school system suffers a loss of about ten per cent of its staff each year. This compares not unfavourably with the 12.4 per cent from the health service and 11.5 per cent from local authorities (Whitmuir Report, 2000). It also seems rather better than the 14 per cent from service industries and the 26 per cent from retail industries reported by Reed Personnel Services (1999). Nevertheless, it does represent a considerable loss of staff and, in fact, given that many of the other factors are more or less in equilibrium, it becomes the main driver of teacher training targets.

7.7 Wastage among women is higher than that for men. Wastage of primary teachers is higher than that for secondary teachers. Why there are these differences is not clear and should be investigated. The primary/secondary difference may go some way to explaining why when primary training targets are always met some primary schools are finding it difficult to fill vacancies.

8. VACANCIES

- 8.1 There is something of a paradox in teacher supply. As we saw in chapter 3, there have been large and persistent shortfalls in recruitment to teacher training for secondary schools. Yet, each year the DfEE is able to report very low vacancy rates.
- 8.2 In its January 2000 survey, for example, it found only 2,732 vacancies in England and Wales, 0.7 per cent of the workforce of 392,103 full-time teachers. Although there was some variation with region and subject, the vacancy rates were generally very low. The highest for a region was 2.3 per cent in inner London and the highest for a subject 1.2 per cent in mathematics. In keeping with the greater turnover, primary schools tended to have somewhat higher vacancy rates than secondary schools. Chart 7.1 shows how the year 2000 compares with previous years.



Sources: DfEE Annual 618G survey and National Assembly for Wales stats3 survey.

- 8.3 Bearing in mind that the scale runs only to 2.5 per cent, vacancy rates look to have fallen quite sharply in the early Nineties, particularly in primary schools. Although the economic recession of the time will have meant fewer job opportunities elsewhere, the major reason for this seems to have been some tightening up in the implementation of the definition of 'vacancy'. The vacancy figures derive from an annual survey conducted by the DfEE and its predecessors each January. In the surveys of the Eighties, schools sometimes returned posts filled on a temporary basis as still vacant. But spelling out the criteria made it clear that a vacancy covered by an appointment lasting a school term was to be regarded as filled. A vacancy is therefore only what remains when all the posts covered by various combinations of part-time, temporary and long-term supply have been taken out.
- 8.4 Not only are there definitional problems. The survey offers a snapshot at just one point in the year, January, which is not a time at which maximum vacancies would be expected to occur. Moreover, it is merely tapping into the normal recruitment cycle of: vacancy; decision to advertise; applications received; decision to appoint; post accepted. It says nothing about how difficult it has been to make an

appointment, whether a school is satisfied with whom it has been able to appoint, or whether it is continuing the search. But, on the basis of low vacancies, the DfEE has felt able to advise the School Teachers' Review Body (STRB, 1999b) when it comes to consider teachers pay that there is no substantial teacher shortage across England and Wales as a whole – rather the crisis is something got up by the media:

Despite suggestions to the contrary in the media, figures on teacher vacancies suggest that there is no substantial shortage of teachers across England and Wales as a whole.

- 8.5 The apparent discrepancy between the chronic under-recruitment to teacher training and DfEE's vacancy figures led the School Teachers' Review Body to commission its own survey of vacancies (STRB, 1999a). Chart 8.2 shows they arrived at much the same result as the DfEE, although for a different time of the year. The Review Body found that 41,700 vacancies arose for September 1998 of which 38,600 (92.6 per cent) had been filled. Of the others, about half were covered by supply teachers, and most of the rest by short-term contracts, within-school moves and other arrangements. Only 155 (3.7 per cent of the vacancies, or 0.4 per cent of posts) had not been filled. The headteachers rated 79 per cent of the permanent appointments as having skills well suited to the post. The STRB (2000a) repeated the survey for September 1999 and found that overall nine per cent of posts were advertised of which about one in 20 was not filled.

Chart 8.2: Posts Filled, September 1998

Category	N	N
Posts	41700	
Filled	38600	
Not Filled	3100	
Temp Contract		496
Supply		1519
Within School		682
Other		248
Not Covered		155

Source: *Survey of Vacancies and Recruitment in Schools, September 1998*. London: OME.

- 8.6 We are therefore left with something of a puzzle - not enough teachers being trained, but posts being filled. We had the opportunity of investigating this in detail in 2000 (Smithers and Robinson, 2000a,b). We, too, in our survey of posts advertised for September 1999 and January 2000 found low vacancy rates - of the same order as those of the DfEE and STRB. But we went one step further and asked how difficult it had been to appoint to the posts. We found that about half in national samples of both primary (48.8 per cent) and secondary schools (49.5 per cent) were reported as difficult to fill. The main reasons given were 'too few applicants' and 'poor quality of the applicants'. The nature of these difficulties and their consequences were explored through interviews with the headteachers of 50

primary schools and 57 secondary schools drawn as national sub-samples of the postal survey.

- 8.7 The interviews revealed that teacher shortages are not showing up in the vacancy figures primarily because headteachers accept the imperative of staffing classes whatever compromises this might entail:

When push comes to shove you've got to put a body in front of the class. So long as you know they are not going to kill a child or maim them – what choices do we have?

(Community, Middle, Coed, Eastern)

- 8.8 Headteachers try at all costs to avoid sending children home. Instances of schools being shut for want of teachers, as in the recent examples of Beechwood School, Slough, and Corby Community School are very rare. Our interviews revealed that headteachers are using a number of coping strategies to bridge the gap between the teachers they need and those who are available.

- **actively seeking out staff**

I interviewed a physicist on a Saturday morning knowing that he was being interviewed elsewhere on the Monday. That's why I got him. You have got to be quite aggressive about this.

(Voluntary Aided, Grammar, Boys', South East)

- **using part-time, temporary and supply appointments as cover**

At that time we were looking to appoint two English teachers. We received about a dozen applications and interviewed five, but we felt we could only make one appointment from that calibre of field. For the other post, the decision was to appoint a temporary teacher for a year and re-advertise this year.

(Foundation, Comp 11-18, East Midlands)

- **recruiting overseas**

Overseas teachers are absolutely crucial to us. If we took out the Australians I don't know what we would do. I really don't. When I say Australians, I also mean New Zealanders, Canadians and South Africans.

(Voluntary Aided, Comp 11-18, Girls', Inner London)

- **modifying the curriculum**

We have got the expansion of compulsory Welsh and nobody out there to recruit. I have gone to the Chair of Governors and said I might have to break the law. The alternative is even worse. This woman who came in as a mature entrant and was unsuitable for teaching - we have got classes that have been destroyed by contact with her. I think the Welsh Assembly has totally underestimated how many teachers of Welsh they need.

(Community, Comp 11-18, Coed, Wales)

- **raising class and group sizes**

Tutor group sizes have gone from 25 to 28 at key stage 3, even in technology where they say there should be a maximum of 20 for safety. It is all hidden. You would never talk about any of that simply because if it got into the local newspapers it would be seen as quite damning.

(Community, Comp 11-18, Coed, South East)

- **reducing non-contact time**

Not being able to fill the technology vacancy we have substantially reduced the non-contact time. It is iniquitous. It has actually caused us some difficulty with moderation. The staff are stressed, they are tired. Development has gone by the board. They are just hanging in there to deliver technology.

(Foundation, Comp 11-16, Coed, West Midlands)

- **increasing teaching outside subject**

We have got a SEN teacher who teaches textiles and we have got a textiles teacher who has been teaching a bit of food. So the idea might be to remove the SEN teacher to teach her textiles timetable and get the textiles teacher to do fully food. There could be that kind of jumbling if you have to run food, but we honestly might have to say we don't have a food specialist and we can't do it.

(Community, Comp 11-18, Coed, Outer London)

- **using other school staff to teach**

We are having to do more what I call fixing. I don't know if you are aware that schools have a range of non-teachers working in them which are basically funded under Section 11 (now Ethnic Minorities Achievement Grant). What we are finding, and although some of this is dodgy, and we have to be careful what we say, we are using these people to actually teach because they are often highly qualified and graduates who will turn their hand to the subject.

(Community, Comp 11-18, Coed, Yorks & Humb)

- **training up**

We have a vacancy for a physicist. I think it will be a question of bringing in some other scientist and training them up to do physics.

(Community, Comp 11-16, Coed, North West)

- 8.9 There were variations with region, location and school, and subject and post. But it is not just London and the South East, and the so-called shortage subjects of maths, science and modern languages, that are affected. Schools in some seemingly very attractive and relatively low cost parts of the country are finding it hard to make appointments. Posts in most subjects - with the possible exceptions of history, PE and art - could be difficult to fill. Problems in appointing deputy heads and co-ordinators to primary schools were widespread. The schools that tended to be the most badly affected were those in the most financially disadvantaged areas and those in special measures or otherwise seen to be failing. This trend is being acerbated by the moves towards rewarding teachers in relation to pupil performance.
- 8.10 The continuing efforts to find staff, and the tension over whether anyone suitable will be found, is taking its toll on both the headteachers themselves and the classroom teachers. The headteachers are at the sharp end. They not only have to bear the brunt of finding people and living with consequences of appointing people not of the desired calibre, but also, in many cases, particularly in primary schools, they are having to do a lot more teaching themselves in order to plug the gaps. The extra stress on teachers is emerging in various ways from shouting at the children, through more tiredness, headaches, absences, and illnesses, ultimately to higher levels of resignation than there need be. The shortages are causing further shortages (Smithers and Robinson, 2000a, b).

Conclusion

- 8.11 Vacancy figures for schools are low, but they are not a good indicator of the state of teacher supply. The recurrent failure to meet the training targets points *prima facie* to the likelihood that there are not enough teachers to go round. While some schools in some locations will be able to appoint without undue difficulty, the general picture is of a widespread struggle to achieve a full complement of satisfactory staff.
- 8.12 We found that headteachers try by all possible means to ensure their schools are fully staffed. By active recruitment they seek to snap up the teachers who are looking for posts. By various organisational devices they juggle with the timetable and the curriculum to make the best use of the staff available. By various people strategies they contrive to bring in someone, no matter that their skills do not exactly fit requirements nor that the children's schooling can consist of a series of temporary appointments. Our findings have been borne out by a study conducted for the STRB itself (IRS Research, 2000). It is rare for the veneer to crack, but when it does children have to be sent home, as recent examples have shown.
- 8.13 Excessive reliance on the vacancy figures has led the Government and the DfEE to a certain complacency about the availability of teachers. The Secretary of State's comment (Blunkett 2000) in a television interview that "schools had come close to meltdown" was a rare shaft of honesty. The Government would argue, however, that this is all in the past because it is making the profession more attractive by modernising it.

9. MODERNISING THE PROFESSION

- 9.1 The Government seems to be facing both ways at once on teacher supply. On the one hand, through the DfEE it stresses the low vacancy figures to the School Teachers' Review Body and urges caution in salary settlements. On the other, it has embarked on a series of measures aimed at making teaching more attractive through what it calls 'modernising' the profession. It set out its stall in the Green Paper, *Teachers: Meeting the Challenge of Change*, issued in December 1998 (DfEE, 1998c).

Green Paper

- 9.2 Launched with a foreword from the Prime Minister, the Green Paper contained a whole raft of proposals to create recruitment incentives and make teaching more attractive. But in the expectation of more people coming forward it has also sought to impose further requirements.

Recruitment Measures

- £5000 incentive to graduates training and going on to teach maths and science;
- 600 new maths and science teachers through school-based training schemes, with schools receiving an incentive of £2000 per trainee, subsequently raised to £4,000 (DfEE, 2000e);
- network of regional advisers to target potential returners;
- suitably qualified unemployed encouraged to train or return;
- Government drive to encourage returners, including the retired.

Salary Structure

- basic 9-point scale, the current scale, with holding-back and fast-tracking;
- a performance threshold, crossing which will give the teacher access to further salary points through both teaching and responsibility;
- a leadership scale for heads (to £70,000+), school management, and advanced skills teachers (to £40,000+).

Other Measures

- bonus payments to schools based on pupils' performance;
- an improved working environment, including 'Staffroom of the Future';
- more support staff – more administrative and technical support through 20,000 extra qualified classroom assistants and students to be paid as part-time teaching associates;
- further drive to reduce bureaucratic burdens.

Further Requirements

- new national tests for trainee teachers in numeracy, literacy and ICT;
- training institutions to have targets for ethnic minorities and males;
- contracted duty to keep skills up to date, including more training out of school hours;
- mandatory qualification for new headteachers by 2002.

9.3 Most, but not all, of these proposals have been taken forward. Little has been heard recently of the competition to design a better staffroom or the idea of paying undergraduates as school assistants. Applications have not yet reached the point where positive discrimination in favour of ethnic minorities or men, even if desirable, becomes possible. But many of the proposals have been firmed up into hard policy. The changes are of two kinds: recruitment incentives and performance related pay.

Recruitment Incentives

9.4 In the DfEE's recent written evidence to the STRB (STRB, 2000c) three kinds of recruitment incentive were identified: 'golden hellos', fast tracking, relocation packages.

'Golden Hellos'

9.5 Since the introduction of tuition fees and the growing realisation that it was something of an obstacle to expect teachers to fund their own training, the Government has taken several steps to ameliorate the situation. First, it waived tuition fees for PGCE courses. Then, it carried forward and developed a Green Paper proposal for 'golden hellos'. It introduced a scheme from September 1999 whereby those training to teach maths or science for secondary schools would qualify for incentive payments of £2,500 payable during training and £2,500 once they took up a teaching post in the subject. As we saw in Chapter 3, this boosted applications in those subjects, but actual admissions to teacher training were still below target in maths, physics and chemistry. The scheme was, nevertheless, due to be extended to modern languages from September 2000 and, in anticipation, there was some increase in applications here also.

9.6 This form of incentive payment has, however, been overtaken by the introduction of salaries of £6,000 for graduates training to be teachers from September 2000. Those training in maths, science, modern languages and technology will be eligible for a further £4,000 after completing their induction year and taking up a teaching post. Both the old-style £2,500 and the new £4,000 payable through salary are subject to tax and national insurance. These arrangements apply to England and a somewhat different scheme operates in Wales.

Fast-Tracking

9.7 Following a recommendation of the Education and Employment Select Committee (1997) the Government also intends to introduce a scheme whereby teachers can be fast-tracked. It is envisaged that trainees will be eligible and those identified will

receive a bursary of £5,000 to be paid in stages and also a laptop. Again, this applies only to England; the position in Wales is to be considered by the National Assembly.

- 9.8 Fast-track teachers are to be identified through certain ‘competencies’ centring on thinking style, interpersonal style, personal style and fast-track values. The STRB (1999c) has expressed reservations about fast-tracking trainees before they have done any teaching practice, but graduate and undergraduate trainees will be eligible for selection along with career changers and existing teachers. The processes by which they will be selected reflect the Government’s wish to see a differentiated profession with the rewards depending on appraisal and assessment of various kinds.

Relocation Packages

- 9.9 Some parts of the country find it particularly difficult to recruit teachers because they cannot afford to buy, or even in some cases, rent property. A Green Paper produced by the Department of the Environment, Transport and the Regions in April 2000 has proposed a starter-home initiative, with interest-free loans for key workers such as teachers.
- 9.10 Some LEAs have also been considering re-location packages including subsidised transport and housing for newly appointed teachers. The impact of these schemes should be monitored, because as we shall be seeing in Chapter 11 one of the ways independent schools in high cost areas are able to attract staff is by providing help with housing.

Performance Related Pay

- 9.11 At the heart of Government policy on teachers is the belief that the profession can be made more attractive by restructuring salaries so that they become more dependent on appraisal and assessment. We have already considered the proposals for fast-tracking. The other main elements in the Government’s plans for performance-related pay are threshold assessment, performance management and new grades like that of Advanced Skills Teacher.

Threshold Assessment

- 9.12 The Government’s plans for introducing threshold assessment were already far advanced when a challenge in the High Court by the National Union of Teachers was successful and it was found that the Government had not consulted as it was required to do. The careful and tight timetable therefore had to be put on hold, but the Government has announced it will backdate to September 2000 the £2,000 on offer.
- 9.13 The NUT was articulating, by the means open to it, the concern many in the profession and outside feel about how performance is to be judged. The management consultants, Hay McBer, were commissioned by the DfEE to make recommendations on standards for effective teaching. Their report (Hay McBer 2000) indicated that effective teachers achieve results in a variety of ways and it identified five clusters of contributory attributes: professionalism, thinking, planning and setting expectations, leading and relating to others.

- 9.14 This perhaps was not the clear list that the DfEE had been expecting, but the Department has nevertheless driven on to create a set of standards of its own. It eventually settled on eight grouped under five headings: knowledge and understanding, teaching and assessment (3 standards), pupil progress, wider professional effectiveness (two standards) and professional characteristics. It was originally envisaged that teachers and their headteachers would complete separate forms with the headteachers being asked to consider over thirty aspects of a teacher's performance, but the reporting has now been combined into one (DfEE, 2000b).
- 9.15 The essence of threshold assessment is that teachers make application by providing evidence of their capacity to meet certain standards. Headteachers will offer an assessment, under each of the five headings, as to whether the standards have or have not been met. External assessors provided by Cambridge Education Associates will verify, through sampling the reporting (but not observing the teachers), that the headteacher has applied the performance threshold standards correctly and fairly. The process thus bears all the hallmarks – evidence gathering, standards met/not met, verification of paperwork – of the National Vocational Qualifications that run into so much difficulty (Smithers, 1998).
- 9.16 There would seem plenty of scope here for unsuccessful applicants to mount their own legal challenges. Given the numbers involved in this initial phase, it is almost certain that performance-related pay will be further tested in the courts. Richardson (2000) offered a different scenario. He suggests that performance-related pay could have been a bargaining counter used by the DfEE in its negotiations with the Treasury to obtain more money for teachers' pay and that nearly everyone who applies will achieve the threshold. If that is the case playing politics in this way involves teachers in a lot of bureaucratic hassle to achieve a relatively modest pay rise, and it will hardly achieve the aim of making teaching more attractive.

Performance Management

- 9.17 Threshold assessment is to be one aspect of a system of performance management to be introduced from September 2000. The hitherto rudimentary appraisal arrangements are to be formalised. Each teacher each year will agree objectives with a team leader (designated by the headteacher) and performance will be monitored in relation to those objectives. This will involve some observation of the teacher in action in the classroom. Performance will be subject to an annual review which will be recorded. Unlike the national threshold assessments teachers in performance management will be judged against individual standards.
- 9.18 Although threshold assessment is separate process it is envisaged that in time performance reviews will become part of the teacher's evidence. Decisions on pre-threshold discretionary points and post-threshold salary level will also be informed by the outcomes of the performance review, as will the contributions of Advanced Skills Teachers and other members of the leadership group. Performance review will not form part of disciplinary or dismissal procedures, but it can lead to capability being investigated further. Headteachers, themselves, are to be subject to annual performance review by the governing body with the support

of an external adviser. Except for their own review, headteachers will advise the governing body on outcomes.

Advanced Skills Teacher

- 9.19 The grade of Advanced Skills Teacher preceded the Green Paper, but this further defined their role, specifying that they had a responsibility to spread good practice. ASTs were introduced from September 1998, but in the first year funding was restricted to Specialist Schools and Education Action Zones. They are now available in all maintained schools and there is a target of 5,000 posts by September 2001. So far about 750 have been appointed, but their selection was suspended following the High Court's judgement on the threshold.
- 9.20 In order to award advanced skills status the DfEE has had once more to grapple with the thorny issue of teacher effectiveness. In this case it has listed six criteria. Excellence in relation to results/outcomes, subject/specialist knowledge, ability to plan, ability to teach, manage pupils and maintain discipline, ability to assess and evaluate and ability to advise and support others teachers. Posts may be external or internally advertised and funded by a school, but in both cases the headteacher organises AST assessment with an agency.

Conclusion

- 9.21 Although the Government's response to teacher shortage has been partly denial and partly to create some incentives, the main thrust of its policy has been to put in place a system of continual appraisal and assessment. At first sight, this seems intended to get more out of the existing teaching force than to make the profession more attractive. Whether it improves recruitment and retention is something to be monitored.

Chart 9.1: Performance Criteria

Threshold: the *standards* of knowledge & understanding, teaching & assessment (3), pupil progress, wider professional effectiveness (2), professional characteristics;

Performance Management: agreed *objectives*;

Advanced Skills Teachers: *excellence in abilities* relating to results/outcomes, subject/specialist knowledge, planning, teaching, maintaining discipline, assessing and evaluating, advising and supporting;

Fast-Tracking: *competencies* centring on thinking style, interpersonal style, personal style and fast-track values.

Source: *Written Evidence from the DfEE* (STRB, 2000c).

- 9.22 The reform is presaged on the belief that it is possible to fairly and accurately judge the performance of a teacher. The Secretary of State in his speeches on the subject often says, "everyone can recognise a good teacher". But as Hay McBer (2000) found in their study it is all a bit more complicated than that. This is borne out by the fact that, as we can see in Chart 9.1, the DfEE in its restructuring is proposing

to adopt quite different criteria for fast-tracking, threshold assessment, performance management and Advanced Skills Teachers. If 'modernisation' were based on a clear concept of the effective teacher, the criteria could have been expected to have been explicitly related to each other.

- 9.23 There is another issue. The emphasis on supervised productivity considerably reduces what was in the past one of the main attractions of being a teacher, that of professional autonomy (Smithers and Carlisle, 1970). Instead, teachers will be subject to appraisal and reward arrangements geared to pupil performance. This may impact on salary expectations. If teachers are put under the same pressure as they would be in industry, they may well look for commensurate salaries.

10. LESSONS FROM ABROAD

- 10.1 Educational policy is now global. Ease of communication and continual contact between politicians, policymakers and practitioners around the world has meant that a policy developed in one country is quickly taken up others. Common policies are adopted in relation to common problems. Many countries are finding it difficult to recruit enough teachers. It is not only the leading industrial nations with high graduate demand which are short of teachers, but also countries as diverse as Kuwait, South Africa and Turkey.
- 10.2 Ease of teacher recruitment has a lot to do with salary. Countries like Switzerland, Korea and Germany which pay their teachers relatively well tend to experience little difficulty. On the other hand, in Turkey where salaries are 40 times lower even adjusted for relative purchasing power (OECD, 1999), numerous schools have been closed for want of teachers. Teachers' salaries are the largest single cost in providing education and are therefore a major charge on taxpayers. Thus although shortage could have been expected to drive up salaries, the reluctance of citizens to pay taxes acts as a powerful downward pressure. Kerchner and Elwell (2000) have recently noted that in the United States "the economic advantage of a teacher investing in a college education is almost nil".

Strategies

- 10.3 Instead of looking to find the extra money required to make teachers' salaries more competitive, countries around the world have tended to react to teacher scarcity by seeking some amelioration through incentives, but otherwise putting up with consequences. It is easy to see where much of the inspiration for the Blair Government's Green Paper proposals (DfEE, 1998c) has come from.

Incentives

- **loan forgiveness:** America has created "a possibility to cancel or defer student loans for teachers serving in low-income or subject-matter shortage areas" (www.ed.gov), and schemes have been introduced in states such as Mississippi and districts such as Baltimore.
- **training salary:** in Cincinnati teacher trainees take an internship in the fifth year for and are paid half time (National Commission on Teaching and America's Future, 1996).
- **teacher recruitment grants:** America has introduced discretionary recruitment grants "to reduce shortages of qualified teachers in high-need school districts" (www.ed.gov).
- **signing bonus:** Massachusetts offers a \$20,000 signing bonus paid over three years for teachers who come from elite colleges and universities. Many school districts offer signing bonuses or extra stipends for bilingual teachers and special education teachers. In order to recruit scarce maths and science teachers districts may offer bonuses or a favourable placement on the salary schedule (Kerchner and Elwell, 2000).
- **housing subsidies:** California is proposing housing subsidies to teachers who cannot otherwise afford to live there.

Living with the Consequences

- **reducing requirements:** in 1998-99 California issued 30,600 emergency credentials, Texas 12,800 and New York 10,200 to staff schools that were having difficulty recruiting fully qualified staff, particularly inner-city schools catering for the ethnic minorities and the poor (Olson, 2000).
- **Technology:** everywhere there is the hope that in the future ICT will mean that educational systems will be able to make do with fewer teachers.
- **Sending Children Home:** in Turkey, in 1998, 3,233 primary schools were closed in 22 provinces in the east and south east of the country for security reasons or because of teacher shortage (www.clark.net).

- 10.4 But, in addition to the various incentives or living with the consequences, the big idea to have surfaced, or rather resurfaced, throughout the world is paying teachers by performance. Merit pay, as it is called in the United States, or performance-related pay, as it has been dubbed by the Blair Government, is not confined to the USA and England, however. Even the ANC in South Africa and Jiang Zemin's China have their own versions.
- 10.5 But it is not clear whether performance-related pay is seen principally as way of making the profession more attractive so that more good graduates apply to train, or whether the principal motivation lies elsewhere. Seeming to make relatively little extra money go a long way gives it strong appeal to Treasuries throughout the world. And politicians everywhere can see the advantages of exerting more control over, and getting more out of, their teaching forces. There is also the thought that some teachers have not been very good in the past and there is an unwillingness to increase salaries unless the return in terms of student learning is greater. Not all of these motives are necessarily compatible. Financial constraints and greater accountability are, at first sight, hardly powerful recommendations for persuading more people into the profession.

Merit Pay

- 10.6 Merit pay schemes of various kinds have a long history. England had a system of paying pupil teachers by results which operated from 1862 to 1897 (Morrish, 1970). It had some bizarre consequences, like children being taught to read backwards. As inspectors came to suspect that children were not reading, but mouthing passages learned by heart, they tried catch the teachers out by asking children to identify words in reverse order. The canny teachers then trained the pupils on whom their pay depended to read back to front also. It also had the effect of teachers "setting their sights no higher than the standards prescribed" (Coltham, 1972).
- 10.7 But the country with the longest and best-documented experience of what it calls merit pay is the United States. As its system of public education began to emerge toward the end of the nineteenth century, the teachers were paid according to the grade they taught, with more money for the higher grades. There were also differentiated schedules for men and women, and whites and blacks, and "school administrators could also factor a subjective measure of merit into teachers' salaries" (Protsik, 1996).

- 10.8 In reaction to the various inequities and disparities, Denver and Des Moines in 1921 created a single salary scale. This paid all teachers the same regardless of grade level, gender, race, or family status. Salary was determined solely by experience and academic preparation. Other districts followed suit and, by 1950, 97 per cent of schools operated on the single salary schedule (Sharpes, 1987). Odden and Kelley (1997) have pointed out the advantages:
- teachers were paid for teaching, not the grade level they taught;
 - the salary scale was easily understandable giving all teachers an equal opportunity of earning a pay rise;
 - salary increases were no longer based on what teachers viewed as an arbitrary administrative assessment of their merit;
 - it changed the nature of the working relationship between teachers and supervisors since it gave teachers greater autonomy in the classroom.
- 10.9 Given all this in its favour one wonders why anyone would want to make a change. The answer lies in what some see to be a crucial weakness in a salary schedule based on qualifications and experience; it does not appear to reward effort or performance. Over the years a number of school districts had experimented with forms of merit pay, but most had fizzled out with the difficulties of agreeing a fair basis for judging performance.
- 10.10 There was, however, a considerable upsurge in interest following the publication of the National Commission on Education's (1983) *A Nation at Risk*. This offered a dire prognosis of the state of education in the United States and posed something of a political problem for President Reagan as the clamour for reform grew. He badly needed some proposals that would both offer the prospect of a marked improvement and not threaten the taxpayer. Chief among them was merit pay which became one of his 'bully pulpit' points (English, 1992):
- Teachers should be paid and promoted on the basis of their competence and merit. Hard-earned tax dollars should encourage the best. They have no business rewarding mediocrity (Reagan, 1983).
- 10.11 There is no Federal role in teachers' pay other than exhortation. It is the responsibility of individual states. In general, they have delegated control to the Boards of Education for the school districts within them. It is a highly decentralized system with about 15,000 school districts each setting its own rate of pay for teachers out of income derived mainly from local property taxes. Following Reagan's (1983) declaration, there was a strong revival of interest in merit pay. But Furtwengler (1994), following up in 1992, found that it had survived in school districts in only nine states. Of the others, 21 did not implement performance pay, six enacted legislation but did not implement it, and 14 implemented it but discontinued.
- 10.12 Among the nine claiming still to be involved only Arizona, Missouri, Tennessee and Texas had continued with funded schemes based on teacher performance and additional work. In most of the others there had been a shift away from the performance element to other criteria, for example, differentiated pay in North Carolina, job enlargement in Utah and school restructuring grants in Iowa. (Ohio

provided no funding and Oklahoma came to it too late to be included in the evaluation.) Furtwengler concluded that “the inability to create evaluation systems that educators feel objectively measure performance has stymied efforts for performance pay systems”, along with “the resistance of the educational profession” and “the high cost of the programs”.

Judging Teacher Performance

- 10.13 It is a common assumption that a good teacher can be easily recognised, but in practice judging teacher performance is extremely difficult to achieve fairly. In essence, the methods boil down to either the teacher looks as though he or she is doing a good job, or student achievement is taken to indicate that the teacher is doing a good job. Soar, Medley and Coker (1983) offered a penetrating analysis of the weaknesses of both.

Looking Good

- 10.14 Most early attempts to distinguish effective from less effect teachers have relied on ratings of classroom performance. Gage’s (1963) *Handbook of Research on Teaching* devoted several chapters to it. But Soar *et al* dismiss the rating method as evaluation without measurement. They argue that educational measurement has four attributes: a standard task; a record of performance; an agreed scoring key and publicly available norms or standards. In contrast, the rating of teachers takes place mainly in the rater’s head. It is only the final judgement that is publicly available and “that reflects the discrepancy between the rater’s composite image of a particular teacher’s effectiveness (however arrived at) and his or her personal standard of effective teaching (whatever its nature)”. Although by the time of Travers’ (1973) *Handbook of Research on Teaching* techniques had become more sophisticated they were still essentially subjective.

Student Achievement

- 10.15 It would seem more logical to judge teacher performance on what the pupils are actually learning, but again Soar *et al* perceptively tease out the weaknesses. They identify three fundamental problems: student variability, regression, and the limits of achievement tests. Teachers have little control over many of the factors which influence pupils’ achievement – ability, home background, peer pressure. If teacher effectiveness were the major determinant, achievement gains could be expected to be relatively stable from year to year. But, in fact, the median coefficient in research studies has emerged at about 0.3 (Rosenshine, 1970). It is widely accepted that measures used to take decisions about individuals should have a coefficient of at least 0.9.
- 10.16 More recently people have been inclined to put their faith in value-added measures. But as Soar *et al* point out this is susceptible to regression. Research clearly shows that there is a negative correlation between raw gain scores and pre-test scores. What this means in practice is that pupils scoring low on the first testing will tend to make the greater gains. The only way unbiased mean gain estimates can be achieved is by randomly assigning pupils to teachers’ classes, which may be too high a price to pay.
- 10.17 Moreover, the tests themselves are not thermometers. They are generally insufficiently reliable to support value-added measurement. In the attempt to

devise standardised achievement tests the temptation is to concentrate on the simpler, more measurable aspects of learning. Teachers whose pay depends on pupil achievement will be inclined to teach to the tests and this may mean that much of the real point of education is neglected.

Career Ladders

- 10.18 For reasons like these, perhaps felt rather than fully articulated, but nevertheless expressed in obstinate opposition, most merit pay schemes have either foundered or evolved into something else – payment for extra work or participating in restructuring schemes. But the idea has not gone away. Odden (2000), an American educator who has been consulted by the Blair Government, argues that the future, lies in knowledge-and-skills-based pay.
- 10.19 In the United States, a National Board for Professional Teaching Standards has been established which assesses teachers on the basis of ten exercises. These involve the compilation of portfolios, performing under laboratory conditions and probes into involvement with parents. The procedure takes about a year to complete and costs \$2,000. As of 1999, 17 States (covering over 40 per cent of teachers) had policies to pay whole or part of this fee. By December 1998 only about 2000 teachers had been certificated by the Board, but the aim is to have over 100,000 by 2005 – equivalent to one for every school. Only about 40 per cent of the applicants - who could be expected to be among the best-performing - are currently successful. Many districts are paying board-certificated teachers a salary supplement. Several others are implementing more comprehensive schemes.
- 10.20 Odden's ideas are writ large in Cincinnati which in September 2000 became the first US public school district to adopt a career ladder based on performance rather than seniority (Pilcher, 2000). Unusually the teachers' union there, the Cincinnati Federation of Teachers, has agreed by a small majority to participate in a Teacher Evaluation and Compensation Scheme. It consists of a career ladder of five steps each with its own salary: apprentice, novice, career, advanced and accomplished. Movement up the steps is through assessment and teachers receive an assessment at least once every five years. In the assessment the teachers are rated from 1(low) to 4 (high) on each of 16 criteria grouped into four domains: planning and preparing for student learning; creating an environment for learning; teaching for learning; and professionalism.
- 10.21 The rating is to be carried out by a supervising administrator and a lead teacher. To reach 'novice' a teacher must have 2s or better in all domains; to reach 'career', 3 or better in all domains; to reach 'advanced', 4 in Teaching for Learning and at least one other domain, and 3s in the other two; and to reach 'accomplished', 4s in all domains. Teachers have only two years to progress to 'novice', and only five to move up to 'career'. In addition, novice teachers must pass Ohio's teacher licensing test. The salary range for an accomplished teacher currently starts at \$60,000, double that for an apprentice teacher. The scheme also provides for incentive pay based on specialised training, advanced degrees, certification for additional content area and taking on leadership roles.
- 10.22 The Cincinnati scheme looks to have been carefully thought out and it does have a certain aesthetic appeal, but it still rests on teacher ratings. It is liable, therefore, to go the same way as previous attempts at merit pay. The teachers' union has

reserved the right to call another vote in May 2002 on which the scheme could be scrapped if 70 per cent voted 'no'. Introducing merit pay has helped to secure the prospect of a tax levy to pay enhanced salaries. But other school districts and other countries will be watching the scheme very closely to see if it can be administered fairly and efficiently, whether it raises pupil achievement and whether it makes teaching more attractive. Cincinnati is carrying out a risky experiment on behalf of the world.

Conclusion

- 10.23 The Labour Government in England has been caught up in the worldwide movement towards paying teachers by performance. But it seems less clear than most as to what the criteria should be. As we saw in Chapter 9, its present policies seek to differentiate teaching in terms of threshold assessment, performance management, fast-tracking and advanced skills teachers. What is significant is that each of these categories is defined by reference to different criteria (Table 9.1). Threshold assessment is to be on the basis of eight standards, performance management on individually agreed objectives, fast-tracking on competencies and advanced skills teachers on excellence in six areas which overlap, but are different from, the eight standards. In addition, there are career entry profiles and capability procedures which operate differently again.
- 10.24 We suspect that the Blair Government's proposals will prove unworkable if only because of their complexity – which betrays a lack of understanding of what good teaching involves. But that does not mean that differentiated salaries cannot be implemented fairly, transparently and efficiently. We believe Odden is right to advocate career ladders, but wrong to seek to base them on knowledge and skill tests and teacher ratings. A better model is offered by some of the professional bodies in the UK which have different levels of membership based on qualifications, professional development and successful performance in work. The Engineering Council has for example the levels of Chartered Engineer and Incorporated Engineer above basic graduate membership.
- 10.25 The establishment of the General Teaching Council, which will have responsibility for maintaining a register of qualified teachers, would provide the opportunity of creating something similar for teachers, if a government were so minded. It would be for that Council to decide on how many levels and work out the rules for progressing from one level to the next. These would presumably involve some certification of successful performance. It would be for teachers to decide whether they wished to put themselves through the procedures to attain a higher career grade. The different levels of membership could attract different salary scales.
- 10.26 Such a system would have the advantage of a national body taking the decisions about performance recognition rather than individual headteachers. But its essential attraction to us is that it could be based on a rounded view of a teacher's contribution rather than on ratings or pupil performance which, as has been pointed out, suffer from inherent weaknesses.

11. LESSONS FROM THE INDEPENDENT SECTOR

- 11.1 Independent schools in Britain tend to have much less difficulty in recruiting teachers than their maintained counterparts. Why should this be? They draw on the same pool, the same universities, the same teacher training institutions, and indeed a number of the teachers are recruited from maintained schools. But because independent schools contrive to be more attractive they are able to adopt more exacting entry requirements and, as we saw in Chapter 5, they are better placed to achieve their preferred gender balance.
- 11.2 To some extent, the independent sector benefits from being part of a whole. It takes about seven per cent of the pupils and has about ten per cent of the staff. It is both able to cream off staff from the maintained system and lose unruly pupils to it. It needs to maintain a relative advantage to satisfy parents, very demanding but prepared to pay. The independent sector is itself a heterogeneous collection of schools and those at the top are able to create the conditions to attract teachers with a good track record in other independent schools. A flow through system therefore tends to operate with the top schools drawing from the others which, in turn, take from maintained schools or recruit from the training institutions. Since the PGCE is not a formal requirement for independent schools - although some prefer their teachers to have it - they may also see themselves as being in direct competition with other occupations for graduates.
- 11.3 We have explored teacher recruitment in the independent sector through interviews with 21 headteachers (Smithers and Robinson, 2000a). The schools were representative in terms of standing, size, geography, and day/boarding. The sample ranged from those that most would think of as the top independent schools through to small remote boarding schools of which few of the general public have even heard.

Attractions

- 11.4 When the headteachers were asked what drew teachers to their schools, they made reference, in the main, to one or more of five reasons: the pleasure of teaching, salary, help with housing and other benefits, facilities and working conditions, and contact time and class sizes.

Pleasure of Teaching

- 11.5 The main reason why the headteachers of independent schools thought they were able to attract staff was that they felt that teaching within them was enjoyable:

I think there is a view that the quality of the teaching life here is better.

(Coed, Day/Boarding, South West)

Certainly the thing they will give most often at interviews as their reason is the fact that they want to get on with the teaching and not the crowd control.

(Girls', Day/Boarding, South East)

Salary

- 11.6 Salaries in independent schools are set by the schools themselves and vary considerably. At the top end of the range some of the most highly selective and sought-after schools pay considerably above what maintained school teachers can expect.

I have always gone for a very attractive starting salary. In September 2000 our starting salary will be about £22,500, which for a young person is good, and I should hope that helps.

(Boys', Boarding, South East)

We pay our own scale which is higher than in many independent schools. Our starting salary is about £21,000 and heads of department get about £38,000.

(Girls', Day, London)

11.7 Not all independent schools sought to have competitive salaries:

We are in the country, we have nice grounds, squash courts they can use, free food and the children are nice. There are enough advantages to teaching in a school like this that I don't think I have to pay vast amounts for. But if push came to shove I would.

(Girls', Boarding, South East)

11.8 But they generally operated their own scales pitched quite carefully to ensure they can continue to attract the staff of the calibre they want.

The average member of staff is paid about 14 per cent more than they would be getting in a state school. It is collegial system with very few special allowances.

(Boys', Day, North West)

Housing and Other Benefits

11.9 As well as enhanced salaries many independent schools can offer help with housing and have a package including other benefits.

I was just seeing in the local newspaper this morning my colleague down the road, at the grammar school, at his prize day, bemoaning the difficulty of attracting appropriate members of staff because of the cost of housing around here. We, like most boarding schools, offer housing and the great majority of those who join us do go into school housing and we find ourselves buying or renting properties. I think it is a crucial element in attracting the right quality of staff.

(Boys', Boarding, South East)

We have retained about half dozen of what we call starter flats, and that actually is a big selling point.

(Coed, Day, Eastern)

11.10 The other benefits can include:

discounted education for sons and daughters, and health insurance.

(Coed, Day, Merseyside)

Working Conditions and Facilities

11.11 But while pay and other benefits are undoubtedly important, a key factor in attracting staff to the independent sector is that it offers a good working environment.

There is often a sense of appreciation of how lucky one is with resources, children and class sizes, and discipline. Some of the more sensitive people, and some of the more intellectual people, will find teaching in a comprehensive dispiriting, particularly if it is only to 16. A very good physicist that I have just appointed was in an 11 to 16 comprehensive. He has got a very good first-class degree and

he is so appreciative. It makes the old hands realise how lucky they are, as indeed they are.

(Coed, Day/Boarding, South East)

11.12 More prosaically it can boil down to having a 'home' of one's own.

We have a lot of staff facilities, everybody has their own desk, their own work space, their own cupboards and shelves, which again makes an attractive environment to work in.

(Girls', Day, Yorks & Humb)

Contact Time and Class Sizes

11.13 The average annual fee in 1999 of £6855 (ISC, 2000) enables independent schools to afford proportionally more teachers than maintained schools. This affects both class sizes and the amount of preparation and marking time that an individual teacher has.

It's a 44 period week and 35 minute periods. They teach 30 of those 44. In the main body of the school the class sizes are 20 or less.

(Girls', Day/Boarding, South East)

I did a calculation recently. Even allowing for the fact that we have this long day, we do a shorter teaching year, and it's something like 80 hours a year less teaching than in the state sector. That of course doesn't take into account the classroom atmosphere which is utterly different, it's dynamic.

(Coed, Day, East Midlands)

11.14 The pupil-teacher ratio in independent schools is currently about 10 to 1 across both prep and senior schools (ISC, 2000). This compares with 23.3 for maintained primary schools (even with the policy of reducing class sizes for the 5 to 7-year-olds) and 17.2 for secondary schools (STRB, 2000c). The contact ratio also tends to be markedly lower - with a maximum of about 80 per cent in the independent sector. Teachers in maintained primary schools have little or no non-contact time and that for secondary teachers is continually being squeezed. The contrast could not be more stark.

Conclusion

11.15 It seems to be the case that, apart from occasional difficulties in relation to their exacting standards or particular requirements, independent schools are able to find the staff they want without too much difficulty. As autonomous institutions generating their own income they are able to create the conditions to attract the staff they are looking for and to make adjustments when difficulties arise.

11.16 Independent schools seem to be able to attract high quality staff and draw off from the maintained system by offering a satisfying working life and competitive salaries. They also ameliorate the costs of housing in expensive parts of the country. But they also employ more teachers so that their class sizes are smaller and the teachers have ample time for preparation and marking, so that teaching stands every chance of being enjoyable. They also provide good facilities. Not all aspects of the independent schools' attractiveness to teachers are transposable to the whole of the maintained system. But there are important lessons to be learned in terms of the satisfactions that good graduates are looking for from teaching.

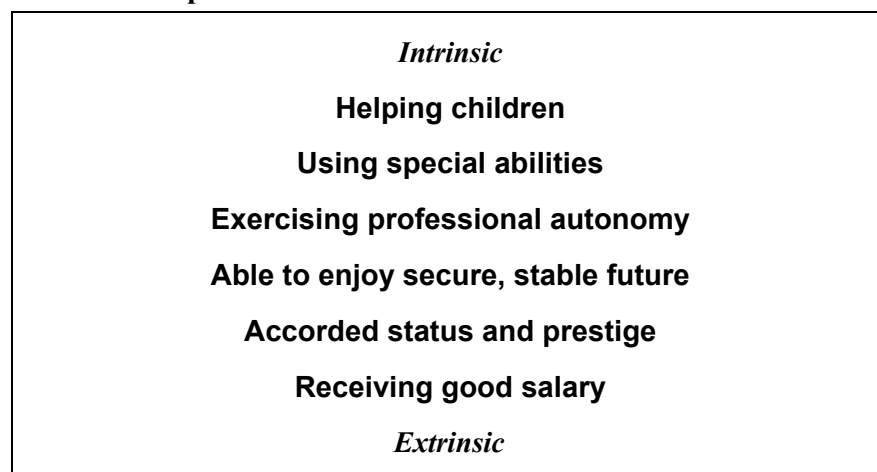
12. ATTRACTING TEACHERS

- 12.1 If not enough suitably qualified people want to become teachers, the profession must be made more attractive. It is not just a matter of incentives to train, but of addressing the fundamentals. That means paying attention to what draws people to the occupations they choose, or end up in. Psychologists (for example, Rosenberg, 1957) have for many years distinguished between two groups of occupational values: intrinsic and extrinsic. Intrinsic occupational values are those inextricably bound up with a particular form of work; extrinsic ones are those which are to some extent detachable from it.

Occupational Satisfaction

- 12.2 Working with people and being able to use special abilities are often cited as examples of intrinsic satisfactions, and salary, security and status as examples of extrinsic satisfactions. The distinction is thought important because detachable satisfactions would seem easier to adjust. But it is not so easy to apply in practice.
- 12.3 Working with children would seem to be the intrinsic satisfaction of teaching *par excellence*. Yet, as we saw in Chapter 11, children's behaviour was identified as a factor influencing teachers' movements between schools. There is thus the prospect of increasing the appeal of teaching through improving pupil behaviour. On the other hand, salary is regarded as the archetypal extrinsic reward, yet income generation is to some extent bound up with the activity. One of the reasons that salaries in the financial sector can be so high is that employment there is in what are, in effect, moneymaking machines. Conversely, maintained education systems are a charge on taxpayers who through their governments exert a downward pressure on salaries. Independent schools do generate income and that gives them the freedom to pay higher salaries.

Chart 12.1: Spectrum of Potential Teacher Satisfaction



Source: Adapted from Rosenberg (1957).

- 12.4 Rather than categories, it is probably more appropriate to think of a spectrum of possible satisfactions ranging from intrinsic to extrinsic. Chart 12.1 suggests what it might look like for teaching. In spite of the caveats, 'working with children' and

'salary' still probably represent the poles, with the other values strung out between them as shown. The scale provides an indication of what levers are available to a government wanting to make the profession more attractive.

Occupational Values of Teachers

- 12.5 Teachers like other professionals are drawn to their particular work by combinations of values. Not surprisingly perhaps, teachers tend to emphasize being 'helpful to children' and 'using special abilities' (Smithers and Carlisle, 1970). Indeed, respective levels of people orientation provide a good explanation of why a higher proportion of, say, English graduates than physics graduates are inclined to enter teaching, and why the profession appeals more to women than men (Smithers and Hill, 1989).
- 12.6 More recently, Kyriacou and Coultard (2000) have compared groups of undergraduates that were either interested or not interested in becoming teachers. Both were agreed that, above everything, teaching provided the satisfaction of working with children, but this was important to only 3 per cent of those not wanting to become teachers. Both groups aspired most to 'a job that I will find enjoyable', but differed in the extent to which they thought teaching could be it.

Enhancing Satisfaction

- 12.7 One lever available to governments is to try to make teaching more enjoyable. Unfortunately, it does not come cheap. It will require, among other things, the money to employ more teachers and to improve facilities. Extra teachers would not only permit smaller classes, but also allow adequate time for preparation and marking. The independent sector charges parents at least twice as much per pupil as the state currently provides to the maintained sector, and a good part of the extra income is spent on staffing and facilities.
- 12.8 It perhaps seems odd to be arguing that one way of tackling teacher shortage is to increase the demand for teachers. But the expectation is that once it became known that teaching was more enjoyable, more would come forward to train. More teachers could also be expected to stay longer. The Government will argue that it is already going down this route. It will point to the planned increase in education spending from £45.8 billion in 2000-1 to £57.7 billion in 2003-4 (HM Treasury, 2000). But this has to be seen against the backdrop of the funding constraints of recent years. In the five years from 1994-95 the real terms funding per secondary pupil dropped by 4 per cent. It also dropped in the intervening years for primary school pupils, but was restored to its 1994-95 level in 1998-99. The trouble with much of this funding is that it is for specific purposes and limited periods, and is not available to increase core staffing.

Salary

- 12.9 In surveys of occupational values students seem disinclined to give much weight to salary, either because it is genuinely unimportant at that age or because it is not thought appropriate to say it is. In Kyriacou and Coultard's (2000) study only 43 per cent of the prospective teachers said they were looking for a good starting salary and fewer, 38 per cent, thought that teaching would provide it. Results like

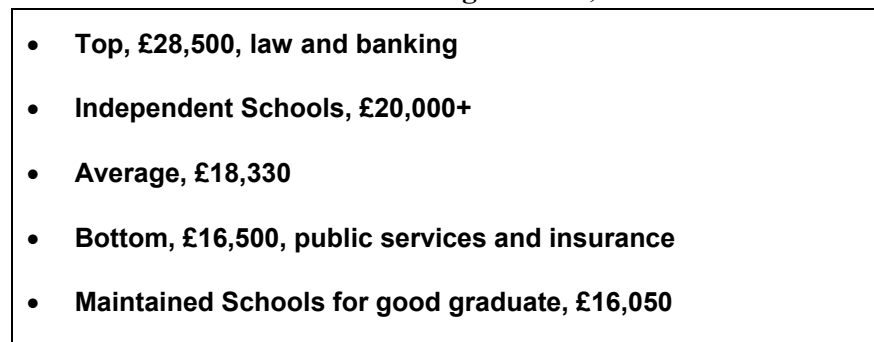
these lead some (for example, Hutchings, 2000) to suggest that salary may be relatively unimportant in teacher recruitment compared with other occupational values.

12.10 Certainly potential satisfactions need to be considered together, and any lessening in one may call for compensatory improvements elsewhere. Both security and autonomy have been shown to be important in attracting teachers. In France, for example, the security enjoyed as civil servants is seen to be one of the main reasons why teacher recruitment has held up. In a number of studies ‘autonomy’ has emerged among the highest rated occupational values of teachers. Yet the Blair Government’s ideas on modernising the profession would seem to threaten both. The increased emphasis on assessment and inspection inevitably affects the teachers’ sense of security and subjects them to more control. As one headteacher recently said to us:

In many ways teaching used to be a very pleasant life. But over the years the pressures have been progressively racked up and people are now asking themselves if they have to take all that pressure why not look elsewhere and earn some real money (Smithers and Robinson, 2000b).

12.11 Thus, however much governments would probably like to, there is no escaping the role of salary. Accepting that it is not the only factor, there is no ducking the fact that teaching is in competition with many other graduate occupations and needs a large number of recruits annually. Chart 3.9 (page 15) revealed the true extent of the demand – about 12 per cent of new graduates overall rising to 40 per cent or more in some subject areas. The logic of wanting lots of good people is that starting salaries and career prospects have to be pitched at above the average.

Chart 12.2: New Graduate Starting Salaries, 2000



Sources: AGR as reported in Judd (2000); STRB (2000) for maintained school salary; Smithers and Robinson (2000a) for independent school salaries.

12.12 Chart 12.2 shows what the actual situation is. According to figures from the Association of Graduate Recruiters (Judd, 2000), starting salaries for new graduates in 2000 for various groups ranged from £16,500 for public service and insurance to £28,500 for law and banking, with the average at £18,330. Interestingly, in view of what we learned about the independent sector in Chapter 11 starting salaries there, in the top schools at least, tended to be set at an above-average level. In contrast, the starting salary for a good graduate in the maintained sector, the second point on the scale, was £16,050 in September 2000. This was below even the public services as a whole in the AGR survey. It is not surprising that, except in times of

economic recession, there should be difficulties in finding enough trainees of the right quality.

- 12.13 The problem is not confined to starting salaries. If teaching is to attract graduates, and to retain them, it must also offer opportunities for continuing career salary progression competitive with comparable occupations. Just as the independent schools have had to compete for good graduates through starting salary, they have also had to offer commensurate opportunities thereafter with salaries of £38,000 or more for heads of department. Even taking into account the newly introduced threshold payment this is some £6,000 above what is payable in a maintained school. Our calculations suggest that the threshold payment notwithstanding nearly half of all teachers will still be earning below £26,000. This, as it stands, seems unlikely to bring enough graduates into teaching.

Resolving the Issue

- 12.14 The key to teacher shortage is almost certainly to arrive at a set of principles for determining teachers' pay, which are fair to both the taxpayer and the profession. Recruitment difficulties around the world are probably not unconnected with a reluctance on the part of elected governments to ask voters to pay as much in the way of taxes as would be needed to make the salaries truly competitive. The continual advice from the British Government to the School Teachers' Review Body that there is not much of a problem can be interpreted in this light. However, the cumulative effect of this constraint is that it is hard to get good teachers, the talents of young people are not fully developed, and a knowledge and skill based economy inevitably suffers. Apparent savings on behalf of the taxpayer in the short term may well have consequences for society which are much more expensive to put right in the long run.
- 12.15 What might a set of fair principles look like? This is a question that the Royal Commission on Civil Service Pay (1953-55) addressed nearly fifty years ago in connection with civil service salaries. Although its report now sits gathering dust on library shelves it seems to us that it went to the heart of the matter. It sought to find a way of balancing the citizen's interests both as a taxpayer and, through the Government, as an employer of the public service.

'Fair comparison' as the primary principle is fair to the community at large for two reasons. First, it looks after the ordinary citizen's interest as a taxpayer. If the Government which represents him pays him what other responsible employers pay for comparable work, the citizen cannot reasonably complain that he is being exploited. Equally we consider that he would agree that he could not, in the long run, obtain an efficient service by paying less (para 97).

We consider that the Civil Service should be a good employer in the sense that while it should not be among those who offer the highest rates of remuneration, it should be among those who pay somewhat above the average. Expressing the point in statistical terms we should say that if it were possible to obtain for any specific job a set of rates 'representative of the community as a whole' which would be arranged in order from top to bottom, and with no complications such as we have described in this Section, the civil service rate should not be lower than the median but not above the upper quartile (para 172).

- 12.16 This seems to us to be not a bad way of settling teachers' salaries. We have much better information now than was available to the Civil Service Commission to rank graduate salaries. Teaching requires an above average number of the above average graduates. It should therefore pay at above the average for graduate salaries.
- 12.17 Some graduate salaries like those at the top of the AGR list are extremely high because of the 'intrinsic' income generating capacity of the field of employment. In order to protect the interests of the taxpayer it has to be recognised that public service salaries cannot compete at this level. Somewhere between the median and upper quartile of graduate salaries seems a reasonable compromise. Precisely where in that range requires the skilled judgement of an informed body like the STRB. Interestingly, the independent schools have instinctively worked their way to offering salaries of this order and they experience relatively few recruitment difficulties.

Conclusion

- 12.18 It will take considerable investment in education to address the intrinsic satisfactions of teaching through more funding to schools and the extrinsic satisfactions through the salary structure of teachers. But it will have to be done. If the quantum of money that is available is too small, performance-related pay can only be a distraction.
- 12.19 The rewards have to be set so as to enable teaching to compete for a reasonable share of the good graduates emerging from the universities. Raising teachers' salaries will raise expectations elsewhere. But it is surely a mark of a healthy society that it should be able to attract some of the most able within it to the vital work of passing on knowledge, skills and understanding to the next generation.

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