

# Research

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## RESEARCH Factors Affecting Teachers' Decisions to Leave the Profession

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Research University of Liverpool Factors Affecting Teachers' Decisions to

Leave the Profession Contents Executive Summary 1. Introduction 2.

Reasons for Leaving 3. Resignations 4. conclusion Aims The investigation

had six main aims: - To quantify the relative importance of the factors

influencing teachers' decisions to leave the profession. - To identify the

destinations of those leaving. - To analyse the characteristics of teachers

leaving the profession. - To explore any geographical variation. - To explore

what factors might influence teachers' decisions to stay. - To identify what

factors might encourage those who have left the profession to return to

teaching. Background The research was commissioned against a background

of increasing concern both in England and abroad about recruiting and

retaining teachers. The study focused on exits from the profession. Previous

monitoring by the DfES and the Employers' Organisation for Local

Government has provided a statistical description of how many teachers

were leaving schools (turnover) and leaving the maintained sector

(wastage). There have also been some quantitative and qualitative studies

which have contributed some understanding of the reasons and destinations,

both nationally and locally. Methodology A three-layered approach was

adopted with a schools survey followed by a leavers survey and interviews.

In addition, a follow-up survey was conducted in January 2003 of those who

had left in the spring and summer of 2002. Response rates were very good,

at least 75 per cent in the schools surveys. From among those schools

responding on all three occasions, structured samples of primary schools

(N= 1, 349), middle schools (N= 30), and secondary schools (N= 316) were constructed to reflect the populations in terms of region and size, and region only in the case of special schools (N= 87). The samples also corresponded closely with the other national distributions which were available. The schools listed all teachers leaving them during 2002 from which we compiled a dataset of resignations (N= 5, 245). Questionnaires were sent, via the schools, to those leavers who were not going on to a full-time or part-time post in a maintained school, taking maternity leave or who had reached normal-age retirement. From their responses we compiled a leavers dataset (N= 1, 066). A sub-sample of 306 leavers was interviewed. Spring and summer leavers who provided their names were sent a further questionnaire in January 2003 to create a follow-up dataset (N= 395).

ii Findings Trends, Turnover and Wastage: Turnover and wastage of full-time teachers from primary and secondary (including middle) schools in 2002 were estimated at, respectively, 14. 1 per cent and 7. 9 per cent. The nearest equivalent comparisons suggest that these are lower than in 2001, which had seen sharp increases in the previous four years. Reasons for Leaving: Five main factors were found to underpin reasons for leaving: workload, new challenge, the school situation, salary and personal circumstances. Of these, workload was by far the most important, and salary the least. Relatively few of the teachers were being tempted away by better career prospects or being offered a higher salary elsewhere. Leavers from secondary schools were more likely to cite the school situation, particularly poor pupil behaviour, than leavers from primary schools. Destinations: About 55 per cent of the resignees whose future plans were known to the schools were leaving the

maintained sector. Full-timers were the most likely to move to full-time posts, and part-timers to part-time posts. Deputy headteachers were the most likely to be moving to other schools, probably for promotion. Heads of department in secondary schools were the most likely to be recruited by independent schools. About 10 per cent of the female resignees were leaving for maternity or family care. Ethnic minority resignees were more likely to be leaving for maternity and less for retirement. Different destinations were associated with different reasons. Retirees pinpointed ‘workload’, and downplayed ‘new challenge’. Those moving to independent schools tended to emphasize the ‘school situation’ and ‘salary’. Those heading for other jobs stressed the excessive workload in schools, not the attraction of opportunities elsewhere. Those moving out of the classroom to take other education posts were significantly more likely to cite ‘new challenge’ and ‘salary’, and less likely to complain of the ‘school situation’. Characteristics of Leavers: Leavers tended to be disproportionately either young with a few years’ service or older and approaching retirement. Young leavers were more likely to cite ‘salary’ and ‘personal circumstances (including travel)’, older leavers ‘workload’. Young leavers, particularly those travelling or teaching abroad, were more likely to expect to return to full-time teaching. Female teachers also were more likely to move and leave than male teachers, and this is associated with higher turnover and wastage rates in primary schools. Female teachers were more likely to hold, to leave, and expect to return to, part-time and fixed-term posts. Ethnic minority teachers were no more likely to leave than others. Turnover in the shortage subjects tended to be higher than in other subjects. Geographical Variation: Teachers

in London and the south and east were more likely to move to other schools and to leave than teachers in the midlands and the north. Leavers in London tended to be a distinctive group. They were significantly more likely to cite 'salary', 'new challenge' and 'personal circumstances' as reasons for going. They were also, by far, the most likely to indicate that they would return to teaching full-time. In contrast, in the North East, the region with the lowest turnover and wastage, less than ten per cent of the leavers indicated that they were 'very likely' to return to teach full-time. Their main reasons for going were also different: 'workload' and the 'school situation'.

iii Influences on Staying: Over 40 per cent of the leavers said that nothing would have induced them to stay. Of the others, 43 per cent suggested a reduction in workload and fewer initiatives, a third, improvements to the ways schools are run, and, a quarter, a better salary might have made a difference. Pupil behaviour came fourth, being much more important to secondary leavers.

Likelihood of Return: About half the leavers indicated that they were 'very unlikely' to return to teaching in maintained schools, either full-time or part-time, but only 38 per cent were similarly emphatic about not returning to do supply. Age, length of service, 'workload' and the 'school situation' were inversely related to the likelihood of return, while leaving for 'new challenge' and 'personal circumstances' were positively associated. Those leaving to travel, teach abroad and go on to supply teaching were the most likely to envisage returning; those going into other employment, teaching in independent schools and lecturing in FE/HE, as well as those retiring, the least.

Decisions in Retrospect: Nearly all the leavers followed up one or two terms after leaving were sure they had done the right thing in leaving.

Nevertheless, a third had changed their plans in the meantime. Ten per cent had, in fact, taken new contracts in schools, usually part-time, mainly from among those intending to go on supply, those who were unsure what to do, and those leaving for family care. So on some definitions wastage would have been lower than would have initially seemed. The same five factors were found to underpin the decisions to leave seen in retrospect as reported at the time of the resignation. In fact, the mean scores tended to be higher suggesting that the leavers felt even more strongly about going.

**Policy Pointers** Our purpose has been investigation, description and analysis, not to canvass particular policies. Nevertheless, it is possible to identify a number of policy pointers. We here summarize the main inferences that can be drawn.

- The DfES and the Employers' Organisation could usefully revisit their characterisations of turnover and wastage with a view to agreeing common definitions which could form part of the co-ordinated approach to data collection in the public sector envisaged in the Comprehensive Spending Review in 2002.
- Whether possible levers to improve teacher retention are sought through exploring reasons for leaving or possible inducements to stay, workload, too many initiatives and pupil behaviour in secondary schools emerge as the most likely candidates. The only exception is salary which is frequently mentioned as an inducement to stay, but does not feature as a reason for leaving (perhaps because for most it is not on offer).
- Some teachers leave because of the particular school situation.

Making retention part of the training of headteachers, ensuring national guidelines for support are implemented, and flexibility in employment to cater for those who wish to job share or work part-time could all have a part

to play in reducing unnecessary loss. - Teaching in an independent school appears to be relatively more attractive. Are there lessons to be learned and how far could they be applied in the maintained sector? iv - A wide variety of advisory posts has recently been created around classroom teaching and these are proving more attractive than teaching itself. The assessment of the costs of any strategy or initiative depending on such posts should take into account the impact on teacher retention. - Leaving is age related with more teachers likely to go at the two ends of the spectrum. Could more be done to retain teachers during their first years in the profession? What impact would encouraging teachers in their fifties and sixties to stay for a few more years have on ameliorating any teacher shortages and, if it appeared desirable, how might it be achieved? - The higher cost of living in London is recognised in allowances, but should the issues surrounding national salary scales be revisited in trying to find ways of securing a relatively stable backbone of staff for schools throughout the country? - In seeking to encourage leavers to return, there are some groups who are much more worth targeting than others, for example, young people who have left to see something of the world, those who are taking a break supply teaching and those who have taken temporary contracts in advisory posts. v 1. Introduction 1. 1 In November 2001 the DfES commissioned the Centre for Education and Employment Research at the University of Liverpool to investigate the factors affecting teachers decisions to leave the profession during the calendar year 2002. Remit - To quantify the relative importance of the factors influencing teachers' decisions to leave the profession. - To identify the destinations of those leaving - whether most of them find jobs after

teaching, the type of work undertaken and the reasons for this. - To analyse the characteristics of teachers leaving the profession - for example, age, gender, ethnicity, career stage, levels of responsibility, and subject area - and identify any patterns that emerge. - To explore geographical variation in teachers' decisions to leave or stay in the profession - that is, to consider the impact of regional factors as well as generic factors. - To explore what factors might influence teachers' decisions to stay in the profession - whether anything could have convinced them to stay. - To identify what factors might encourage those who have left the profession to return to teaching - whether there are any obstacles or incentives for returning to teaching in the future.

Background 1. 2 The research was commissioned against a background of increasing concern with finding and retaining enough teachers of sufficient quality to staff our schools. England is not alone. UNESCO (2002) marked World Teachers Day in 2002 with the warning, based on a joint study with the International Labour Office, that "relentless population growth and declining working conditions are creating severe shortages of teachers in the world's classrooms that may lead to a slide in education standards". Highlighting population growth as a cause suggests that UNESCO had the plight of developing nations particularly in mind. In emphasising working conditions, however, it was also commenting on a trend that it had detected in industrialised nations. "The declining conditions and low salaries in the industrialised nations are discouraging new recruits to the profession, creating shortages and threatening to diminish the quality of education at a time when the need for new knowledge and skills is growing dramatically". 1. 3 UNESCO's cautionary words are underlined by



EURYDICE's (2002a, b) recent study of the teaching profession in Europe, defined to include the countries of the European Union, the candidate countries, and members of the European Free Trade Association. Of the 31 countries providing information, 21 reported teacher shortages, 13 general and eight in particular regions and subjects. The explanations given were remarkably similar. From Belgium to Romania there were references to the poor competitive position of teaching with respect to the other occupations to which those with the necessary abilities might aspire. 1.1.4 The other side of the coin is oversupply leading to teacher unemployment. Six countries reported surpluses. Greece and Cyprus attributed this to a combination of the generous conditions attached to teaching and few opportunities elsewhere. Italy and Liechtenstein reported that a falling birth rate had reduced the requirement for teachers. Austria and Portugal did not offer explanations. 1.1.5 The main elements in balancing teacher provision are shown in Chart 1.1. Demand is essentially driven by four elements: pupil numbers, government policies, affordability and wastage. There are also four main types of supply: newly-trained teachers, those returning from being out of service, teachers recruited from other countries, and temporary cover of various kinds. Too many teachers leads to unemployment, too few leaves schools struggling to staff their classes. Imbalances may be across the whole system or specific to particular regions, schools or subjects. Chart 1.1: Teacher Provision Demand Supply - Pupil Numbers - New - Policies - Returners - Affordability - Overseas - Exits - Cover Resultant - Balance - Surplus - Shortage 1.1.6 In the EURYDICE (2002b) study, we have seen that 21 nations reported teacher shortages and six, surpluses. Only four were in the

happy position of being able to claim that demand and supply matched: Finland and Spain, and closer to home, Northern Ireland and Scotland. Clearly, it would be interesting for any country experiencing difficulties to see how they have managed it. 1. 7 In this report we focus on the exit element of teacher demand in England. Previous monitoring has provided a statistical description of how many teachers are leaving, and quantitative and qualitative research studies have contributed some understanding of the reasons and destinations. Statistical Description 1. 8 Monitoring of teacher demand and supply in England (previously together with Wales) is generally good. In the EURYDICE study it was one of only four countries (the others were the Netherlands, Sweden and Iceland) that were able to provide comprehensive trend data. However, that comparative study revealed there were also important definitional differences. Whereas the data from Sweden and the Netherlands indicated large and growing teacher shortages, and in Iceland a stubborn deficit, in England, contrary to common impression, there appeared to be no shortfall. But closer inspection showed that the difference turned on the definition 2 of vacancy. England had counted only those posts to which no teacher had been appointed, whereas the other three countries had included, as well, posts occupied by non-qualified or inappropriately qualified teachers. 1. 9 A major source of statistical information about teachers in England is the annual publications of the Department for Education and Skills. From them, it is evident that many qualified teachers do not make teaching their career. The latest volume of Statistics of Education: School Workforce in England 2002 Edition, page 91, records that 290, 100 qualified teachers aged under 60 were not working in schools (and

that excludes those receiving a teacher's pension). Of those, 82, 700 had never taught. There are thus two aspects to teacher retention: loss of teachers (with which we are concerned) and loss of trainees. Loss of Teachers 1. 10 Both the DfES and the Employers' Organisation for Local Government regularly compile statistics on teachers leaving maintained schools. Both publish two indices: turnover and wastage. Turnover is resignations from individual schools, some of which can be to move on to other schools. Wastage is loss from the maintained sector. But there are definitional and measurement differences (which we will explore in detail in Chapter 5) and they consistently produce different results. In 2000-2001, the latest year for which we have figures, the DfES (2002c) reported rates of 16. 4 per cent and 9. 0 per cent for turnover and wastage respectively, while the Employers' Organisation's (2002) estimates were only 12. 8 per cent and 6. 5 per cent. Nevertheless, both sets of data do indicate a steep rise in the number of teacher resignations from 1998 to 2001 and one of the issues for the present research is whether this has continued. 1. 11 Comparisons between different professions and occupations are difficult, but teacher turnover at times does seem to be somewhat higher than elsewhere. Whitmuir Management Consultants (2000) in a report for the School Teachers' Review Body cited average turnover rates in 1999 for the health service of 12. 4 per cent and for local authorities of 11. 5 per cent, against the DfES' estimate for that year of 15. 2 per cent. This is, however, considerably better than the 26 per cent turnover in retail industries found by Reed Personnel Services (1999). The Audit Commission (2002) in a recent report on recruitment and retention in the public sector noted that in the

absence of easily comparable information “ considerable energy is devoted to arguing about the size of the problem”. It welcomed the action planned in the Comprehensive Spending Review 2002 for a more co-ordinated approach to data collection.

1. 12 Although we cannot be sure of the relative extent of wastage in the teaching profession there is, nevertheless, considerable actual loss, especially bearing in mind the length of training involved. From the age profile of the teaching force we can also see that many teachers are approaching retirement. The Government has acknowledged that 45 per cent of serving teachers will reach 60 at some point in the next 15 years (DfES, 2001), so leaving rates can be expected to increase. As Chart 1. 1 illustrates exits from the profession are one of the main elements determining the requirement for new recruits.

3 Loss of Trainees 1. 13 In England, the Government has put considerable effort and investment into creating incentives to train as teachers. The Green Paper, *Teachers: Meeting the Challenge of Change*, DfES (1998), sets out a number of proposals most of which have been carried through and developed, so there are now training salaries, ‘ golden hellos’ for shortage subjects, tuition fee remission, repayment of student loans and fast- tracking. The incentives do seem to have boosted recruitment. The latest report of the School Teachers’ Review Body (2003) shows that the intake into mathematics teacher training courses has risen by nearly half as many again since 1998/1999, albeit from a very low base. There have been increases too in the other core subjects of science (up 19 per cent), English (up 17 per cent) and modern foreign languages (up 6 per cent). As impressive as this may seem, with the exception of English, the training places taken up are still below allocations,

with shortfalls of 29 per cent in modern foreign languages, 15 per cent in maths and 9 per cent in science. 1. 14 The training targets have to be set higher than they need be because of the substantial numbers of trainees who appear either not to enter teaching or to soon leave. An analysis of published statistics (Smithers and Robinson, 2001b) showed that of every 100 entering teacher training and due to complete in 1998 only 88 did so, and just 59 were in full or part-time service in maintained schools in March 1999. Six per cent could be expected to enter later raising the overall number entering teaching to 63, but, given the high wastage in the first years, only 53 of the original 100 were likely to be teaching after three years. 1. 15 A similar calculation has been carried out by Johnson (2002) who found that 40 per cent of those who started training with a view to completing in 1998 (including the four-year BEd) had not become teachers by the following March. This component of wastage is rather higher than the DfES' estimates, but nevertheless in modelling teacher demand and supply the Department assumes losses of 25 per cent in training from BEd courses and 11 per cent from PGCE courses. It also builds in non-entry rates for successful completers ranging from 16 per cent for female primary to 30 per cent for male secondary (DfEE, 1998). Research on Teacher Retention 1. 16 Published sources thus provide a reasonable numerical description of the flows through teacher training into and out of teaching, but they cannot reveal the underlying reasons. Research on teacher supply has been dominated by studies of recruitment. Edmonds, Sharp and Benefield (2002) reviewed the literature on recruitment and retention to initial teacher training. They considered in detail the 42 articles out of 300 citations since 1986 judged to

contain the best evidence. They found that people tend to be drawn to teaching by intrinsic occupational values such as wanting to work with children, search for intellectual fulfilment and the sense of contributing to society. Male recruits were more likely to emphasize extrinsic rewards such as salary, status and approval. 1. 17 Edmonds et al found only limited research into recruitment to particular subjects or from under-represented groups such as male trainees for primary schools. But, in particular, they drew attention to the lack of research on the retention of teacher 4 trainees. The studies they did find tended to be small scale and retrospective. Our own literature review has found also only relatively few studies of the retention of teachers themselves. Quantitative Studies 1. 18 The first large-scale study of teacher resignations in England and Wales we have to report in all modesty was by ourselves (Robinson and Smithers, 1991). Through surveys and interviews we attempted to chart for the calendar year 1989 the full cycle of how many teachers were leaving, where they were going, what happened to the posts, how many applicants there were for vacancies, and how many posts were filled and on what contracts. It involved all secondary schools (including independent schools within the area) in a ten per cent sample of LEAs in England and Wales. Four hundred and seventeen schools (367 maintained and 50 independent) out of a possible 431 agreed to participate. Notwithstanding the six sweeps, 62. 4 per cent of the schools returned all questionnaires. 1. 19 The report was the first to emphasize the distinction between turnover and wastage and it found rates for teachers leaving full-time permanent contracts in maintained secondary schools of respectively 9. 6 per cent and 5. 1 per cent. About 70. 5 per cent of the

resignations fell in the summer term, with 19.2 per cent in the autumn and 10.3 per cent in the spring. The main reasons the teachers gave for leaving were work overload, poor pay, lack of respect, poor discipline and having to teach outside their subject. Sixteen per cent of the vacancies arising in maintained schools in summer 1989 could not be filled either because there were no applications or none from whom a suitable appointment could be made. Independent schools tended to fare better, with turnover of 6.3 per cent and wastage of 3.2 per cent. Nearly all vacancies in independent schools (98 per cent) were filled, and all except 6 per cent on permanent contracts. 1.20 Both turnover and wastage have increased considerably in recent years. Twelve years after the initial study we had the opportunity of again conducting a national survey of teacher resignations (Smithers and Robinson, 2001a). We found that the equivalent turnover and wastage rates for 2001 had risen to 14.5 per cent and 6.8 per cent respectively. As in the earlier study, among secondary teachers, the most frequently given reason for going was workload (58 per cent of leavers) followed this time by pupil behaviour (45 per cent). But in 2001 the new category of 'government initiatives' had to be added (37 per cent). Salary (25 per cent), stress (22 per cent) and status/recognition (20 per cent) were again frequently cited. Leavers from primary schools (not covered in the 1989 survey) mentioned pupil behaviour less often (16 per cent), but were more likely to give as reasons workload (74 per cent) and government initiatives (42 per cent). 1.21 Workload has been a recurring theme. Varlaam, Nuttall and Walker (1992) in a survey of one in three staff of all maintained schools in a ten per cent structured sample of LEAs in England and Wales (response rate 35 per

cent) found that 'having a manageable level of paperwork' was a source of dissatisfaction for 78 per cent of the respondents. 'Having a manageable workload', 'having a manageable level of stress' and 'having sufficient time for private life' also came in the top five out of 38 potential sources of dissatisfaction. The importance of workload as an issue emerges 5 again in a recent 'census' conducted for the General Teaching Council (2003) by MORI and published in The Guardian. Of the fifth or so of the teaching force who responded, impressive in number (about 70, 000) but of unknown representativeness, 56 per cent indicated that workload (including paperwork) was the major demotivating factor. This was followed by initiative overload (39 per cent), targetdriven culture (35 per cent), and pupil behaviour/discipline (31 per cent). Scott (1999) in a questionnaire survey of teachers in 114 schools in eight Local Education Authorities (LEAs), but with only a 26 per cent response rate, found that "school teaching staff are increasingly feeling inadequate in the face of rising expectations and greater responsibilities being placed upon them".

1. 22 Relative salary has been another theme. Dolton and Klaauw (1995, 1999) have applied econometric analysis to a sample of 1980 UK graduates surveyed in late 1986/early 1987. They found 66 per cent of the teachers still in the classroom after five years. They calculated a ten per cent salary increase would have raised the retention rate to 69 per cent, and a 25 per cent increase to 73 per cent. They found that BEd graduates are less likely to quit than those with more marketable degrees. Women from higher social class backgrounds and privileged schools were more likely to leave for family reasons because, the researchers suggest, the opportunity cost of having children is lower.

1. 23



Sturman (2002) has looked more generally at the quality of life of teachers and finds that it compares favourably with that of other workers. Consistent with the econometric findings she reports that teachers tend to be more dissatisfied with their salaries, but they were also more likely to complain of stress than other employees. Stress and satisfaction have been recurring issues in teacher retention (Popleton, 1991; Evans, 1998; Travers, 1996; and Troman and Woods, 2001). Qualitative Studies 1. 24 In addition to surveys, there have been a number of qualitative studies looking in depth at various aspects of teacher retention. Typical is the report of Wilkins and Head (2002) based on case studies of 18 teachers. They found the most common causes of dissatisfaction to be heavy workload, a poor working relationship with a superior and being out of tune with the thrust of recent policy thinking in education. Focus groups conducted with teachers in 29 schools by IRS Research (2000) for the School Teachers' Review Body identified the status of teachers, overall pay levels and workload as the main recruitment and retention issues requiring action at national level. 1. 25 An early study by Gooding (1989) explored the likelihood of former teachers returning to the classroom. She interviewed 21 contacted through four teacher training colleges and found that not one intended to go back, at least not in the foreseeable future. Of the 21, eight were still involved in education but in posts they regarded as preferable to classroom teaching (as inspectors, administrators, and teaching in independent schools and other sectors). Six were undertaking further study including retraining for other occupations; four were mainly looking after their children; and three were in other employment - as a priest, in public relations and self-employed.

Gooding recommended that in any modelling of teacher supply a clear distinction should be drawn between teachers definitely out of the system and 6 those who are likely to return. Her study suggested that returners would comprise only a small proportion of the 'pool of inactive teachers', as it had become known. Some leavers, however, could be encouraged to return through more support during career breaks, job sharing and reduced timetables for those re-starting.

Regions and Subjects 1. 26 National studies have found differences with region and subject. Turnover and wastage rates tend to be higher in London and the South East than in other parts of the country. Hutchings, Menter, Ross, Thomson and Bedford (2000) investigated teacher supply and retention in six London boroughs mainly through a census of all teachers in the schools (response rate 35 per cent). They reported that the demographic profile of London teachers was different from the rest of the country, with more young short-term teachers. Forty per cent were under 35 and most intended to stop teaching in London within five years. They argued that the mix of young transient teachers - teachers who spend a few years at the beginning of their careers in the capital and overseas teachers seeing something of the world - and long-term teachers had got out of balance. Cunningham (2000) in a supplementary report highlighted as major push factors the cost of living in London and the higher pay differential with respect to equivalent professions.

1. 27 The School Teachers' Review Body commissioned IRS Research (2000) to take a close look at the recruitment and retention of classroom teachers in London. It conducted case studies of 12 schools in London LEAs and 12 outside. All but one of the London schools was facing some difficulties in recruiting teachers

compared with half those outside. In the capital, housing costs was the most commonly cited negative factor in retention, but outside it was workload.

This was borne out by focus groups of teachers, 17 in London and 12 outside. In London, location (particularly housing costs), pay and pupil characteristics were identified as the main reasons why staff might leave a school. Outside London, the focus groups were most likely to cite promotion.

1. 28 Not only are there differences with location, but also subject.

Professional bodies like the Institute of Physics (1999) have long campaigned to increase the number of specialist teachers in their subjects. But, as regards the physical sciences, the situation may be getting worse. Blackwell, Lynch and Jones (2001) have drawn on the Office of National Statistics longitudinal study based on a one per cent sample of the population in England and Wales in the 1971, 1981 and 1991 censuses to follow the flows of men and women with science, engineering and technology (SET) degrees into and out of teaching. They found that the profession relies heavily on those born between 1947 and 1956, many of whom are due to retire in the next decade. Between 1981 and 1991 while men moved between teaching and other SET employment, women were more likely to move to full-time housework. Teaching, they suggest enabled women with SET degrees to combine professional and family life. But women's expectations are now more like men's and this will reduce the pool of potential returners to science teaching. 1. 29 Languages is another shortage subject and Pachler (2001) has reviewed the recruitment, training and retention of teachers of German in the UK. He concludes that " for a complex combination of reasons, unless urgent action is taken, the future for German as a foreign

language in the UK as an integral part of the compulsory 7 education of pupils aged 11-16 is at risk". Among the reasons for concern was teacher dissatisfaction. The chief complaints were workload, bureaucracy, poor pupil behaviour - which puts a strain on teacher-parent relations - and the accountability culture which leads to tension between classroom teachers and middle managers. He suggests that teachers quit more to get out than to move on to other things, citing Ross (2001) who found that only 27 per cent of the teachers leaving schools in London would be earning more in their new posts. Policy-Related Research 1. 30 The Government responded to the frequently expressed concerns about teacher workload when, in 2001, it commissioned PriceWaterhouseCoopers (PwC) to conduct a review. Teachers were benchmarked against other occupations and it was found that " teachers and headteachers work more intensive weeks than other comparable managers and professionals. On an annual comparison, teachers work at similar levels to other managers and professionals. " The main issues to emerge in fieldwork in over 100 schools, and discussions with national and local bodies, were the burden of documentation, the pace and manner of change of government initiatives, the pressure of rising expectations, deteriorating pupil behaviour and lack of parental support. 1. 31 The PwC report was referred to the School Teachers' Review Body (2002) which recommended that teacher workload, which it found to be averaging 52 hours a week in term time, be tackled. The Government brought forward a series of proposals in Time for Standards: Reforming the School Workforce (DfES, 2002b) which are currently being implemented including the establishment of an Implementation Review Unit (DfES, 2003). Increased

support for teachers through teaching assistants is a major plank of that reform. The National Foundation for Educational Research (2002) has reviewed the evidence on the impact of teaching assistants. They conclude that while it is generally positive, the preparing and planning teachers will have to do to make the most effective use of assistants could increase workload. Research in Other Countries 1. 32 Many countries are experiencing teacher shortages, but Stoel and Thant (2002) suggest from their study of teachers in nine industrialized countries that the United States and England are the exceptions in suffering acute retention problems, particularly of the newly trained. They report that while 30 per cent of US teachers leave within five years, in Germany it is less than five per cent, in Hong Kong less than 10 per cent, and in France and Portugal it is negligible. Stoel and Thant attribute the differences to the relative conditions. US teachers, for example, earn less than other professionals, while in Portugal there are few opportunities for teachers outside the classroom. Polls indicate that the American public holds the teaching profession in low esteem and respect, but Japan's teachers come from the top five per cent of high school graduates. 1. 33 Retention has become the focus of teacher supply in the United States (Fetler, 1997; Stinebrickner, 1998; McCreight, 2000; Hanushek, Kain and Rivkin, 2001). The National Commission of Teaching and America's Future (NCTAF) (2002) has recently issued a report suggesting that enough teachers are trained, but the problem is high attrition rates. It estimates that almost a third of America's teachers leave sometime during their first three years, and the rate is even higher in low-income communities. Attrition rates are highest in special education, mathematics and science, each of which loses about a

fifth of their teachers annually. NCTAF identified four main factors contributing to teachers leaving: salaries, working conditions, preparation (for which it is something of a pressure group) and mentoring support in the early years of teaching. 1. 34 Murphy and Novak (2002) cite evidence that nine per cent of new teachers in the US quit during their first year. They suggest that this is due to such factors as frustration with the working environment, the pursuit of other professional opportunities and for personal reasons. But they also draw attention to another aspect of teacher retention which resonates with the UK: the ageing teacher population. Murphy and Novak suggest that almost half the teachers in some subjects and districts will become eligible for retirement in the next ten years. 1. 35 Australia also has to contend with an ageing teacher force (Senate Employment, Education and Training Reference Committee, 1998). Preston's (2000) projections reveal that 58 per cent will have been over 40 in 2002. Her analyses also show that only a third of those with secondary teaching qualifications aged 55-59 are still teaching, reflecting a tendency to retire early. Nearly forty per cent of the qualified aged 25-29 were not teaching suggesting that Australia may be similar to the United States and England in having high early drop-out. A factor in this is the burgeoning of international recruitment of young teachers from Australia to teach in countries like England. While this is not new and many have returned to teach in Australia after a few years, it was unclear whether re-entry would continue at its former levels. Purpose 1. 36 There is thus much that is already known about teacher retention, both in this country and abroad, and one may wonder about the need for another study. But there is real point for at least two reasons. First, data about

education dates rapidly. There is always a need, therefore, for accurate and up-to-date information on the current situation. Secondly, as extensive as the emerging research on teacher retention has been, it has been largely descriptive. It is also important to get behind the figures and tease out the underlying motivations of teachers leaving the profession. 1. 37 There were thus two main purposes for the present investigation. First, to present an accurate up-to-date picture of how many teachers are leaving and where they are going with a view, in part, of establishing whether things are generally getting better or worse. And, secondly, to go beyond surface description to reveal any patterns that might be at the root of teachers' decisions to leave. 1. 38 This report sets out the main findings of that study. In the next chapter we describe in detail our methods. This is supported by an appendix which examines the representativeness of the samples in relation to population characteristics. Having set out our approach, in Chapter 3 we report the total number of resignations from schools in 2002, irrespective of whether the teacher was moving to another school or leaving the profession. In Chapter 4, we look in detail at the destinations so as to be able to distinguish the within-schools moves (of various kinds) from other destinations. Our estimates for turnover and wastage for 2002 are reported in Chapter 5 and compared to the differing estimates for previous years offered by the DfES and the Employers' Organisation for Local Government. As well as trying to determine the trends in turnover and wastage, we also look at how they vary by region and gender. 1. 39 The remaining chapters focus on the leavers. Chapter 6 compares those leaving with those moving to other schools. Chapter 7 explores in detail the reasons for leaving and the

underlying factors in different groups. In Chapter 8, we consider how likely the different kinds of leavers are to return to maintained schools to teach full-time, part-time or on supply. Those leaving the profession at the end of the spring and summer terms 2002 were followed up in January to see how they viewed their decisions in retrospect. Chapter 9 reports the findings of that follow-up study.

1. 40 The research has been undertaken to increase understanding, not to promote particular policies. Nevertheless, from the characteristics of those who are leaving, where they are going and their reasons, it is possible to identify some policy pointers and we set these out in Chapter 10.

10 2. Methods

2. 1 The population studied was teachers leaving primary, secondary and special schools in England during the calendar year 2002. There were three layers to the basic design: - First, a survey of schools was conducted to coincide with the three resignation dates during the year to discover how many teachers were resigning and where they were going. - Secondly, the resignees in each of these surveys who were leaving the profession were sent questionnaires. - Thirdly, a sub-sample of those leavers was interviewed.

2. 2 Through representative samples of schools, representative samples of resignees were identified from whom, in turn, it was hoped to achieve representative samples of leavers from the profession.

2. 3 In addition, a follow-up study was conducted in January 2003 of those who had indicated they were leaving the profession in the spring and summer terms of 2002 to ascertain whether in retrospect they thought they had done the right thing in leaving, what they had intended to do and whether they were doing it.

Sampling and Participation

Schools 2. 4 Initial samples, stratified by local education authority (LEA), were drawn randomly.



These initial samples comprised 4, 541 primary schools (1 in 4), 1, 774 secondary schools (1 in 2) and 294 special schools (1 in 4). Letters inviting schools to participate were sent out at the end of January 2002. Those agreeing were sent questionnaires close to each of the three resignation dates of 28 February, 31 May and 31 October 2002. Table 2. 1 shows the response rates. Table 2. 1: School Response Rates Participating Primary1 Secondary2 Special3 Total Schools N % N % N % N % Agreed 2, 163 100. 0 792 100. 0 160 100. 0 3, 115 100. 0 Spring Survey 1, 922 88. 9 602 76. 0 145 90. 6 2, 669 85. 7 Summer Survey 1, 893 87. 5 595 75. 1 139 86. 9 2, 627 84. 3 Autumn Survey 1, 861 86. 0 600 75. 8 141 88. 1 2, 602 83. 5 All Three Surveys 1, 578 73. 0 448 56. 6 120 75. 0 2, 146 68. 9 1. Includes middle deemed primary. 2. Includes middle deemed secondary. 3. Includes non-maintained. Resignations 2. 5 The questionnaire asked the schools to list those teachers leaving during, or at the end of, the term. The total numbers of teachers recorded as leaving schools - henceforward referred to as resignations or resignees - are shown in Table 2. 2. 11 Table 2. 2: Resignations Resignations Primary1 Secondary2 FT PT FT PT Special3 Total FT PT FT PT Spring Survey 471 130 543 78 37 12 1, 051 220 Summer Survey 1, 839 400 2, 820 478 92 19 4, 751 897 Autumn Survey 503 113 596 119 39 8 1, 138 240 Total 2, 813 643 3, 959 675 168 39 6, 940 1, 357 Totals FT+PT 3, 456 4, 634 207 8, 297 1. Includes middle deemed primary. 2. Includes middle deemed secondary. 3. Includes non-maintained. Leavers 2. 6 The next stage involved sending a questionnaire to each resignee leaving teaching in the maintained sector (henceforward referred to as leaver). The information provided by the schools on resignations did not include the

names of the resignees, but did give details of their posts and their destinations. A school's return was photocopied and leavers, except those reaching normal-age retirement or taking a break for maternity (where the reasons were thought to be obvious), were highlighted. 2. 7 The highlighted sheet was sent back to schools with a request to hand on to each identified leaver an envelope containing a letter, a questionnaire and a prepaid reply.

Table 2. 3 shows responses to the leavers' questionnaire. Table 2. 3: Leavers

Primary <sup>1</sup>	Secondary <sup>2</sup>	Special <sup>3</sup>	Total	Leavers	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	Spring		
106	30	102	15	3	5	211	50	Summer Survey	328	69	491	102	13	1	832		
172	Autumn Survey	98	37	138	29	7	4	243	70	Total	532	136	731	146	23	10	1,
286	292	Totals	FT+PT	668	877	33	1,	578	1.	Includes	middle	deemed					

primary. 2. Includes middle deemed secondary. 3. Includes non-maintained.

Interviews 2. 8 The leavers questionnaire asked if the leaver would be willing to be interviewed and, if so, to give their name and a contact telephone

number. Three-fifths (60. 2 percent) of those returning questionnaires did so.

Three hundred from primary and secondary schools (including middle) were chosen for interview to reflect destinations, type of contract and resignation

date. If the person could not be contacted after persistent attempts then the nearest equivalent was substituted. Twice as many secondary leavers as

primary were interviewed to take account of the more varied and specialised nature of teaching in this phase. In addition, all of the relatively few offers

from leavers from special schools to be interviewed were taken up. 12 2. 9

Table 2. 4 shows the interviews conducted. The design was carried through completely, except for one secondary interview which did not record

properly and was not used. Table 2. 4: Interviews Primary<sup>1</sup> Secondary<sup>2</sup>

Special3 Total Resignations FT PT FT PT FT PT FT PT Spring Survey 10 0 18 2  
 0 0 28 2 Summer Survey 65 6 122 17 2 0 84 23 Autumn Survey 18 1 35 5 2  
 3 55 9 Total 93 7 175 24 4 3 272 34 Totals FT+PT 100 199 7 306 1. Includes

middle deemed primary. 2. Includes middle deemed secondary. 3. Includes non-maintained. Follow Up 2. 10 Spring and summer leavers who provided their name (whether interviewed or not) were sent a follow-up questionnaire in January 2003. Although we had their names we did not have their addresses. The questionnaires were, therefore, sent in stamped envelopes bearing the leaver's name to the schools with a request that the letter be sent on to his or her last known address. Table 2. 5 shows the response rates. Table 2. 5: Follow Up Response Returns Phase Sent Out N % Primary 261 151 57. 9 Secondary (inc Middle) 365 240 65. 8 Special 11 4 36. 4 Total 637 395 60. 0 2. 11 The overall response is very good especially as most of those travelling, going to teach abroad or returning to work in their own country will have left their last known address and not be contactable.

Instruments 2. 12 As can be inferred from the description of the overall design of the study, data was gathered by four main instruments: a schools questionnaire, a leavers questionnaire, an interview schedule, and a follow-up questionnaire. Schools Questionnaire 2. 13 The schools questionnaire was a folded four-sided sheet the middle two pages of which were occupied by a large chart on which the school was asked to list (without giving names) those teachers leaving that term. For each leaver the school was asked to indicate post, whether full-time or part-time, whether permanent or fixed- 13 term, gender, ethnic background, and destination in 17 categories ranging from going to teach full-time in another state school to not known. Sixteen

lines were provided on the chart. When occasionally a school had more than 16 leavers in the term it was asked to photocopy the blank chart and continue listing as from a seventeenth row. 2. 14 The front page of the questionnaire asked for some establishing details, such as category of school, type of school, gender of pupils, number on roll, how many teachers were leaving and whether the schools saw this as increasing or decreasing. On the back page, headteachers (or their representatives) were asked to give the numbers of staff employed (excluding supply), whether they had attempted to persuade any of the leavers to stay, and to offer a general comment, if they wished, on how turnover was affecting their school. There were variants for primary, secondary and special schools to take account of the different school types and the more specialised nature of teaching in the secondary phase. The amount of establishing information requested in the summer and autumn surveys was reduced to what was needed to bring the returns for each school together. Leavers Questionnaire 2. 15 The leavers questionnaire consisted of five pages. The first two asked for background information, such as type of contract, gender, age, nationality, ethnic origin, teaching qualification, pay scale, additional allowances, years teaching, date of first post and any breaks in service. The secondary questionnaire differed from the primary and special questionnaires in that it began by asking for details of main teaching subject and other teaching subjects. 2. 16 Pages 3 and 4 explored destinations and reasons. Respondents were first asked to tick a box which best described their destination and then to write a few lines giving more information. Similarly, they were asked to tick boxes to give a general indication of their reasons for leaving and then explain in

more detail. 2. 17 The fifth page asked when they had first thought seriously about leaving their current post, when they finally decided to leave, and what, if anything, would have induced them to stay. They were then asked to tick boxes to indicate the likelihood of their returning to teaching in a maintained school, full-time, part-time and as a supply teacher, in the next five years. Finally, they were asked if they would be willing to be interviewed and, if so, to give their name, a contact telephone number and the best time to ring. Interviews 2. 18 Interviews were conducted by a team of ten experienced interviewers, including ourselves and another member of the CEER core team, Louise Tracey. They were fully briefed on the purposes of the study and given the questionnaires returned by the interviewees. The interviewers worked to a printed schedule exploring, systematically, the post vacated, the route by which the leaver had got into teaching, the school they were leaving, their destination, their reasons for leaving, and the likelihood of their returning. The approach was, in each case, to start with the 14 questionnaire responses, partly as a check on their accuracy, but mainly as a basis for probing in depth. 2. 19 The interviews were (with the permission of the interviewee) taped, and then transcribed by an experienced team of four to provide a written record of the interview. Follow-Up Study 2. 20 The follow-up study was designed mainly to discover what the leavers were doing and how they viewed their decisions, in retrospect, 10 months after resigning in the case of the spring leavers, and 6 months in the case of the summer leavers. The questionnaire began with five establishing questions: name, name of the school they had left, gender, age and type of contract. The destinations questions, both tick box and open-ended, from the leavers

questionnaire were then repeated, with a re-phrased rubric to fit the present circumstances. The leavers were asked if the destination was the same as they had intended when they resigned and to tell us more if it was not. 2. 21 Similarly, the questions on reasons for leaving and likelihood of returning were repeated. The leavers were asked whether they thought they had made the right decision in leaving the particular school and teaching in maintained schools generally. They were further asked what, if anything, would encourage them to return to teaching in a maintained school. Analysis 2. 22

The sampling fractions were arrived at with the intention of securing at least five per cent of the population of primary schools and ten per cent of the populations of secondary schools and special schools responding to all three surveys. Structured Samples of Schools 2. 23 The anticipated response rate was, in the case of primary schools, greatly exceeded. This led to us to base the analyses on a 7. 5 per cent structured sample rather than the planned 5 per cent. A ten per cent structured sample of secondary (including middle) schools was devised according to plan. Although there were sufficient special schools overall to have constructed a ten per cent sample, responses were rather patchy by region and a 7. 5 sample was opted for as more representative. The composition of these samples by region is shown in Table 2. 6. Primary Schools 2. 24 Structuring was by region and number of pupils on roll. Where more schools were available than were required for any cell, the schools to be included were randomly selected by a computer programme. Where too few schools were available in any one cell, compensation was from neighbouring cells keeping the row and column totals the same. Tables 2. 7 and 2. 8 show how the primary schools sample

compared with the national distributions by region and school size. Appendix A shows that the sample also corresponded very closely with the national distributions in terms of 15 type of school (infant, first, infant junior etc) and school status (community, voluntary aided etc.). Table 2. 6: School Samples by Region

Region	Primary	Middle	Secondary	Special	Total
North East	74	6	14	5	99
North West	203	49	16	268	599
Yorks & Humber	147	1	33	8	189
East Midlands	131	3	27	7	168
West Midlands	145	4	39	11	199
East of England	160	9	35	9	213
Inner London	45	-	11	1	57
Outer London	88	-	28	10	126
South East	206	3	49	16	274
South West	150	4	31	4	189
Total	1,349	30	316	87	1,782

2. 25 Inspection of the questionnaire returns revealed rather different patterns for secondary schools per se and middle schools deemed secondary. It was, therefore, decided to analyse them separately. Of the 448 secondary schools responding on all three occasions, 57 were middle deemed secondary, leaving 391 secondary schools as such.

Table 2. 7: School Samples Compared To National Distributions by Region<sup>1</sup>,

Region	%S	%N	%S	%N	%S	%N	%S	%N
North East	5.5	5.4	20.0	20.3	4.4	5.1	5.7	5.8
North West	15.0	15.0	-	-	15.5	15.2	18.4	17.2
Yorks & Humber	10.9	10.8	3.3	3.0	10.4	10.1	9.2	9.0
East Midlands	9.7	9.7	10.0	10.0	8.5	9.3	8.0	7.5
West Midlands	10.7	10.7	13.3	14.3	12.3	11.9	12.6	11.4
East of England	11.9	11.7	30.0	29.0	11.1	10.8	10.3	9.1
Inner London	3.3	4.0	-	-	3.5	4.3	1.1	6.2
Outer London	6.5	6.5	-	0.7	8.9	8.7	11.5	7.5
South East	15.3	15.2	10.0	12.0	15.5	15.1	18.4	17.7
South West	11.1	11.1	13.3	10.7	9.8	9.5	4.6	8.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1. %S refers to percentage of sample and %N to percentage of national distribution. 2.

National distributions taken from Statistics of Education. Schools in England, 2002, p. 18-19. 2. 26 The samples of middle and secondary schools were structured in relation to cross-tabulations of the school populations by region and number of pupils on roll. Tables 2. 7 and 2. 8 show how they compare with the national distributions. Appendix A shows that the secondary sample also closely matched the national distributions in terms of gender (girls', boys', coeducational), age range (up to 16, up to 18), specialism (technology, languages etc) and status (community, voluntary aided etc). 16 Special Schools 2. 27 No national cross-tabulation of special schools by region and size was available, so the sample was arrived at solely on the basis of region. The 120 schools who had replied on all three occasions were randomly reduced by computer programme to the required 87. Table 2. 7 (on the previous page) shows how it compares. Table 2. 8: Structured Samples Compared To Populations by School Size<sup>1, 2</sup>

	Primary	Middle	Secondary	Number on Roll	%S	%N	%S	%N	Number on Roll	%S	%N
Up to 100	15. 0	101 to 200	29. 9	201 to 300	31. 0	301 to 400	15. 0	401 to 500	6. 8	501 or more	2. 2
15. 1	6. 7	6. 0	29. 9	31. 0	10. 0	10. 3	15. 0	23. 3	24. 0	6. 8	30. 0
28. 3	2. 2	30. 0	31. 3	Up to 400	2. 8	2. 7	401 to 700	17. 4	17. 4	701 to 1000	33. 5
33. 6	1001 to 1300	27. 5	27. 4	1301 to 1600	14. 6	14. 1	1601 or more	4. 1	4. 8	Total	100. 0
100. 0	100. 0	100. 0	100. 0	Total	100. 0	100. 0					

1. %S refers to percentage of sample and %N to percentage of national distribution 2. National distributions taken from Statistics of Education. Schools in England, 2002, p. 43. Resignations from Sample Schools 2. 28 The sample of 1, 782 schools received a total of 5, 245 resignations from teachers during 2002, as shown in Table 2. 9. This represents an average of



2. 71 full-time teachers resigning and 0. 45 part-time teachers resigning per school. There were, of course, given the different average school sizes, big differences with phase. For full-time teachers there were, during 2002, 1. 43 resignations per primary school, 2. 9 resignations per middle school, 7. 14 per secondary school, and 1. 1 per special school. Table 2. 9: Resignations from Sample Schools

	Primary	Middle	Secondary	Special	1	Resignations	FT	PT						
FT	PT	FT	PT	FT	PT	Spring Survey	322	91	11	0	313	51	18	1
FT	PT	FT	PT	FT	PT	Summer Survey	1,263	283	60	6	1,613	270	55	13
FT	PT	FT	PT	FT	PT	Autumn Survey	350	78	16	1	329	71	22	8
FT	PT	FT	PT	FT	PT	Total	1,935	452	87	7	2,255	392	95	22
FT	PT	FT	PT	FT	PT	Totals FT+PT	2,387	94	2,647	117	1.			

Includes non-maintained. 2. 29 Scaling up from the sampling fractions (7. 5 per cent for primary and special schools, and 10 per cent for middle and secondary), we can see what these resignations mean in population terms. During 2002, we estimate that primary schools in England received a total of 31, 830 resignations (25, 800 full-time, 6, 030 part-time), middle schools received 940 (870 full-time, 70 part-time), secondary schools 26, 470 (22, 550 full-time, 3, 920 part-time) and special schools 1, 560 (1, 267 full-time, 293 part-time). In total, this comes to 60, 800 resignations (50, 487 from full-time posts, 17 10, 313 from part-time posts). But it must be borne in mind that this is not loss to the profession; some of the teachers will have been moving to other schools. 2. 30 Table 2. 10 vindicates another aspect of the design (based on the findings of Robinson and Smithers, 1991, and advice from LEAs) which is that about 70 per cent of the resignations were anticipated to take place in the summer, the end of the school year. Resignations were, however, more evenly distributed between the spring and autumn than the 10/20 split that had been assumed. Table 2. 10: Total

Resignations from Sample Schools Resignations Full-time Part-time Total N %  
 N % N % Spring Survey 664 15. 2 143 16. 4 807 15. 4 Summer Survey 2, 991  
 68. 4 572 65. 5 3, 563 67. 9 Autumn Survey 717 16. 4 158 18. 1 875 16. 7  
 Total 4, 372 100. 0 873 100. 0 5, 245 100. 0 Leavers from Sample Schools 2.

31 Table 2. 11 shows the replies received in response to questionnaires which were sent to schools to pass on to those leaving teaching in maintained schools. Table 2. 11: Leavers from Sample Schools Primary Secondary<sup>1</sup> Special<sup>2</sup> Total Leavers FT PT FT PT FT PT FT PT Spring Survey 74  
 17 59 9 2 2 135 28 Summer Survey 248 51 304 68 7 0 559 119 Autumn  
 Survey 68 28 92 19 6 4 166 51 Total 390 96 455 96 15 6 860 198 Totals  
 FT+PT<sup>3</sup> 488 557 21 1, 066 1. Includes middle deemed secondary 2. Includes non-maintained. 3. 8 did not indicate whether part-time or full-time, 2

primary and 6 secondary. Response Rate 2. 32 The 1, 578 returns from leavers (from all schools, not just those in the structured samples) represent 37. 7 per cent of the questionnaires sent out. The response rate is, however, higher than this for two reasons. First, 212 replies were received from teachers who had been listed by the school as leaving the profession, but who, in fact, were moving to other schools. Their questionnaires have not been included in the analyses. We also received 48 telephone calls or letters from headteachers or their representatives saying they were unwilling to pass on questionnaires to particular leavers because of the circumstances of their going (for example, chronic illness, disciplinary reasons). In both cases, the actual numbers known to us are likely to be underestimates (for example, teachers moving to another school may have not returned a questionnaire because they thought it was no longer relevant; not all

headteachers who did not pass on questionnaires for particular reasons will have 18 notified us). Nevertheless, taking the figures at face value our estimate of the response rate to our leavers survey is 43.8 per cent.

Statistical Analysis 2.33 Questionnaire data were coded and tagged by an experienced team of three according to printed coding frames. Our computer specialist, Mandy-Diana Coughlan, took the lead in the compilation of the datasets, inputting the coded information into excel files and verifying them.

2.34 The datasets were then transferred into files of the Statistical Package for the Social Sciences Version 10. For analysis by descriptive statistics, missing cases were excluded. In multivariate analyses, however, isolated missing cases were replaced by the mean or median of the particular distribution. This will have reduced the variance, but was preferable to losing the other information. The analyses were run by Mandy-Diana Coughlan and ourselves.

19 3. Resignations 3.1. 3.2. Our research design is based on the assumption that structured samples of schools will yield representative samples of leavers. The questionnaires completed by the