Research Report DCSF-RR026

Secondary School Curriculum and Staffing Survey 2007

Maria Charles, Alison Marsh, Anne Milne,
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National Foundation for Educational Research

department for
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The NFER project team for this work included:

Maria Charles	Project director
Alison Marsh	Project leader
Ceril Morris	Project researcher/data analyst
Rose McClure	Lead clerical support
Joy Fullilove and Allison O'Hare	Project administration
Emma Scott	Project statistician
Yarim Shamsan	Project statistician

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1 Executive summary

Introduction

The Secondary School Curriculum and Staffing Survey (SSCSS) has been carried out every four to six years since 1965. The 2007 survey was carried out by the National Foundation for Educational Research (NFER), on behalf of the Department for Children, Schools and Families (DCSF).

Aim

The aim of this survey was to create a picture of the secondary school teaching workforce in terms of teachers' qualifications and the curriculum subjects they taught. It was important that the results of the survey were comparable with those produced in the last SSCSS which was carried out in 2002, in order to observe change over time. Teachers' post A-level qualifications were matched to the subjects they taught to demonstrate the proportions of teachers with qualifications relevant to the subjects they delivered in the classroom. Teachers' highest post A-level qualifications were selected against each subject they taught, counting a degree or a higher degree as the highest followed by BEd, PGCE, Certificate in Education and then other types of post A-level qualification. The results of the survey will be used to inform policy and to set teacher training places by curriculum subjects.

Key findings

- Ninety-six per cent of teachers' highest post A-level qualification was a degree, a higher degree, a BEd, or a PGCE;
- In thirteen of the twenty nine subject categories used in the analysis of the survey data, over 70% of teachers held a post A-level qualification in a subject relevant to the subject they taught;
- The proportions of teachers with post A-level qualifications in the subjects they taught varied across subjects from less than 20% in some subjects (e.g. Careers Education at 7%) to over 80% in others (e.g. Music at 87%);
- The subjects with the highest proportions of post A-level qualified teachers were Chemistry, Biology and Physics[1] where 90% and over of teachers had post A-level qualifications in relevant subjects; and
- Analysis of the qualification subjects of all science teachers demonstrated the relative proportions of science[2] specialisms within schools, showing that 32% of specialisms were in Biology, 22% were Chemistry, 22% were Physics, 16% were Other Science and 8% were non-science.

[1] Teachers qualified in Combined/General Science were treated as qualified to teach Biology, Chemistry and Physics. Teachers qualified to teach Biology, Chemistry and Physics were treated as qualified to teach Combined / General Science.

[2] This was not applied to the analysis of science specialisms where more specifically related subjects were used to assign a specialism.

- The 2007 survey results showed a ten percentage point increase overall in the proportions of teachers with degrees or higher degrees in the subjects they taught compared to the 2002 survey. The proportions of teachers with Certificates in Education and BEds were four and three percentage points less, respectively, in 2007 compared to 2002. Overall there were higher proportions of teachers with relevant post A-level qualifications in the subjects they taught in 2007 compared to 2002 (by five percentage points across all subjects).
- Across all subjects, the proportion of lessons being taught by teachers with relevant post A-level qualifications was slightly lower in 2007 (79%) than it had been in 2002 (83%).
- In most subjects teachers under 40 years of age were more likely to have post A-level qualifications that related to the subjects they taught than older teachers.
- In most subjects, Grammar schools had higher proportions of teachers with post A-level qualifications relevant to the subjects they taught than in other types of school.
- In more than half of the subject categories, schools with the smallest numbers of pupils eligible for free school meals had higher proportions of teachers with relevant post A-level qualifications than those with the highest numbers. Across all subjects the proportion of teachers with no relevant post A-level qualifications in the subjects they taught was 35% in the lowest quintile of free school meals entitlement compared to 44% in the highest quintile.
- There were higher proportions of Advanced Skills Teachers with relevant post A-level qualifications in the subjects they taught than other types of teacher. QTS classroom teachers and post-threshold teachers delivered the majority of periods in schools, and QTS classroom teachers had higher levels of post A-level qualifications than post-threshold teachers.
- Across all subjects there were higher proportions of teachers with degrees in their taught subjects in the exam years (years 9, 11, 12 and 13) compared to the non-exam years (years 7, 8 and 10). The proportions of periods taught by teachers with relevant post A-level qualifications in the subjects they taught was 81% in the exam years, compared to 78% in the non-exam years.
- In 2007, there was evidence that a large number of schools had teachers with qualifications that related to some of the new Diploma subjects. Over 70% of schools had at least one teacher with a post A-level qualification in subjects related to seven of the first fourteen lines of learning.

Methods

Data were collected on teachers' age, gender, role in school, full and part time status, qualifications, subjects taught and numbers of periods taught by subject.

Survey forms were sent to a sample of 438 maintained secondary schools in England. Of those, 327 schools submitted completed forms. Teacher data were collected from 14,137 teachers from these schools, which on average represented a 66% response rate at teacher level. The sample was representative of the population in terms of key school factors and of teachers' roles in school. Schools involved in the survey were offered a range of different methods for returning their data. This was put in place to make it as easy as possible for schools to participate and to give the opportunity to provide data that was already held electronically in school management or other systems. The vast majority of schools (90%), however, opted to return their data on paper forms completed by each teacher. This was probably the easiest option as most schools did not hold all of the required data in a single electronic system.

The survey forms asked for teachers' role in school based on the following categories; headteacher, deputy headteacher, assistant headteacher, advanced skills teacher, excellent teacher, post-threshold teacher, QTS classroom teacher and non-QTS classroom teacher[3]. The subjects that teachers' taught and the subjects of their qualifications were collected in open format. Both subjects and qualifications were coded, linked and categorised[4] to form comparisons with the results of the 2002 survey.

The data collected from the survey was only from a sample of teachers. To represent the national figures and to remove any biases due to sample design, it was necessary to produce weighting factors to represent the national population. The grossing took into account school type and school size. The grossing method used was modelled on the method used in the 2002 survey analysis.

In order to present a full picture of the whole secondary teaching workforce including all full and part time teachers, the 2007 analysis was based on full time equivalent numbers of teachers. However, where comparisons have been made with the results of the 2002 survey, the analysis only includes full time teachers, as was the case in 2002.

The findings in this summary are based on the analysis of full and part time teachers, apart from where comparisons have been made with the 2002 survey results where analysis of full time teachers only has been quoted. All differences between the 2007 and the 2002 results quoted in this summary were statistically significant.

[3] Non-QTS classroom teachers were teachers who had not yet gained qualified teacher status and post-threshold teachers were identified as a separate group from QTS classroom teachers in this survey.
[4] The links between the subject and qualification codes are given in Annex 5.

Discussion of findings

The qualifications of the teaching workforce

Eighty-one per cent of teachers had a degree or a higher degree as their highest post A-level qualification. Twelve per cent had BEds and 3% had a PGCE but not a degree in the same subject. Only 3% had a Certificate of Education and 2% had other types of post A-level qualification. Only the highest qualification was counted in these percentages, with degree or higher degree counted as highest, followed by BEd, then PGCE, then Certificate in Education and then other post-A level qualifications.

Younger teachers were more likely to have degrees than their older colleagues. For example, 94% of teachers under the age of 25 had a degree compared to 64% of teachers between the ages of 50 to 54. There were noticeably smaller proportions of teachers with BEds amongst teachers under 40 than older teachers. Certificates in Education were mainly held by teachers over 44, reflecting the time when these qualifications were discontinued.

There were differences in the type of post A-level qualifications amongst teachers with different roles in school. Headteachers and QTS classroom teachers had the highest proportion of degrees when compared to other teachers. Post-threshold teachers had the lowest proportion of degrees compared to other roles in school and higher proportions with Certificates in Education than others. This was consistent with the older age profile of post-threshold teachers and that larger proportions of younger teachers were coming in to the profession with degrees than their older colleagues. Non-QTS classroom teachers had the highest proportions of teachers with ‘other’ post A-level qualifications.

The qualifications of teachers in subjects taught

In 23 out of 29 subject categories, the majority of teachers with a post A-level qualification in the subject they taught held a degree or higher degree in that subject. The proportions of teachers holding BEds and PGCEs were relatively low compared to those holding a degree, however there were markedly higher proportions of these in some subjects. Higher proportions of teachers with BEds were observed in Design and Technology (12%) and Physical Education (25%) compared to an average of 7% across all subjects. In Design and Technology this was perhaps related to there being a relatively high proportion of older teachers in the subject and that older teachers tended to hold more BEds. Physical Education had a young age profile of teachers but still had high proportions of teachers with BEds, indicating perhaps that BEds were a more popular route into teaching this subject compared to other subjects. Higher proportions of teachers with PGCEs (but no degree in the subject) were seen in Mathematics (14%), Combined and General Science (15%) and Art and Design (15%) compared to 7% across all subjects.

The subjects with the highest proportions of post A-level qualified teachers were Chemistry, Biology and Physics all of which had over 90% of teachers with a post A-level qualification in the subject. English, Mathematics, Combined and General Science, German, French, Geography, History, Music, Art and Design and Physical Education had between 70% and 89% of teachers

with relevant post A-level qualifications. Some subjects had much lower proportions of post A-level qualified teachers, including ICT with 41%, Religious Education with 47%, Business Studies with 50% and Design and Technology with 53%. Only 7% of teachers teaching Careers Education[1] and 5% of teachers teaching Citizenship[5] held any related post A-level qualifications.

Overall the proportion of teachers holding some kind of post A-level qualification in the subjects they taught was five percentage points higher in 2007 than in 2002. There were changes in terms of the proportions of teachers holding different types of post A-level qualification. Overall there was an increase in the proportion of teachers with degrees by ten percentage points across all subjects. There was a three percentage point decrease in the proportions of teachers holding BEds and a four percentage point decrease in the proportions of teachers holding Certificates in Education across all subjects.

In some subjects there were marked differences between the survey results of 2007 and 2002, in terms of different levels of post A-level qualification. In Physical Education the proportion of teachers with degrees in related subjects rose to 50% in 2007 compared to 25% in 2002. In Design and Technology the overall proportion of teachers with a post A-level qualification decreased with 46% in 2007 compared to 76% in 2002. The proportion of teachers with Certificates in Education in Design and Technology had fallen to 2% in 2007 from 21% in 2002, which linked to a considerable drop in the proportion of teachers in the over 50 age group.

Qualifications by background factors

There were higher proportions of post A-level qualifications amongst younger teachers than older teachers. Younger teachers were more likely to hold a degree than their older colleagues who were more likely to have BEds and Certificates in Education. For example, in English 73% of teachers under 30 had a degree compared to 43% of teachers in the over 50 age band. In Physics, 79% of teachers aged under 30 had a degree in Physics or a related subject compared to 70% of teachers aged over 50.

Analysis of qualifications by role in school showed that Advanced Skills Teachers had the highest levels of relevant post A-level qualifications in many subjects. For example, in Mathematics 76% of Advanced Skills Teachers teaching the subject had a degree compared to 50% of QTS classroom teachers, and 47% of post-threshold teachers.

There were differences in the proportions of teachers' qualifications in subjects taught between different school types. Across all subjects, Grammar schools had the highest proportion (67%) of teachers with relevant post A-level qualifications in the subjects taught, followed by Comprehensives to 18 (64%) and Comprehensives to 16 (60%).

[5] Only qualifications specifically in Citizenship and Careers Education were counted as related post A-level qualifications for these subjects

In most subjects there were higher proportions of teachers with relevant post A-level qualifications in schools with small numbers of pupils eligible for free school meals (FSM) compared to schools with high numbers of these pupils. For example, in Geography 85% of teachers had relevant post A-level qualifications in the schools with the lowest numbers of pupils eligible for FSM, compared to 65% in the schools with the highest numbers of these pupils. Although this was broadly true for most subjects, the opposite was seen in Design and Technology and ICT where higher proportions of teachers with post A-level qualifications were in schools with high numbers of pupils eligible for FSM.

There were small variations between the levels of post A-level qualifications by subject when broken down into geographical regions. In general teachers in London held slightly higher proportions of post A-level qualifications related to the subjects they taught compared to teachers in other areas, across all subjects. The Eastern region had slightly lower proportions of teachers with post A-level qualifications in the subjects they taught. The differences between regions were fairly small, where the largest difference in the proportion of teachers holding relevant post A-level qualifications was between London (64%) and Eastern region (58%).

Subject periods taught by teachers with different levels of post A-level qualification in related subjects

Data were collected on periods taught and analysed to illustrate the proportions of periods taught by teachers with different levels of post A-level qualifications. Overall the majority of periods were taught by teachers holding relevant post A-level qualifications. In Mathematics, English, Biology, Chemistry, Physics, French, German, History, Geography, Music, Art and Design and Physical Education over 80% of periods were taught by teachers with post A-level qualifications in related subjects. In Design and Technology and ICT the figures were lower with only 70% and 55%, respectively, of periods taught by teachers with post A-level qualifications in relevant subjects.

The majority of periods taught by teachers with post A-level qualifications were by teachers with degrees rather than other types of qualification. One of the few exceptions to this was Design and Technology where only 33% of periods were taught by teachers with degrees in related subjects and 39% were taught by teachers with other types of post A-level qualification, in related subjects.

Comparing the analysis of periods taught to the analysis of the proportions of qualified teachers in each subject it was clear that teachers with relevant post A-level qualifications taught more periods than their colleagues with no relevant post A-level qualifications.

The 2007 analysis was compared to the results of the 2002 survey. This showed that for most subjects there had been an increase in the proportions of periods being taught by teachers with degrees in relevant subjects. However, this was outweighed by a decline in the proportions of periods taught by teachers with BEds and Certificates in Education since 2002. Overall taking these factors together meant that there was a small increase in the proportions of periods taught, in 2007, by teachers with no post A-level qualifications in the subjects taught for most subjects compared to 2002. For example, in English the proportion of periods taught by

teachers with degrees was eleven percentage points higher in 2007 compared to 2002, the proportion of English periods taught by teachers with BEds was seven percentage points lower in 2007 compared to 2002, those delivered by teachers with Certificates in Education was four percentage points lower in 2007 compared to 2002 and overall the proportion of English periods delivered by teachers with no relevant post A-level qualifications was slightly higher in 2007 (10%) compared to 2002 (9%). Similarly, in Physics 91% of periods were taught by post A-level qualified teachers in 2007 compared to 94% in 2002.

In Mathematics, the Science and Innovation Investment Framework 2004-2014: next steps report (HM Treasury, 2006) set a target that by 2014 95% of lessons will be taught by Mathematics specialists. The analysis of the SSCSS data shows a small, but statistically significant, decline in the proportions of lessons taught by teachers with qualifications relevant to Mathematics since 2002. In 2007, 84% of periods were taught by teachers with relevant post A-level qualifications compared to 88% in 2002.

When the proportions of periods taught were broken down by year group there was an overall trend in which higher proportions of periods were taught by teachers with relevant post A-level qualifications in the older year groups compared to the younger years. Over all subjects the proportion of lessons taught by teachers with related post A-level qualifications went up as the pupils got older.

Splitting the analysis by exam years (years 9, 11, 12, 13) and non-exam years (years 7, 8, 10) showed that higher proportions of periods were given by teachers with relevant post A-level qualifications in the exam years compared to the non-exam years. Across all subjects the proportions of periods offered by post A-level qualified teachers in the exam years was three percentage points higher than for the non-exam years. In most subjects, there were higher proportions of periods taught in the exam years by teachers with relevant degrees than in the non-exam years. For example, in Chemistry 86% of periods taught within exam years were given by teachers with degrees compared to 79% in the non-exam years.

Subject periods taught by background factors

The analysis of periods taught by teachers with different levels of post A-level qualifications was broken down by teacher level and school level background factors. This analysis showed little difference in the patterns of periods taught by post A-level qualified male and female teachers. However, there were distinct trends in terms of other background factors and these were consistent with the observations made in relation to the qualifications of teachers in the subjects they taught.

In terms of age, in most subjects, younger teachers with relevant post A-level qualifications delivered higher proportions of periods than older colleagues. The proportions of periods taught by post A-level qualified teachers generally declined as the teachers got older. For example, in Business Studies, in the under 30 age group, 81% of periods were taught by teachers with a relevant post A-level qualification. This was considerably higher than for Business Studies teachers in the over 50 age group where only 56% of periods were taught by teachers with relevant post A-level qualifications.

When looking at the qualifications of teachers in the subjects taught, Advanced Skills Teachers had high levels of post A-level qualifications compared to teachers with other roles. However, Advanced Skills Teachers formed a very small proportion of the workforce represented in this analysis and so delivered very small proportions of the total periods taught. Most periods were delivered by QTS classroom teachers and post-threshold teachers, both groups having fairly high proportions of teachers with relevant post A-level qualifications. Of those periods taught by QTS classroom teachers slightly higher proportions were given by teachers with relevant post A-level qualifications compared to those delivered by post-threshold teachers.

In most subjects Grammar schools provided higher proportions of lessons delivered by teachers with relevant post A-level qualifications, and in particular degrees, than other types of schools. The next highest proportions were in Comprehensives to 18 and then Comprehensives to 16. Across all subjects 68% of periods in Grammar schools were taught by teachers with degrees compared to 59% in Comprehensives to 18 and 52% in Comprehensives to 16.

Schools with the highest proportions of pupils eligible for free school meals had smaller proportions of periods taught by teachers with post A-level qualifications related to the subjects taught. Higher proportions of periods were taught by teachers with degrees in subjects taught in schools with the least pupils eligible for free school meals compared to those with the highest. For example, in Mathematics 64% of periods taught in the lowest quintile of free school meals were given by teachers with degrees in related subjects compared to 44% of periods in the highest quintile.

Diplomas

From September 2008, the first of the new Diplomas will be offered by some schools and colleges. These new Diplomas will be available to 14 to 19 year olds as an alternative way of learning and a new route into Higher Education. The first five Diplomas will be introduced in September 2008, followed by the next five in September 2009 and the next four in 2010. In October 2007, the DCSF announced the introduction of a further three diplomas in Languages, Science and Humanities. The analysis in this report was undertaken before this announcement and so the findings in this report relate only to the first fourteen lines of learning.

The Diplomas cover a wide range of topics within their industry area and each includes functional skills in Mathematics, English and IT. Individual schools will not be expected to be able to offer the whole range of Diplomas independently and so the Diplomas will be offered by groups of schools and colleges working in partnership with employers and other providers.

The subjects taught and qualification data collected in the 2007 survey were linked to the areas covered by each Diploma[6] to create an indicative picture of what was already on offer in schools and what qualifications teachers had in relation to the Diploma lines of learning.

[6] The subjects covered by the first fourteen diplomas were finalised after the analysis for this report was undertaken, however the analysis in this report should still provide a good indication of the situation in 2007.

The analyses showed that high proportions of schools had at least one teacher with qualifications related to aspects of nine out of the first fourteen lines of learning. These were Business Administration and Finance, Manufacturing and Product Design, Land Based and Environmental, Society, Health and Development, Engineering, IT, Creative and Media, Sport and Leisure and Hospitality and Catering. For example, over 40% of schools had at least one teacher with a post A-level qualification specifically in Engineering. The Diplomas where there appeared to be very few teachers with relevant post A-level qualifications were Hair and Beauty, Travel and Tourism, Retail and Public Services.

Analysis of subjects taught in the survey showed that a number of aspects of the Creative and Media, IT and Sport and Leisure and Business Studies Diplomas were being taught in schools in 2007. As would be expected, in the other Diplomas, very few schools were offering aspects of the lines of learning.

Conclusion

The results of the 2007 survey showed an overall increase in the proportions of teachers with degrees in the subjects they taught by ten percentage points compared to the 2002 survey. The proportions of teachers with degrees in subjects relevant to the subjects they were teaching were higher amongst younger teachers coming into the profession than older teachers. If this trend were to continue then the levels of post A-level qualifications in relevant subjects may rise over the coming years. Despite these positives, 25% of teachers of Mathematics and 21% of teachers of English did not hold any related post A-level qualification. In science the situation was more positive, especially in Biology and Chemistry where only 4% of teachers of those subjects had no related post A-level qualifications. In Physics, 10% of teachers had no related post A-level qualification in the subject. The shortage of specialist teachers for Mathematics and the inequity between qualifications of teachers teaching science was similar to the results of the NFER study looking at the deployment of mathematics and science teachers (DMS) carried out in 2005 (Moor H et al, 2006). The DMS study found that 24% of teachers teaching Mathematics were not specialists[7] in the subject and for science 8% were not specialists. This compares to 25% of Mathematics teachers with no relevant post A-level qualifications in Mathematics in the SSCSS study. In science, the SSCSS analysis showed that 8% of qualification specialisms of science teachers were in non-science subjects. Both studies also showed that schools with lower proportions of pupils eligible for free school meals attracted teachers with higher levels of related post A-level qualifications than other schools, and schools with pupils from 11-18 had higher proportions of post A-level qualified teachers than schools with pupils from 11-16.

In terms of the new Diplomas, the 2007 survey gave a positive indication that many schools had some teachers with post A-level qualifications relevant to aspects of the new lines of learning, that may help to equip schools to deliver some aspects of the Diplomas starting in 2008.

[7] Specialist was used to describe teachers who held a degree or initial teacher training qualification in a subject related to the subject they taught.

2 Introduction

The National Foundation for Educational Research (NFER) was commissioned by the Department for Children, Schools and Families (DCSF) to carry out the 2007 Secondary School Curriculum and Staffing Survey (SSCSS).

The aim of the survey was to create a national picture of the teaching workforce in terms of the qualifications of teachers in the subjects they taught. The survey has been run periodically around every four years since 1965, with the last survey being run in 2002. Comparisons with the 2002 survey results can provide a view of change over time. The results will be used to inform a range of workforce policies, including planning for teacher training places. The survey is vital in ensuring that the secondary teaching workforce will in future be sufficiently large and have the necessary wide set of qualifications to deliver the curriculum to pupils. The analysis of the 2007 survey included a particular focus on the new Diplomas. The first five of the Diplomas will begin to be offered by some schools and colleges as part of the 14-19 Curriculum from September 2008.

NFER carried out the 2007 survey with an achieved sample of 327 maintained secondary schools in England collecting information about 14,137 teachers. Teachers at all levels within the school were included in the survey from headteachers to classroom teachers. Data were collected on teachers' post A-level qualifications, curriculum subjects taught, age, gender and role in school. The survey took place in February 2007.

This analysis report uses the data supplied by teachers to illustrate the teaching workforce in terms of teachers' qualifications in the subjects they taught. It looks at the qualifications of teachers in the subjects they taught according to their background characteristics such as age, role in school and region. It also contains analyses of the proportion of subject periods taught by teachers' qualifications overall and by background factors. From the sample representation section onwards, data in the report has been grossed to create a national picture.

2.1 Background

The focus on the qualifications of teachers in the subjects they teach has increased over the past few years. The areas of Mathematics and Science have been a particular focus of recent studies driven by falling numbers of pupils opting to take Mathematics and Science subjects beyond key stage 4. The Lords Science and Technology Committee (House of Lords: Science and Technology Committee, 2006) reported in November 2006 on the state of Science teaching in schools. The report warned that a severe shortage in specialist Science teachers was putting the future of Science and Engineering in Britain at risk. The Smith Inquiry (Smith A, 2004) identified a shortage of around 3,400 specialist Mathematics teachers and noted that over 30% of those teaching Mathematics did not have a post A-level qualification in the subject. In 2001 the Roberts Review (Roberts G, 2002) expressed concern over the lack of suitably qualified Mathematics and Science teachers. In 2006 NFER reported on the Deployment of Mathematics and Science Teachers Study[4] (Moor H et al, 2006). This report identified the difficulties schools face in trying to recruit suitably qualified Mathematics and Science teachers.

The last Secondary School Curriculum and Staffing Survey carried out in 2002 (DfES, 2003) provided a picture of the secondary school teaching workforce across all secondary curriculum subjects. The analysis in this report makes comparisons with the findings of the 2002 report. Previously the 2002 survey report drew out comparisons with the 1996 survey. It found that there had been an overall increase of 12% in the number of teachers with degrees in 2002 compared with the 1996 survey. There had been a 4% increase between the 1996 and the 2002 surveys in the proportion of teachers holding a degree in the subjects they taught. The issues with the qualifications of Mathematics and Science teachers were clear in the results of the 2002 survey. There were other subjects too that had either small proportions of teachers qualified to degree level or high proportions of teachers with no post A-level qualification in the subjects they taught. ICT, Drama and Religious Education fell into this category, along with the Technologies and Physical Education. In terms of subject periods taught, the 2002 survey showed a rise of eight percentage points in the proportion of periods taught by teachers with degrees in relevant subjects compared to the findings of the 1996 survey.

In order to make comparisons between the 2007 survey and the 2002 survey, the survey analysis was approached, where possible, using the same methods as those used in the 2002 survey.

This report provides some analysis related to the new Diplomas. These new Diplomas are aimed at students in the 14-19 age group and will start to be offered in some schools and colleges from September 2008. They are intended for pupils from across the range of abilities up to the equivalent of three A-levels. The Diplomas will be developed by employers, schools, colleges and universities, with awarding bodies, and will be focussed on the ‘real world’ environment. Initially there will be fourteen lines of learning or subject areas, the first five to be offered from September 2008 will be:

Construction and Built Environment
Creative and Media
Engineering
Society, Health and Development
IT

The next five to be introduced from 2009 will be:

Land-based and Environmental Studies
Manufacturing and Product Design
Hair and Beauty
Business Administration and Finance
Hospitality and Catering

A further four Diplomas to be offered from 2010 will be:

- Public Services
- Sport and Leisure
- Retail
- Travel and Tourism

The Diplomas are likely to be delivered not just by individual schools but by consortia of schools, colleges and other providers. This report focuses just on the current delivery of related subjects in schools and the proportions of teachers who have qualifications relevant to the new Diploma subjects.

In October 2007, the DCSF announced the introduction, from 2011, of a further three Diplomas in Languages, Science and Humanities. The analysis for this report was undertaken prior to that announcement and so focuses only on the first fourteen Diplomas.

2.2 Methodology

The sample of schools

The survey was carried out with a sample of maintained secondary schools in England. The aim was to gain completed questionnaires from 350 schools and a within school teacher response level of 80%. This was not quite met with an achieved sample of 330 schools and a 66% teacher level response rate, providing data from 14,137 teachers (Of the 330 schools, three completed the school level data form incorrectly and so were excluded from the analysis.)

The invitation process had two stages, first a letter of invitation and then a dispatch of survey materials to those schools agreeing to take part. The original sample contained 1,094 schools with the aim to gain participation from 438 schools who would be sent the survey materials, in order at the end of the survey to achieve returns from 350 schools. Schools were sent an invitation in late October 2006 to participate in the survey. The invitation asked for a nominated person in the school who, from that point on, would be our main contact and who would help us gain a high teacher level response. Schools were offered a financial incentive of £100 for participating in the study and providing data for at least 80% of their teachers.

The response at the initial invitation stage was poor, and within three weeks of the initial invitation being sent out it became clear that the required participation rates would not be met. A further sample of schools was approached in order to achieve the target number. This strategy was successful and 590 schools out of the two samples agreed to participate. This was a response of about 23% of all sampled schools. Only 438 schools were to be sent survey materials, so some of the 590 were sent letters thanking them for their willingness to take part but saying that it was not possible on this occasion to include them. Schools sent these letters were those that responded by the latest dates. Table 2.2.1 shows the response at the invitation stage.

Table 2.2.1 Response by schools - the initial invitation stage

Action	Number of schools	% of total schools invited
Schools in original sample	1,094	42
Schools in top-up sample	1,497	58
Total schools invited to participate	2,591	100
Number of schools agreed to participate	590	23
Schools not required	152	6

Base: 2,591
Source: NFER survey administration system 2007

When schools were asked to respond to the initial invitation they were sent a reply form that asked for reasons why they would not like to participate if this was their choice. 585 schools actively declined to take part. The reasons they gave for not wanting to take part are shown in the table below. The vast majority stated pressure of work and other staff commitments as their reason. A large number of schools (1,416) did not respond to our invitation at all and so we do not know what their reasons for withdrawal were.

Table 2.2.2 Reasons for withdrawal at invitation stage

Reason	Number of schools	%
Unable to help / no reason given	155	26
No time/pressure of work / staff commitments	211	36
Inspection	17	3
Staff or Headteacher / illness / changes / shortage	52	9
School special problems / re-organisation / closing / closed	21	4
Too many requests for help / involved in other projects	86	15
Other	35	6
School closing	8	1
Total	585	100

Base: 585
Source: NFER survey administration system 2007

The survey instruments

In order to make it as easy as possible for schools to complete the survey, the data collection instrument was developed in a number of different formats. Schools were given the choice of which method of completion suited them best.

The different formats offered to schools were as follows:

- A3 folded paper survey forms designed to be completed by individual teachers. This was the most popularly used form and some school contacts said that it only took each teacher a few minutes to complete. School contacts were sent a checklist that allowed them to record the number of each survey form against each teacher's name so that they could monitor the response and chase teachers for their forms.

- An online version of the individual paper form was also provided, which could be completed by individual teachers or for all teachers in the school.

- There was also an Excel version of the form which could be used to complete for all teachers in the school.

The electronic versions were designed so that it was possible for the school to import data from existing data sources held in school.

The survey requested information about each teacher concerning their age, gender, role in school, their full or part time status, post A-level qualifications and the subjects they taught by number of periods and year group. The paper version of the data collection form is given in Annex 3 of this report.

A small number of case studies with local schools helped to determine the design of the forms and methods for allowing schools to import data already held on their systems. Five schools were visited, with the aim of ascertaining which aspects of the required data were held in schools in electronic format. How schools might extract this data and how familiar they seemed to be with manipulating the data was investigated. The results of the visits suggested that it was very unlikely that all of the data required by this survey was held electronically. Most schools held some of the data electronically and some data on paper. Familiarity with methods of exporting data from their systems varied across the group of schools as would be expected. All of the schools were SIMS users. Each of the schools used the personnel module of SIMS to store teachers' names, dates of birth and gender. The SIMS system did not appear to be being used for the storage of the whole range of teacher roles required by this survey. All of the schools stored teacher roles, but in a range of ways from paper lists to Access databases.

Post A-level qualifications were only stored on SIMS by one school. This school was only recording the highest qualification gained. Some of the schools which did not store this information on SIMS held it in Excel or on paper.

In the schools visited, subjects taught by each teacher and the year groups taught by each teacher could be stored in SIMS but could only easily be extracted in two reports. One report held the teacher name with the subjects they taught and the other report held the total number of periods per year group that each teacher taught. There did not seem to be a simple way to combine this information.

The results of the school visit exercise were useful in helping to devise the electronic versions of the survey forms. The import function that was felt to be most useful to schools was one that allowed schools to enter teachers' dates of birth and gender, as this seemed to be the most commonly held on SIMS.

In reality very few schools used the electronic means of supplying the data to NFER and by far the most popular method for submission was the paper form to be completed by individual teachers. Table 2.2.3 shows the number of returns by school and teacher for each method.

Table 2.2.3 Response for each survey completion model

	Medium	No. of schools	% of schools
Collective return by school contact	Online	4[1]	1%
Individual returns by teachers	Online	6	2%
Collective return by school contact	Excel	22	7%
Individual returns by teachers	Paper	298	90%

Base: 330
Source: NFER survey administration system 2007
[1] One school listed as a collective online return, one teacher completed the online survey individually, whilst the rest came back from the school contact as a collective return.

The survey stage

Materials were dispatched to schools in early February 2007 for completion during the one or two weeks beginning 5th February, depending on whether they operated a one or two week timetable. At the invitation stage schools were asked to supply the number of teachers within their school so that they could be sent sufficient survey materials and so that the teacher level return rate could be monitored. Each school was sent a set of individual forms for all of their teachers, along with the links to the online version of the forms and the Excel version.

Although information on job roles of the school contact people was not collected, telephone conversations with schools seemed to indicate that they were mostly school office staff rather than teachers. Having the nominated contact at each school helped during reminding stages, and those we spoke to were very enthusiastic about helping to ensure that data was provided for most teachers in their school.

The response to the survey was very positive, with 330 schools returning completed survey materials. The table below illustrates the response at the survey stage.

Table 2.2.4 Response at survey stage

	Number of schools	% of schools
Number of schools sent survey materials	438	100%
Number of schools returning teacher questionnaires	330	75%
Number of schools returning school questionnaires	330[1]	75%
Number of schools returning materials unused	39	9%
	Number of teachers	% of teachers
Number of teachers sent survey materials	21,316	100%
Number of teacher questionnaires returned	14,163[2]	66%

Base: 438 schools and 21,316 teachers
Source: NFER survey administration system 2007
[1] Three schools did not complete the timetable section of the school questionnaire correctly and so were excluded from the analysis
[2] It was not possible to use all of the teacher data in the analyses because of missing key data items and so the number of teachers for whom data was used was 14,137, which is less than the figure shown in the table above.

During the survey period schools received two written reminders. The second was sent together with copies of the survey instruments. These reminding strategies were effective in terms of gaining a good response at school level. In order to try to maximise the teacher level response, an additional letter was sent to schools that had returned data for less than 80% of their teachers to encourage them to send in more teacher data. A number of schools returned data for more teachers as a result of this reminder.

Data processing, coding and matching

The paper data collection forms were scanned using Pulsetrain's Bellview Scan software. Data were captured using the automatic reading function of Bellview and then edited and verified manually to assure accuracy. It was then exported to SPSS. Data from the electronic forms were combined to form a master dataset and read into SPSS.

Subjects taught and teachers' qualifications were coded during the data processing stage. The coding frame was devised using a combination of the codes established for the pilot of the school workforce census, along with specific codes related to Diplomas and codes established during the coding process to ensure that the coding frame captured an appropriate level of detailed data. The Joint Academic Coding System (JACS)[8] was used to help assign particular subjects taught to the categories provided in the analyses in this report. JACS was also used to help devise the detailed linkage between the subjects taught and the qualifications of teachers. For the analysis of Diplomas, codes for subjects taught and teachers' qualifications were manually matched to the areas of study based on guidance for the delivery of each Diploma[9]. Once coded and put into SPSS, the data were checked for accuracy and then passed to NFER's statisticians for analysis.

[8] http://www.hesa.ac.uk/datacoll/home.htm (June 2007)

[9] http://www.qca.org.uk/17406.html (June 2007)

3 Sample representation and grossing

3.1 Sample representation

The sample of schools was drawn from NFER's Register of Schools. This database holds contact details of schools across the United Kingdom. It also holds background information about schools which was used to help draw a representative sample of the target group. The sample population included maintained secondary schools in England, including middle deemed secondary but excluded special schools. Schools were selected by random sampling using school type, government office region and school size as stratifiers.

Both the initial sample and the subsequent top up sample were drawn with the same sampling population, stratification and method.

The tables in this section illustrate the representation of the sample of schools that submitted teacher and school data compared to the overall target population as defined above.

Table 3.1.1 shows the achieved sample of schools against the target population. This table illustrates a good match overall between the achieved sample and our target population by key factors. However, there were statistically significant differences between the achieved sample and the population in terms of single sex/co-educational schools. The other differences between the population and the achieved sample were not statistically significant. However, the achieved sample slightly under-represented large schools with a corresponding over-representation of smaller schools. It may have been that larger schools did not participate because the task of completing the forms for large numbers of teachers was too onerous and hence off-putting. The weighting and grossing strategy used school type and school size as key factors and so the imbalances in these areas will have been addressed in the analysis.

Table 3.1.1 Comparison of the achieved sample to the population by school factors, including type, government office region and school size

		Population		Sample	
		Count	Col %	Count	Col %
Government Office Region	1 North East	209	6.15	28	8.56
	2 North West/Merseyside	471	13.86	44	13.46
	3 Yorkshire & The Humber	298	8.77	29	8.87
	4 East Midlands	329	9.68	25	7.65
	5 West Midlands	415	12.21	40	12.23
	6 Eastern	426	12.53	32	9.79
	7 London	422	12.42	40	12.23
	8 South East	505	14.86	60	18.35
	9 South West	324	9.53	29	8.87
School type	8 Middle deemed Secondary	248	7.30	31	9.48
	9 Secondary Modern	113	3.32	11	3.36
	10 Comprehensive to 16	1270	37.36	128	39.14
	11 Comprehensive to 18	1522	44.78	128	39.14
	12 Grammar	164	4.82	23	7.03
	13 Other Secondary schools	82	2.41	6	1.83
Size of school	1 0-660 pupils	677	19.92	68	20.80
	2 661-867 pupils	682	20.06	77	23.55
	3 868-1052 pupils	681	20.04	71	21.71
	4 1053-1298 pupils	680	20.01	51	15.60
	5 1299-high pupils	679	19.98	60	18.35
% eligible FSM 2007 (5 pt scale)	1 Lowest 20%	672	19.77	70	21.41
	2 2nd lowest 20%	689	20.27	71	21.71
	3 Middle 20%	680	20.01	67	20.49
	4 2nd highest 20%	676	19.89	60	18.35
	5 Highest 20%	682	20.06	59	18.04
Achievement Band (total GCSE point score 2005)	1 Lowest band	665	19.56	48	14.68
	2 2nd lowest band	651	19.15	67	20.49
	3 Middle band	622	18.30	67	20.49
	4 2nd highest band	594	17.48	50	15.29
	5 Highest band	511	15.03	60	18.35
	8 Missing information	356	10.47	35	10.70
% of pupils with statements	1 None	246	7.24	29	8.87
	2 1 - 2%	1698	49.96	168	51.38
	3 3 - 29%	1395	41.04	130	39.76
	9 Missing information	60	1.77		
Single sex / Coeducational schools*	1 Boys	181	5.33	25	7.65
	2 Girls	224	6.59	36	11.01
	3 Mixed	2966	87.26	266	81.35
	9 Missing information	28	0.82		
Total		3399	100.00	327	100.00

Base: 3399 schools in population
Source: NFER Register of Schools 2007
** statistically significant difference between the population and the achieved sample*

Table 3.1.2 provides a comparison of the achieved sample in terms of the roles of teachers within schools to the national population. The national population figures are taken from the 618G survey 2007 provisional findings. The table shows a good match between our achieved sample and the 618G figures.

Table 3.1.2 Comparison of the achieved sample by teacher role

	Sample %	Population[1] %
Headteachers	1.69	1.86
Deputy Headteachers	3.01	2.98
Assistant Headteachers	5.74	5.85
Classroom and others[2]	89.56	89.30
	100.00	100.00

Base: 14,137 teachers in sample
Source: [1] results from 618G survey results 2007[10]
[2] These figures included advanced skills teachers as well as QTS and non-QTS teachers and post-threshold teachers. The 2007 ungrossed survey data included information for 187 Advanced Skills Teachers.

In trying to build up a picture of the secondary teaching workforce it was important to achieve a high teacher response within each school. Although the target was to achieve a response of 80% of teachers within each school, it was not achieved in all schools. However, this was an ambitious target for this type of survey and the overall average response rate of over 60% was good. Table 3.1.3 shows the proportion of schools returning different percentages of teacher data.

[10] http://www.dfes.gov.uk/rsgateway/DB/SFR/s000725/SFR15_2007_RevisedFinalTables20070504.xls (April 2007)

Table 3.1.3 Numbers and proportions of schools returning different proportions of teacher data compared to the total teachers in school

% Teacher return	Number of schools	%
90-100%	48	15
80-89%	87	26
70-79%	39	12
60-69%	39	12
50-59%	42	13
40-49%	35	11
30-39%	26	8
20-29%	11	3
1-19%	3	1
All	330	100

Base: 330 schools
Source: NFER survey administration system 2007

In order to examine any response bias in terms of within school returns, it was helpful to look at sample representation for only those schools who returned less than 80%. Table 3.1.4 shows the breakdown of achieved schools that returned less than 80% of teacher data against the population. The only category that showed a statistically significant difference was the single sex/co-educational category. The differences in other areas were not statistically significant. However, there was a greater proportion of larger schools in this sample (less than 80%), compared to the whole sample, indicating that it was more difficult to get as many teachers to complete the survey in large schools compared to small schools. There was also a larger proportion of Comprehensives to 18 in the less than 80% sample. Schools in this category tend to be larger and so it follows that slightly more of these returned small proportions of teacher data compared to others. The apparent differences in relation to school type and size should not be of concern in terms of interpreting the data as they were not statistically significant.

Table 3.1.4 Representation of participating schools compared to national (schools with less than 80% return)

		Population		Sample	
		Count	Col %	Count	Col %
Government Office Region	1 North East	209	6.15	14	7.25
	2 North West/Merseyside	471	13.86	25	12.95
	3 Yorkshire & The Humber	298	8.77	15	7.77
	4 East Midlands	329	9.68	11	5.70
	5 West Midlands	415	12.21	20	10.36
	6 Eastern	426	12.53	21	10.88
	7 London	422	12.42	33	17.10
	8 South East	505	14.86	38	19.69
	9 South West	324	9.53	16	8.29
School type	8 Middle deemed Secondary	248	7.30	12	6.22
	9 Secondary Modern	113	3.32	4	2.07
	10 Comprehensive to 16	1270	37.36	74	38.34
	11 Comprehensive to 18	1522	44.78	83	43.01
	12 Grammar	164	4.82	15	7.77
	13 Other Secondary schools	82	2.41	5	2.59
Size of school	1 0-660 pupils	677	19.92	29	15.03
	2 661-867 pupils	682	20.06	43	22.28
	3 868-1052 pupils	681	20.04	45	23.32
	4 1053-1298 pupils	680	20.01	38	19.69
	5 1299-high pupils	679	19.98	38	19.69
% eligible FSM 2007 (5 pt scale)	1 Lowest 20%	672	19.77	44	22.80
	2 2nd lowest 20%	689	20.27	36	18.65
	3 Middle 20%	680	20.01	43	22.28
	4 2nd highest 20%	676	19.89	32	16.58
	5 Highest 20%	682	20.06	38	19.69
Achievement Band (total GCSE point score 2005)	1 Lowest band	665	19.56	31	16.06
	2 2nd lowest band	651	19.15	43	22.28
	3 Middle band	622	18.30	37	19.17
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	5 Highest band	511	15.03	38	19.69
	8 Missing information	356	10.47	12	6.22
% of pupils with statements	1 None	246	7.24	17	8.81
	2 1 - 2%	1698	49.96	102	52.85
	3 3 - 29%	1395	41.04	74	38.34
	9 Missing information	60	1.77		
Single sex / Coeducational schools*	1 Boys	181	5.33	17	8.81
	2 Girls	224	6.59	26	13.47
	3 Mixed	2966	87.26	150	77.72
	9 Missing information	28	0.82		
Total		3399	100.00	193	100.00

Base: 3399 schools in population
Source: NFER Register of Schools 2007
** statistically significant difference between the population and the achieved sample*

3.2 Weighting and grossing

The data collected from the survey were only from a sample of teachers. To represent the national figures and to remove any biases due to sample design and response bias, it was necessary to produce weighting factors to represent the national population.

The first step in producing these factors was to use the Annual School Census dataset (2007) to ascertain the national figures for full time (FT) and full time equivalent teachers (FTE) for the following school types:

Comprehensive 11-16
Comprehensive 11-18
Middle deemed secondary
Grammar
Secondary Modern
Other secondary schools
CTC schools

Additionally, since there were such a large number of teachers within comprehensive schools, teachers in these schools were divided into further groups according to the size of the school; three size groupings in comprehensive 11-16 (each containing a third of schools) and four size groups in comprehensives 11-18 (each containing a quarter of schools).

For each of the 12 school types (or strata), the numbers and types of teachers in the sample (as FT and FTE) within each school type and the corresponding national figures were established. Grossing factors (or weights) were then calculated by dividing the national figures for each stratum by the sample figures. These weights were applied to the data to represent the national figures to create two datasets, one for FTE and one for FT teachers and analysis was carried out using this data.

Analysis in this report was carried out on both full time and full time equivalent teachers. The analysis of full time teachers allowed us to make comparisons with the 2002 survey whilst the analysis of full time equivalent teachers ensured that we had analyses that represented the whole teaching workforce, including full and part time teachers. Interestingly, specific analysis carried out on the 2007 data showed that there was little difference between the analyses when based on full time only teachers compared to full time equivalent teachers.

Further information about weighting and grossing, the standardisation of periods taught data, coding and the production of confidence intervals used in this report are provided in Annex 1.

4 Overview of qualifications

This section provides an overview of the analysed data for all teachers based on full time equivalent numbers. All analysis from this section onwards has been grossed by the method described in Section 3.2. Highest post A-level qualification is ranked as in the 2002 survey with degree being the highest, followed by BEd, then PGCE, then Certificate in Education and then Other qualification. In this section the tables reflect teachers' qualifications regardless of the subject they teach. So, they are included even if their highest qualification is not in the subject taught. Higher degrees have been grouped with degrees throughout this report. For example, a teacher holding both a degree and a PGCE would only be counted against degree. The PGCEs counted in the analysis in this section represent teachers who had a PGCE but not a degree or a BEd. The 'other qualifications' category included a range of qualifications given by respondents, such as Post Graduate Diplomas, Post Graduate Certificates (not in Education) and HNDs.

The table below shows the proportions of teachers holding each level of post A-level qualification. It only counts their highest post A-level qualification. It shows that the majority of teachers (81%) held a degree or higher degree and only around 12% held a BEd. Three per cent had a Certificate in Education. Only 3% were shown as having a PGCE, but this only includes those who did not have a degree or BEd (in the same subject) as well. Many of the teachers included in the degree category will also have had a PGCE. This becomes more relevant later in the report where the subject of the PGCE and degree are taken into account in the analyses. A small proportion of teachers did not provide any data related to their post A-level qualifications or listed qualifications that were not of post A-level standard.

Table 4.1.1 Highest post A-level qualifications

Post A-level qualification	%	Number of teachers (000s)
Degree	81	173.5
Bed	12	25.2
PGCE	3	5.5
Cert Ed	3	6.2
Other qualification	2	3.8
Missing data	<1	0.1
Total	100	214.3

Base: 214,300 teachers
Source: NFER Secondary School Curriculum and Staffing Survey 2007

It is interesting to break these levels of qualification down into age bands. Table 4.1.2 shows this breakdown and illustrates some noticeable differences in levels of qualification for teachers of different ages. Younger teachers were more likely to have a degree than older teachers and less likely to have a BEd. Certificates in Education were mainly held by teachers over 45, reflecting the fact that these qualifications were discontinued some years ago.

Table 4.1.2 Highest post A-level qualification level by age bands

	Degree	BEd	PGCE	Cert Ed	Other Qual	Missing qualification data	No. of teachers
	%	%	%	%	%	%	(000s)
under 25	94	3	2	0	1	0	11.5
25-29	92	4	3	<1	1	0	38.9
30-34	89	7	4	<1	1	<1	32.3
35-39	87	9	3	<1	1	<1	26.1
40-44	81	15	3	<1	1	0	22.9
45-49	74	20	2	2	2	<1	26.7
50-54	64	21	1	11	3	<1	28.9
55-59	66	17	2	11	5	0	20.4
60 or over	72	11	3	6	8	<1	3.1
Missing age data	-	-	-	-	-	-	3.5
Total							214.3

Base: 214,300 teachers
Source: NFER Secondary School Curriculum and Staffing Survey 2007

Table 4.1.3 shows the breakdown of qualifications by role in school from headteacher to non-QTS teacher. This illustrates a well qualified workforce across all teaching roles. Eighty-five per cent of headteachers had degrees which was higher than deputy headteachers and assistant headteachers. This was surpassed, however, by QTS classroom teachers, with 91% of them having a degree. Post-threshold teachers[1] had the lowest proportion of degrees compared to other roles in school but a relatively high proportion with Certificates in Education than others, which is in line with the age profile of this particular group compared to others.

[1]Post threshold teachers were specifically identified in the survey returns as a separate group from QTS classroom teachers.

Table 4.1.3 Proportions of teachers with different levels of post A-level qualification level by role in school

	Degree	BEd	PGCE	Cert Ed	Other Qual	Missing qualification data	Number of teachers
	%	%	%	%	%	%	(000s)
Headteacher	85	12	1	1	2	0	3.5
Deputy Headteacher	78	18	1	1	1	0	6.4
Assistant Headteacher	76	17	3	2	2	0	12.1
Advanced Skills Teacher	80	14	2	3	1	0	2.9
Post-threshold Teacher	74	17	2	5	2	<1	93.7
QTS Teacher	91	4	3	1	1	<1	80.5
Non-QTS Classroom Teacher	82	7	1	2	7	1	8.6
Missing data	-	-	-	-	-	-	6.6
Total							214.3

Base: 214,300 teachers
Source: NFER Secondary School Curriculum and Staffing Survey 2007

5 The qualifications of teachers in the subjects taught

5.1 Qualifications by subjects taught for 2007

This section looks at the qualifications of teachers in the subjects they taught. Table 5.1.1 shows the proportion of full time equivalent teachers with different post A-level qualifications in each subject. The table includes the highest qualification gained in each taught subject, rather than recording each qualification. Thus a teacher with a degree plus a PGCE in the taught subject would be recorded in the degree column. If the PGCE is related to the taught subject but the degree is in a different subject, then this would be recorded as a PGCE. Higher degrees were grouped together with degrees. Teachers were counted once against each subject they taught.

Generally where teachers had a relevant post A-level qualification the majority had a degree in the subject they taught. The Sciences had higher proportions of teachers with degrees compared to other subjects. In Biology, for example, 85% of teachers teaching the subject had a relevant degree.

The subjects with the best qualified teachers measured by proportions of any post A-level subjects were Chemistry, Biology, Physics, Combined and General Science, Physical Education and Music, where over 80% of teachers had relevant post A-level qualifications.

In the languages, French (77%) had the largest proportion of teachers with post A-level qualifications compared to German (72%) and Spanish (60%). Of those teachers categorised as teaching Other Modern Languages 69% had no relevant post A-level qualifications in the language that they taught. However, the manual coding exercise showed that a lot of these teachers had either studied in or appeared to be from the country of the particular language taught.

Of those teaching Design and Technology, only 53% had any post A-level qualifications in related subjects and a higher proportion of BEds (12%) were held amongst teachers of this subject than in most other subjects. In ICT, 59% of teachers delivering the subject held no related post A-level qualifications.

In History and Geography, 76% and 73%, respectively, of teachers had related post A-level qualifications, the majority of these being relevant degrees or higher degrees. Around half of the teachers teaching Business Studies, Design and Technology and Religious Education held a relevant post A-level qualification.

In Physical Education, where 83% of teachers held a relevant post A-level qualification, 25% of teachers held a BEd which was the highest proportion of BEds compared to all other subjects. In Music, 87% of teachers had a relevant post A-level qualification compared to 56% in Drama and 78% in Art and Design.

As would be expected, very small proportions of teachers of Careers Education, PSHE, General Studies and Citizenship had post A-level qualifications specifically related to these areas.

Dance was included within Physical Education in this analysis. It was interesting, though, to look at Dance in its own right to get a sense of how qualified the teachers delivering the subject were. Of those teachers specifically teaching Dance, 75% held a post A-level qualification related to Dance, and 62% held a degree in the subject. Out of all those teaching Physical Education in general, just over 4% held a post A-level qualification in Dance.

Table 5.1.1 Highest post A-level qualifications[1] held by full time equivalent teachers in the subjects[2] they taught to year groups 7 to 13 in 2007

	Highest post A-level qualification																					
	Degree[3]			BEd			PGCE			Cert. Ed.			Other qual.			No qual			*Any post A-level qual*		No. of teachers	
	%		±CI	%		±CI	%		±CI	%		±CI	%		±CI	%		±CI	%		*(000s)*	
Mathematics	47	±	2	9	±	1	14	±	2	2	±	1	3	±	1	25	±	2	*75*		30.8	
English	62	±	2	9	±	1	5	±	1	2	±	1	1	±	0	21	±	2	*79*		32.8	
Combined/General Science[4]	58	±	2	5	±	1	15	±	2	1	±	0	2	±	1	19	±	2	*81*		32.1	
Biology[4]	85	±	3	5	±	2	4	±	2	1	±	1	1	±	1	4	±	2	*96*		8.9	
Chemistry[4]	83	±	2	4	±	2	7	±	2	1	±	1	1	±	1	4	±	2	*96*		8.0	
Physics[4]	72	±	4	6	±	2	8	±	3	1	±	1	2	±	1	10	±	3	*90*		7.3	
Other Sciences	39	±	5	1	±	1	2	±	1	1	±	1	4	±	2	53	±	5	*47*		5.0	
French	57	±	3	5	±	1	10	±	2	3	±	1	2	±	1	23	±	3	*77*		14.9	
German	61	±	5	2	±	1	7	±	3	1	±	1	2	±	1	28	±	4	*72*		6.6	
Spanish	50	±	5	1	±	1	10	±	3	-	±	0	-	±	0	40	±	5	*60*		5.2	
Other Modern Languages	25	±	7	-	±	0	6	±	4	-	±	0	-	±	0	69	±	8	*31*		2.1	
																					0.0	
Design and Technology[5]	26	±	2	12	±	1	9	±	1	3	±	1	4	±	1	47	±	2	*53*		35.7	
ICT[5]	23	±	3	4	±	1	10	±	2	0	±	0	4	±	1	59	±	3	*41*		18.0	
Other/Combined Technology[5]	24	±	4	20	±	4	8	±	2	7	±	2	7	±	2	34	±	4	*66*		7.9	
																					0.0	
Business Studies	41	±	4	3	±	1	3	±	1	0	±	0	2	±	1	50	±	4	*50*		11.8	
Classics	53	±	17	-	±	0	-	±	0	-	±	0	-	±	0	47	±	17	*53*		0.3	
History	64	±	3	5	±	1	6	±	2	1	±	1	1	±	1	24	±	3	*76*		15.7	
Religious Education	31	±	3	5	±	1	7	±	2	2	±	1	2	±	1	53	±	3	*47*		15.4	
Geography	62	±	3	6	±	2	3	±	1	1	±	1	1	±	0	27	±	3	*73*		15.3	
Other Social Studies	28	±	5	1	±	1	2	±	2	0	±	1	1	±	1	68	±	5	*32*		5.1	
Combined Arts/Humanities/ Social studies	13	±	3	0	±	0	4	±	2	-	±	0	2	±	1	80	±	4	*20*		7.0	
Music	63	±	3	7	±	2	12	±	3	2	±	1	4	±	2	13	±	3	*87*		6.5	
Drama	38	±	4	4	±	2	8	±	2	2	±	1	4	±	2	44	±	4	*56*		9.0	
Art and Design	50	±	4	6	±	2	15	±	3	3	±	1	4	±	2	22	±	3	*78*		10.1	
Physical Education	49	±	3	25	±	2	4	±	1	4	±	1	2	±	1	17	±	2	*83*		21.7	
Careers Education	-	±	0	1	±	2	-	±	0	-	±	0	6	±	4	93	±	4	*7*		1.9	
Personal Social and Health	0	±	0	0	±	0	0	±	0	-	±	0	0	±	0	100	±	0	*0*		24.3	
General Studies	-	±	0	-	±	0	-	±	0	-	±	0	-	±	0	100	±	0	*0*		4.1	
Citizenship	1	±	1	-	±	0	4	±	2	-	±	0	1	±	1	95	±	2	*5*		10.2	
Other																					17.1	
Total	**43**	**±**	**1**	**7**	**±**	**0**	**7**	**±**	**0**	**1**	**±**	**0**	**2**	**±**	**0**	**38**	**±**	**1**	***62***		**390.9**	

Base: 390,922 teachers

Source: NFER Secondary School Curriculum and Staffing Survey 2007

1. Where a teacher had more than one post A level qualification in the same subject, the qualification level was determined by the highest level reading from left (Degree) to right (Other Qual.). For example, teachers shown under PGCE had a PGCE but not a degree or BEd in the subject, while those with a PGCE and a degree were shown only under Degree.
2. Teachers were counted once against each subject that they were teaching.
3. Included higher degrees but excluded BEds.
4. Teachers qualified in combined/general science were treated as qualified to teach biology, chemistry, or physics. Teachers qualified in biology, chemistry or physics were treated as qualified to teach combined/general science.
5. Teachers qualified in other/combined technology were treated as qualified to teach design & technology or information & communication technology. Teachers qualified in design & technology or information & communication technology were treated as qualified to teach other/combined technology.

5.2 Qualifications of science teachers

The Science and Innovation Investment Framework 2004-2014: Next steps report (HM Treasury, 2006) recommended that by 2014, 25 per cent of science teachers have a Physics specialism and 31 per cent of science teachers have a Chemistry specialism. The two science targets were set against analysis from the Deployment of Mathematics and Science Teachers study (DMS), (Moor H et al, 2006), which was carried out by NFER in 2005 and published in January 2006. The study investigated how teachers and support staff were deployed within secondary schools to deliver the curriculum in Mathematics and Science in England. In particular the DMS study created an analysis of the proportions of teachers with particular science specialisms. The SSCSS data has been used to replicate the DMS analysis as far as possible, to compare the outcomes of the two studies and to provide information in relation to progress towards the science targets.

When making comparisons of the outcomes of the two studies it is important to note that the two studies asked different questions of different respondents with different samples in two different years (2005 and 2007). The DMS study asked the heads of science departments to give the details of the subject specialisms of the science teachers in their schools within five response categories (Biology, Chemistry, Physics, Other Science or non-science). In addition, they were asked for numbers of teachers from other departments who taught science. The SSCSS asked individual teachers to list all of the post A-level qualifications they held. NFER then assigned the qualifications to each of the science subjects (a list of subjects[11] covered under each category is given in the supplementary analysis section of this report). The SSCSS analysis was based on selecting all teachers who taught Combined Science, Biology, Chemistry, Physics or Other Science. It took account of all of a teacher's post A-level qualifications which included degrees, BEds, PGCEs, Certificates in Education and other post A-level qualifications.

Table 5.2.1 illustrates the specialisms of teachers in Biology, Chemistry, Physics, Other Science and non-science subjects for both the DMS and SSCSS studies. For the DMS study, the figures given are from the published report, which were based on responses from 630 heads of science departments. For SSCSS, the percentages were calculated as far as possible on the same basis as for the DMS analysis, and were based on the responses of a sample of 2,167 science teachers which was grossed to a total of 35,720 science teachers to represent the population.

[11] The subjects counted under each of Biology, Chemistry, Physics and Other Science for this science analysis were selected to best replicate DMS and were slightly different to those used in the rest of the SSCSS analysis. In the rest of this report teachers were counted as qualified to teach Biology, Chemistry and Physics if they had a degree in Combined Science, which was not the case in the science analysis in this section.

Table 5.2.1 Comparison of science teachers' science specialisms for the Deployment of Mathematics and Science Study and the Secondary School Curriculum and Staffing Survey

Science subjects	DMS percentage of teachers by specialism 2005	SSCSS(1) percentage of specialisms 2007	SSCSS(2) percentage of teachers 2007
	%	%	%
Biology	44	32	40
Chemistry	25	22	27
Physics	19	22	27
Other Science	5	16	20
Non-science subject	8[1]	8	10
Total [2]	100	100	124

Base: DMS - 630 responses from heads of science / SSCSS - 44,022 cases of specialism and 35,720 teachers (grossed)
Source: NFER Secondary School Curriculum and Staffing Survey 2007
[1] 'Non-science related specialism' and 'teachers from other departments teaching science' were combined
[2] The percentages may not sum to 100% due to rounding

Notes of explanation about the SSCSS science analysis

The SSCSS(2) figures are percentages of the 35,720 science teachers who had a specialism in each subject category and because a number of teachers held multiple specialisms this summed to 124%. In order to provide an analysis that is more easily comparable with the DMS figures, SSCSS(1) was produced, which presents the percentages of occurrences for each specialism and sums to 100.

In SSCSS, some teachers had a qualification that covered more than one science subject. For example, if a teacher had a degree in Biochemistry, then they would be categorised as having a specialism in both Biology and Chemistry. Where qualifications covered more than one science subject, equal weight was given to each subject when recalculating to sum to 100% to create the SSCSS(1) figures. The analysis did not take account of how many periods were taught by a teacher, so the specialism of a teacher who taught one period of science was given an equal weight to a teacher who taught 10 periods of science. A qualification in science overwrote a qualification in any other subject, for example, a teacher with a degree in Geography and a PGCE in Biology was counted as having a specialism in Biology. A teacher with more than one qualification in the same subject was counted only once against that specialism. Those with an Other Science specialism were those who did not have a specialism in any of Biology, Physics or Chemistry.

Even though the SSCSS analysis was carried out as far as possible to replicate the DMS analysis, the figures in Table 5.2.1 did not measure quite the same things. However, comparing DMS and SSCSS(1), there appeared to be some consistency in the percentages for Chemistry, Physics and Non-Science categories between the two studies. By comparison, the SSCSS(1) analysis showed a much higher percentage in the Other Science category and a lower percentage in the Biology category than the DMS analysis. This difference may have stemmed

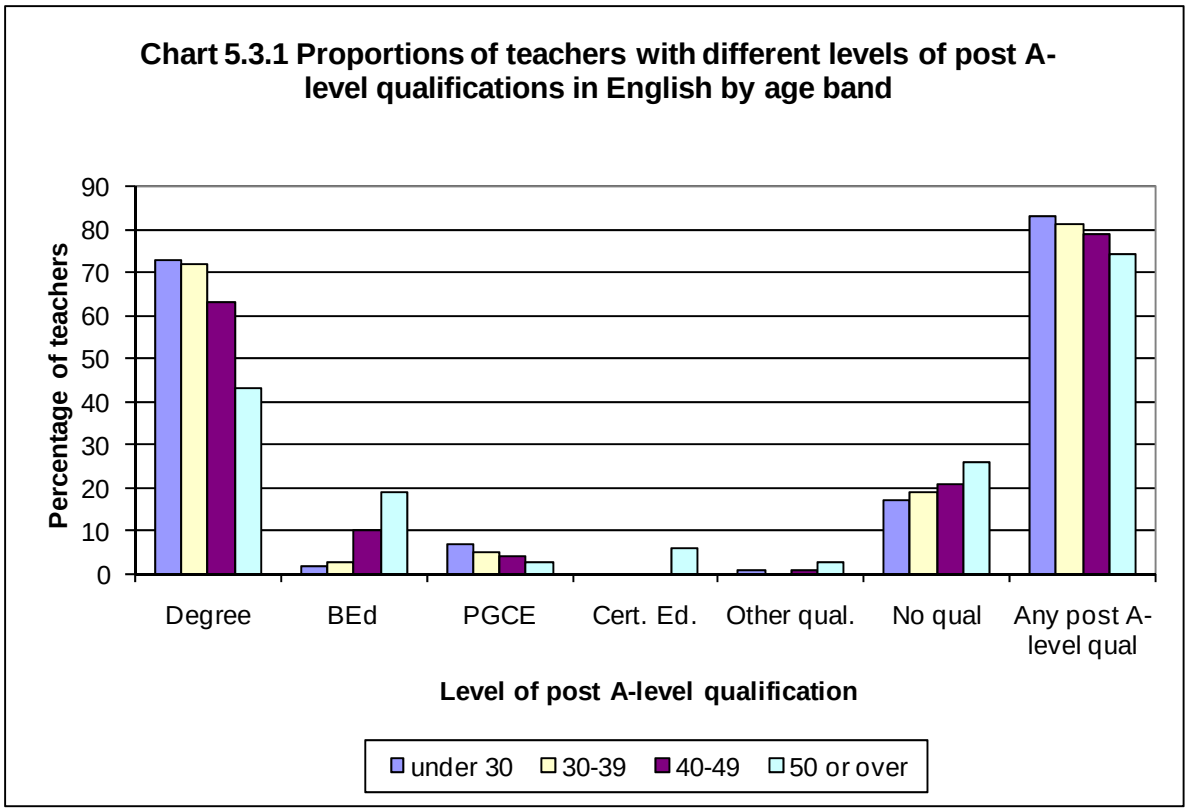
from the way in which the data was collected in the two studies. In the SSCSS analysis, 59% of the Other Science cases of specialism were for teachers qualified in either Combined or Applied Science. In the DMS study, heads of science departments who may not have been familiar with the exact qualifications of their colleagues, may have allocated teachers with Combined or Applied Science qualifications to the specific science subjects that their teachers taught the most. If this happened in the case of Biology, in particular, then it could explain some of the sizeable difference between the Biology and Other Science figures in the above analysis from the two studies.

Although it is difficult to make a truly reliable comparison between the DMS and the SSCSS analysis of science specialisms, the SSCSS analysis does provide an indication of the relative specialisms of science teachers as it stood in 2007 to compare with the targets for 2014. The Science Innovation Investment Framework 2004-2014: next steps report (HM Treasury, 2006) recommended that 25% of science teachers had a specialism in Physics by 2014. This compares to 22% of science specialisms in the SSCSS(1) analysis. In Chemistry, the SSCSS(1) analysis showed that 22% of specialisms were in Chemistry, compared to the 2014 target of 31%.

5.3 Qualifications in subjects taught by gender and age

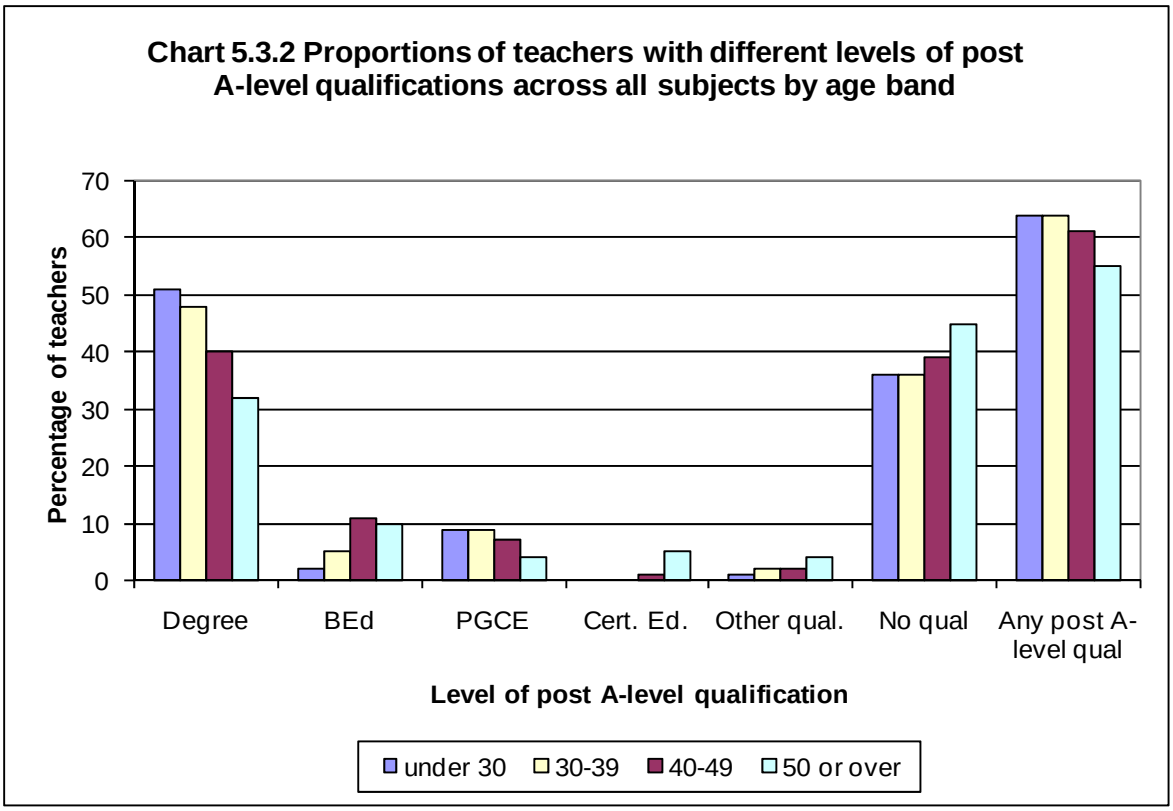
The levels of post A-level qualifications for male and female teachers showed no significant difference across the range of subjects. However, analysis by age band did provide some interesting patterns. For most subjects, there were higher proportions of teachers in the youngest age band with relevant post A-level qualifications in the subjects taught compared to older teachers. Overall across all subjects, teachers in the two youngest age bands had higher proportions of degrees and PGCEs than older teachers. Teachers in the two oldest age bands had higher proportions of Certificates in Education, BEds and other types of post A-level qualifications than younger teachers.

Across all subjects the proportions of teachers qualified, post A-level, in the subjects they taught decreased as we moved up the age bands. For example, in English there were 83% of teachers with any post A-level qualification in the under 30s age band compared to 74% in the oldest age band (50 and over). The chart below shows the pattern of post A-level qualifications for teachers of English.



Base: 32,302
Source: NFER Secondary School Curriculum and Staffing Survey 2007

As is seen in most subjects, in Spanish and German there were higher proportions of teachers in the two youngest age bands with relevant post A-level qualifications than older teachers. However, the pattern was slightly different in French and Other Modern Languages. Out of those teaching French, there was a higher proportion of teachers with relevant qualifications in the 40-49 age band than other age bands. In Other Modern Languages the 30-39 age band of teachers had the highest level of post A-level qualifications with 38% compared to other age bands. The chart below shows the pattern of qualifications for teachers by age across all subjects.



Base: 385,046
Source: NFER Secondary School Curriculum and Staffing Survey 2007

Further analysis of the age profile of teachers teaching each subject compared to the findings of the 2002 survey is given in the supplementary analysis section.

5.4 Qualifications in subjects taught by role in school

There were variations in levels of post A-level qualification when the analysis was broken down by role in school. Advanced Skills Teachers were the most likely to have a post A-level qualification in their taught subject. QTS classroom teachers had high proportions of teachers with relevant post A-level qualifications in most subjects. There were higher proportions of teachers with degrees in the subjects they taught amongst QTS classroom teachers and Advanced Skills teachers than other teachers.

5.5 Qualifications in subjects taught by school type

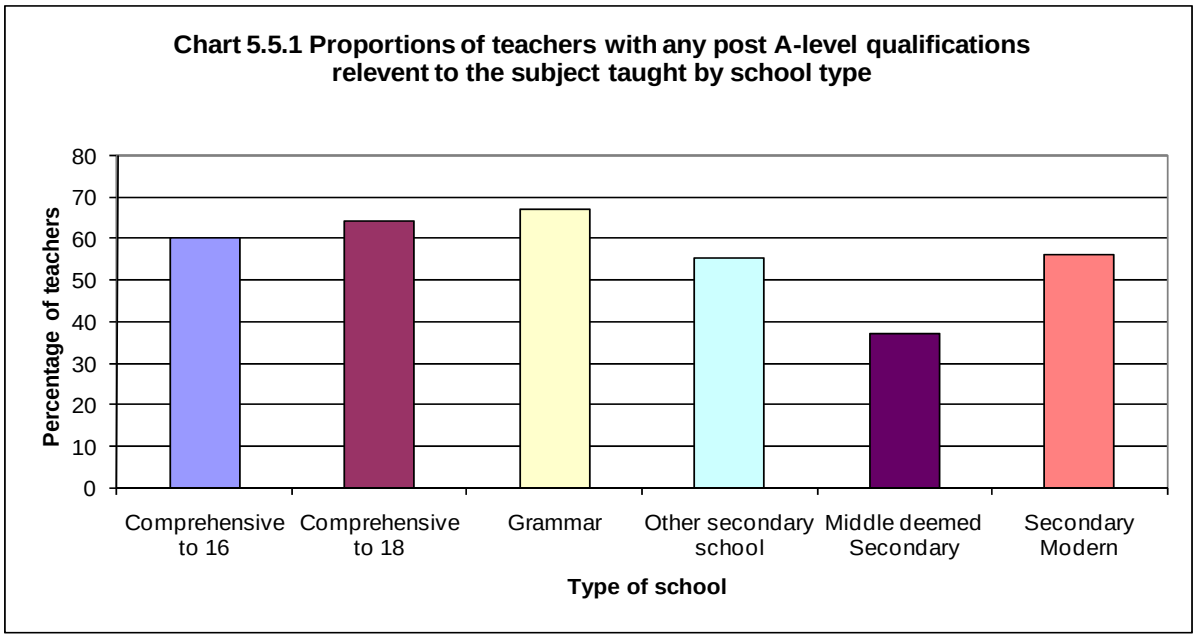
For most subjects Grammar schools, Comprehensives to 18 and Comprehensives to 16 had the highest proportions of teachers with any post A-level qualifications in the subjects they taught. Table 5.5.1 shows the proportions of teachers holding any post A-level qualification in subjects taught for a range of subjects. Grammar schools had higher proportions of post A-level qualified teachers than other schools in most subjects. However, interestingly in ICT and Physical Education the situation was quite different with only 38% holding a relevant post A-level qualification in ICT in Grammar Schools compared to 44% in Comprehensive to 16 schools. In Physical Education, Grammar Schools had the lowest proportion of teachers with post A-level qualifications compared to other school types.

Table 5.5.1 Proportions of teachers holding any relevant post A-level qualification in subjects taught by school type (for a range of subjects)

	Comprehensive to 16	Comprehensive to 18	Grammar	Other secondary school	Secondary Modern
Mathematics	73	79	88	87	56
English	78	82	94	76	66
Biology	92	97	99	100	95
Chemistry	92	98	99	75	93
Physics	88	91	97	70	88
French	75	77	84	79	81
Spanish	55	64	50	53	75
Geography	69	77	95	67	74
German	66	76	81	45	49
Design and technology	57	54	53	49	45
ICT	44	41	38	46	28
Business studies	32	56	54	41	45
Drama	49	60	77	28	60
Art and design	77	80	79	83	95
History	74	82	88	66	70
Music	85	89	94	71	87
Physical education	85	85	66	80	86
Religious education	40	52	65	56	61

Base:273,864 Source: NFER Secondary School Curriculum and Staffing Survey 2007

Chart 5.5.1 shows the proportions of teachers holding any post A-level qualification relevant to the subject taught for all subjects.



Base: 390,922 Source: NFER Secondary School Curriculum and Staffing Survey 2007

5.6 Qualifications in subjects taught by Free School Meals eligibility

In most subjects there was a distinct pattern in the qualifications of teachers when broken down by the proportion of pupils eligible for free school meals in the school. Most commonly the proportion of teachers with relevant post A-level qualifications in the subjects they taught was highest in those schools in the lowest or 2nd lowest quintiles of free school meals eligibility. The proportions of teachers with post A-level qualifications in most cases declined as we moved up the quintiles, with the least qualified teachers in schools with the most children eligible for free school meals. This mirrored the findings of the Deployment of Mathematics and Science Teachers Study (Moor H et al, 2006), which showed that schools in the lowest quintiles of free school meals eligibility had higher proportions of specialist Mathematics and Science teachers than schools in the higher quintiles.

Although this pattern was broadly consistent across most subjects, ICT and Design and Technology looked different. In both of these subjects the highest proportion of teachers with relevant post A-level qualifications was in schools with the highest level of free school meals pupils. Table 5.6.1 illustrates the proportions of teachers with relevant post A-level qualifications by free school meals quintiles for a range of subjects.

Table 5.6.1 Proportions of teachers with any relevant post A-level qualification in subjects taught by Free School Meals quintiles (for a range of subjects)

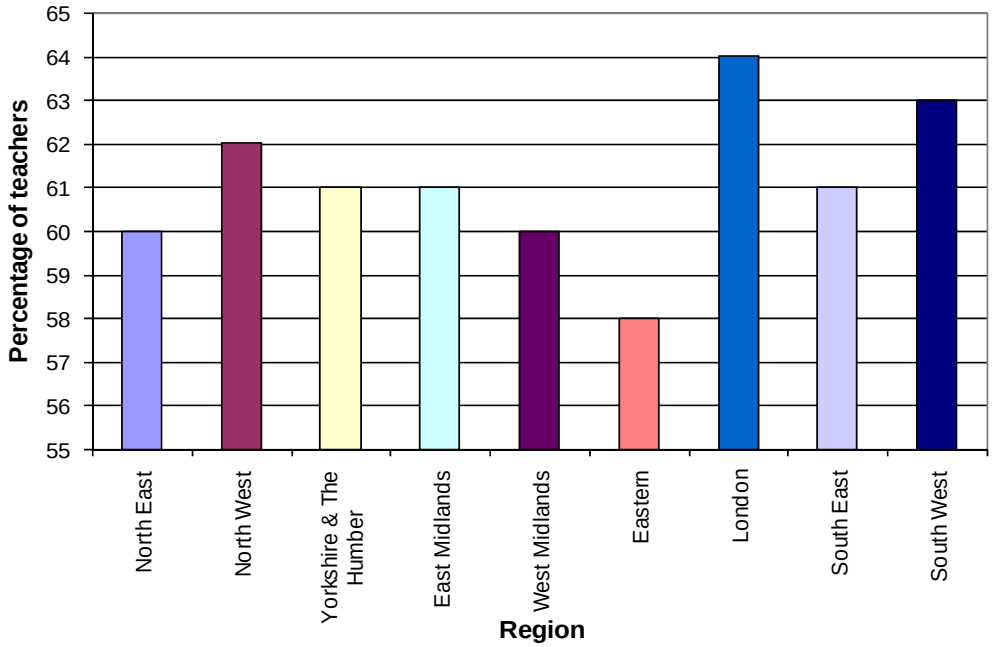
	Lowest 20%	2nd lowest 20%	Middle 20%	2nd highest 20%	Highest 20%
	%	%	%	%	%
Mathematics	79	82	70	70	65
English	87	80	77	81	71
Chemistry	97	100	89	95	88
Physics	91	94	91	89	79
Spanish	62	57	65	57	57
Geography	85	73	63	75	65
History	84	79	71	74	72
Biology	98	97	94	98	89
ICT	37	41	42	41	50
Design and technology	52	53	55	50	57

Base: 177,042
Source: NFER Secondary School Curriculum and Staffing Survey 2007

5.7 Qualifications in subjects taught by region

Looking at proportions of teachers with post A-level qualifications in the subjects they taught by region showed a large amount of variation by subject and small differences between regions across all subjects. Chart 5.7.1 shows the proportions of teachers with relevant post A-level qualifications in the subjects they taught across all subjects. The region with the highest proportion of post A-level qualified teachers across all subjects was seen in London, however there was a great deal of variation between subjects and Table 5.7.1 illustrates this. For example, in Physics the Eastern region had 100% of teachers with relevant post A-level qualifications compared to 83% in London.

Chart 5.7.1 Proportions of teachers with any relevant post A-level qualifications across all subjects by region



Base: 390,922
Source: NFER Secondary School Curriculum and Staffing Survey 2007

Table 5.7.1 Proportions of teachers with any post A-level qualifications relevant to subjects taught by region (for a range of subjects)

	North East	North West	Yorkshire & The Humber	East Midlands	West Midlands	Eastern	London	South East	South West
	%	%	%	%	%	%	%	%	%
ICT	38	58	37	34	42	38	43	37	38
Business Studies	33	50	66	54	49	46	53	47	46
Geography	71	70	72	78	76	55	82	72	86
English	79	79	76	79	77	75	82	81	81
Biology	96	91	94	98	95	93	98	98	100
Physics	83	88	93	94	87	100	83	91	95

Base: 94,141
Source: NFER Secondary School Curriculum and Staffing Survey 2007

6 Periods taught by post A-level qualifications

6.1 Periods taught by post A-level qualifications in 2007

This section looks at the proportions of periods taught by teachers holding post A-level qualifications in the subjects taught. Table 6.1.1 shows the proportions of periods taught by full time equivalent teachers at each different level of post A-level qualification for each subject. As in Section 5, the analysis in this section used data grossed up to reflect the whole maintained secondary workforce based on full time equivalent teachers. The numbers of periods taught were standardised to a 40 period week to make them consistent with the 2002 method. Explanatory notes about how the analyses were carried out are given in Annex 1 of this report.

The analysis showed that for most subjects the majority of periods were taught by teachers holding a post A-level qualification in a related subject. The subjects with the highest proportions of periods taught by teachers with relevant post A-level qualifications were English, Biology, Chemistry, Physics, History, Music and Physical Education, where the proportions were 90% and over. The subject areas where the proportion of periods taught by teachers with relevant post A-level qualifications was between 80% and 90% were Mathematics, French, German, Geography and Art and Design. It is interesting to note that in ICT only 55% of lessons were delivered by teachers with relevant post A-level qualifications. In Design and Technology there were only 70% of periods taught by post A-level qualified teachers.

In most subjects, there were higher proportions of periods taught by teachers holding a degree than any other post A-level qualification. The exceptions to this were Design and Technology, Other/Combined Technology, Careers and Citizenship where there were higher proportions of subject periods being taught by teachers with post A-level qualifications other than degrees.

When comparing the analysis of periods taught to the analysis of the proportions of qualified teachers in each subject it was clear that teachers with post A-level qualifications taught more periods than their colleagues with no post A-level qualifications. For example, 75% of Mathematics teachers held a post A-level qualification, but 84% of Mathematics lessons were taught by teachers holding a post A-level qualification. Similarly, in ICT only 41% of teachers offering ICT had a post A-level qualification, but 55% of ICT lessons were delivered by teachers with post A-level qualifications.

Table 6.1.1 Periods[1] taught[3] to years 7 to 13 by post A-level qualifications[2] of full time equivalent teachers in 2007

	Highest post A-level qualification													
	Degree[4]		BEd		PGCE		Cert. Ed.		Other qual.		No qual		*Any post A-level*	Total of periods
	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI	%	(000s)
Mathematics	54	± 0	10	± 0	16	± 0	2	± 0	3	± 0	16	± 0	*84*	722.5
English	73	± 0	8	± 0	5	± 0	2	± 0	1	± 0	10	± 0	*90*	701.7
Combined/General Science[5]	50	± 1	4	± 0	22	± 0	1	± 0	2	± 0	21	± 0	*79*	527.8
Biology[5]	88	± 1	3	± 0	4	± 0	1	± 0	1	± 0	3	± 0	*97*	103.6
Chemistry[5]	84	± 1	3	± 0	8	± 1	0	± 0	1	± 0	4	± 0	*96*	98.5
Physics[5]	74	± 1	6	± 1	9	± 1	0	± 0	2	± 0	9	± 1	*91*	87.9
Other Sciences	53	± 2	1	± 0	2	± 0	0	± 0	5	± 1	39	± 1	*61*	61.2
French	63	± 1	5	± 0	11	± 0	3	± 0	2	± 0	16	± 1	*84*	253.9
German	74	± 1	2	± 0	5	± 1	0	± 0	1	± 0	18	± 1	*82*	95.0
Spanish	61	± 1	1	± 0	10	± 1	-	± 0	-	± 0	28	± 1	*72*	67.9
Other Modern Languages	29	± 2	-	± 0	8	± 1	-	± 0	-	± 0	62	± 2	*38*	31.5
Design and Technology[6]	33	± 1	19	± 1	12	± 0	4	± 0	4	± 0	30	± 1	*70*	306.1
ICT[6]	30	± 1	6	± 0	14	± 1	1	± 0	5	± 0	45	± 1	*55*	304.2
Other/Combined Technology[6]	27	± 1	21	± 1	6	± 1	8	± 1	8	± 1	31	± 1	*69*	127.1
Business Studies	59	± 1	6	± 0	4	± 0	0	± 0	3	± 0	28	± 1	*72*	167.1
Classics	66	± 6	-	± 0	-	± 0	-	± 0	-	± 0	34	± 6	*66*	3.2
History	77	± 1	4	± 0	6	± 0	1	± 0	2	± 0	10	± 0	*90*	274.9
Religious Education	49	± 1	8	± 0	12	± 1	2	± 0	2	± 0	26	± 1	*74*	220.2
Geography	77	± 1	6	± 0	4	± 0	1	± 0	1	± 0	11	± 0	*89*	280.0
Other Social Studies	37	± 2	1	± 0	3	± 1	0	± 0	2	± 1	57	± 2	*43*	49.5
Combined Arts/ Humanities/ Social Studies	23	± 1	0	± 0	5	± 1	-	± 0	2	± 0	70	± 1	*30*	64.1
Music	67	± 1	7	± 1	13	± 1	2	± 0	5	± 0	7	± 0	*93*	152.7
Drama	55	± 1	6	± 0	10	± 1	2	± 0	5	± 0	23	± 1	*77*	137.9
Art and Design	59	± 1	5	± 0	18	± 1	3	± 0	5	± 0	11	± 1	*89*	224.3
Physical Education	57	± 1	25	± 1	4	± 0	3	± 0	2	± 0	9	± 0	*91*	463.4
Careers Education	-	± 0	0	± 0	-	± 0	-	± 0	13	± 3	87	± 3	*13*	9.0
Personal Social and Health Education	0	± 0	0	± 0	0	± 0	-	± 0	0	± 0	99	± 0	*1*	73.5
General Studies	-	± 0	-	± 0	-	± 0	-	± 0	-	± 0	100	± 0	*0*	11.4
Citizenship	1	± 0	-	± 0	12	± 1	-	± 0	3	± 1	84	± 1	*16*	38.7
Other	-		-		-		-		-		-		-	112.3
Total[3]	**56**	**± 0**	**9**	**± 0**	**10**	**± 0**	**2**	**± 0**	**3**	**± 0**	**21**	**± 0**	***79***	**5771.0**

Base: 5,771,022 Source: NFER Secondary School Curriculum and Staffing Survey 2007

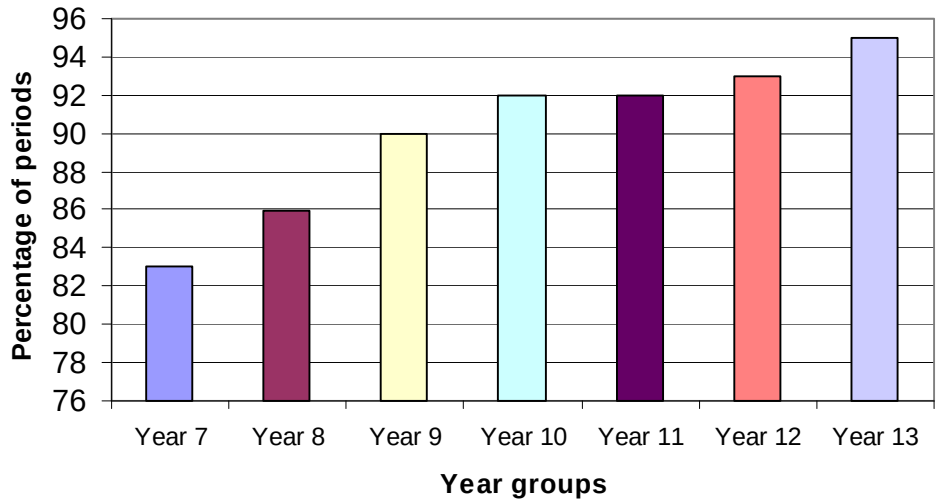
1. The number of periods in one complete timetable cycle standardised to a one 40 period week timetable.
2. Where a teacher had more than one post A level qualification in the same subject, the qualification level was determined by the highest level reading from left (Degree) to right (Other Qual.). For example, teachers shown under PGCE had a PGCE but not a degree or BEd in the subject, while those with a PGCE and a degree were shown only under Degree.
3. Teachers were counted once against each subject that they were teaching.
4. Included higher degrees but excluded BEds.
5.Teachers qualified in combined/general science were treated as qualified to teach biology, chemistry, or physics. Teachers qualified in biology, chemistry or physics were treated as qualified to teach combined/general science.
6. Teachers qualified in other/combined technology were treated as qualified to teach design & technology or information & communication technology. Teachers qualified in design & technology or information & communication technology were treated as qualified to teach other/combined technology.

6.2 Periods taught by post A-level qualifications by year group

When the proportions of periods taught were broken down by year group there was an overall trend in which pupils in the older year groups were more likely to be taught by teachers with relevant post A-level qualifications than pupils in the younger years. For example, in English the percentage of periods taught by teachers with a relevant post A-level qualification was 83% in year 7, 86% in year 8, 90% in year 9, 92% in year 10, 92% in year 11, 93% in year 12 and 95% in year 13. The pattern was similar in most subjects, but in some subjects the proportions were slightly higher in year 9 than in year 10. This is probably due to year 9 being a statutory test year, which along with the GCSE and A-level exam years tended to have more periods taught by teachers with relevant post A-level qualifications. There are comparisons of exam and non-exam years in Section 6.3 of this report.

Chart 6.2.1 shows the proportions of periods taught by teachers with relevant post A-level qualifications for English. The picture was similar in most subjects.

Chart 6.2.1 Proportions of English periods taught by teachers with post A-level qualifications within each year group



Base: 5,771,022
Source: NFER Secondary School Curriculum and Staffing Survey 2007

Physical Education showed much more consistency across the year groups with nearly the same proportions of lessons delivered by teachers with relevant post A-level qualifications in each year group.

Table 6.2.1 shows the proportions of periods taught by teachers with relevant post A-level qualifications in each subject in each year group.

Table 6.2.1 Proportions[1] of periods taught by teachers with any post A-level qualification in the subject 'within' each year group

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
	%	%	%	%	%	%	%
Mathematics	78	79	85	86	86	92	97
English	83	86	90	92	92	93	95
Combined / General science	78	80	81	79	81	80	75
Biology	87	97	98	96	96	98	99
Chemistry	97	93	94	95	96	99	99
Physics	84	84	94	92	92	91	95
Other sciences	2	35	51	36	32	72	77
French	80	81	82	87	89	86	88
German	78	77	77	86	87	96	91
Spanish	66	67	70	74	76	76	87
Other modern languages	30	38	33	33	40	53	58
Design and technology	65	68	71	72	71	78	76
ICT	52	56	58	54	55	57	53
Other / combined technology	66	67	72	67	71	84	88
Business Studies	42	52	82	68	70	74	78
Classics	43	90	87	79	80	65	60
History	84	86	90	95	95	96	96
Religious education	68	68	73	74	78	91	93
Geography	81	86	90	93	95	95	96
Other social studies	32	15	20	36	40	39	49
Combined arts / humanities / social studies	11	10	15	37	34	39	38
Music	91	94	95	94	93	98	96
Drama	71	78	77	78	78	79	77
Art and design	83	88	91	92	91	92	91
Physical education	90	92	91	92	93	93	93
Careers education	26	43	17	9	15	5	6
PSHE	2	1	0	0	0	1	0
General studies	0	0	0	0	0	0	0
Citizenship	20	23	26	9	12	5	5
Total	75	78	81	80	81	80	82

Base: 5,771,022
Source: NFER Secondary School Curriculum and Staffing Survey 2007
[1] The proportions of periods taught were calculated within each year group, so for example, in year 7 Mathematics 78% of periods were taught by teachers with relevant post A-level qualifications and the rest (22%) were taught by teachers with no relevant post A-level qualifications.

6.3 Periods taught by post A-level qualifications by exam and non-exam years

This section looks at the proportions of periods taught against teachers qualified to different levels for exam and non-exam years. Table 6.3.1 shows the proportions of periods taught by teachers with different levels of post A-level qualification for the exam years and the non-exam years. Years 9, 11, 12 and 13 were counted as exam years and years 7, 8 and 10 as non-exam years.

As expected the comparison illustrates that higher proportions of periods were given by teachers with relevant post A-level qualifications in the exam years than in the non-exam years. On average the proportions of periods offered by post A-level qualified teachers in the exam years was three percentage points higher than for the non-exam years. In most subjects, there were higher proportions of periods taught in the exam years by teachers with degrees than in the non-exam years.

For example, in Mathematics 57% of periods in the exam years were taught by degree qualified teachers compared to 50% in the non-exam years. Overall in Mathematics the proportion of periods taught by teachers with any post A-level qualification in the subject was 87% in the exam years and 81% in the non-exam years.

The biggest differences between exam and non-exam years were seen in the ‘other’ subject categories, for example, in Other Sciences 67% of periods were taught by post A-level qualified teachers in the exam years compared to 34% in the non-exam years.

Table 6.3.1 Proportion of subject periods[1] taught to year groups 9, 11, 12 and 13 (exam years) and years 7, 8 and 10 (non-exam years) by full time equivalent teachers holding a post A-level qualification[2] in that subject[3]

	Degree[4]			BEd		
	Exam	Non Exam	sig[7]	Exam	Non Exam	sig[7]
	%	%		%	%	
Mathematics	57	50	*	10	10	
English	75	71	*	9	8	*
Combined/General Science[5]	50	49	*	4	4	
Biology[5]	90	83	*	2	4	
Chemistry[5]	86	79	*	3	5	*
Physics[5]	75	72	*	6	7	
Other Sciences	59	23	*	1	2	
French	65	61	*	5	6	
German	76	71	*	1	2	
Spanish	63	59	*	1	1	
Other Modern Languages	36	24	*	-	-	
Design and Technology[6]	34	32	*	20	18	*
ICT[6]	31	29	*	6	5	
Other/Combined Technology[6]	27	27		23	19	
Business Studies	61	55		6	5	
Classics	65	67				
History	81	73	*	4	4	
Religious Education	52	47	*	9	7	*
Geography	81	73	*	6	6	
Other Social Studies	38	29	*	1	2	
Combined Arts/ Humanities/ Social Studies	26	18	*	-	0	
Music	68	65	*	7	7	
Drama	56	55		6	5	
Art and Design	60	58	*	5	5	
Physical Education	57	58	*	26	25	*
Careers Education	-	-		1	-	
PSHE	-	0		0	0	
General Studies	-	-		-	-	
Citizenship	1	2		-	-	
Other	-	-		-	-	
Total[3]	**59**	**54**	*	**8**	**9**	

Base: 5,771,022 *Source: NFER Secondary School Curriculum and Staffing Survey 2007*

1. The number of periods in one complete timetable cycle standardised to one 40 period week.
2. Where a teacher had more than one post A level qualification in the same subject, the qualification level was determined by the highest level reading from left (Degree) to right (Other Qual.). For example, teachers shown under PGCE had a PGCE but not a degree or BEd in the subject, while those with a PGCE and a degree were shown only under Degree.
3. Teachers were counted once against each subject that they were teaching.
4. Included higher degrees but excluded BEds.
5. Teachers qualified in combined/general science were treated as qualified to teach biology, chemistry, or physics. Teachers qualified in biology, chemistry or physics were treated as qualified to teach combined/general science.
6. Teachers qualified in other/combined technology were treated as qualified to teach design & technology or information & communication technology. Teachers qualified in design & technology or information & communication technology were treated as qualified to other/combined technology.
7. The 'Sig' column indicates if the difference between the exam and the non-exam years was statistically significant with a *.

Table 6.3.1 Proportion of subject periods[1] taught to year groups 9, 11, 12 and 13 (exam years) and years 7, 8 and 10 (non-exam years) by full time equivalent teachers holding a post A-level qualification[2] in that subject[3] (continued)

	PGCE			Cert Ed		
	Exam	Non Exam	sig[7]	Exam	Non Exam	sig[7]
	%	%		%	%	
Mathematics	16	16	*	1	2	
English	5	6		1	2	*
Combined/General Science[5]	23	22	*	1	1	
Biology[5]	3	6	*	1	1	
Chemistry[5]	7	9	*	0	0	
Physics[5]	9	9		1	0	
Other Sciences	2	3		0	1	
French	10	11	*	2	3	*
German	5	5		0	0	
Spanish	11	9	*	-	-	
Other Modern Languages	7	10	*	-	-	
Design and Technology[6]	12	11	*	4	3	
ICT[6]	14	14	*	0	1	
Other/Combined Technology[6]	6	6		8	8	
Business Studies	4	3		1	0	
Classics						
History	6	7		1	1	
Religious Education	13	12	*	2	3	*
Geography	4	4		1	1	
Other Social Studies	3	2		0	-	
Combined Arts/ Humanities/ Social Studies	6	4	*	-	-	
Music	13	12		2	2	
Drama	10	9		2	2	
Art and Design	18	18		3	3	
Physical Education	4	4		3	4	
Careers Education	-	-		-	-	
PSHE	0	1		-	-	
General Studies	-	-		-	-	
Citizenship	12	12		-	-	
Other	-	-		-	-	
Total[3]	**10**	**11**	*	**2**	**2**	*

see footnotes on page 44

Table 6.3.1 Proportion of subject periods[1] taught to year groups 9, 11, 12 and 13 (exam years) and years 7, 8 and 10 (non-exam years) by full time equivalent teachers holding a post A-level qualification[2] in that subject[3] (continued)

	Other qual			No qual			Total of periods	
	Exam	Non Exam	sig[7]	Exam	Non Exam	sig[7]	Exam	Non Exam
	%	%		%	%		(000s)	(000s)
Mathematics	3	4	*	13	19	*	344.5	377.9
English	1	1		8	13	*	330.3	371.4
Combined/General Science[5]	2	2		19	22	*	225.1	302.7
Biology[5]	1	1		2	5	*	71.9	31.7
Chemistry[5]	1	1		3	5	*	63.1	35.4
Physics[5]	2	1		7	11	*	56.6	31.4
Other Sciences	5	6		33	66	*	51.0	10.3
French	2	2		15	17	*	112.0	141.9
German	1	2		16	20	*	47.1	47.9
Spanish				26	31	*	32.2	35.8
Other Modern Languages	-	-		58	66	*	14.8	16.7
Design and Technology[6]	3	4		28	32	*	141.0	165.1
ICT[6]	5	5		44	46	*	158.2	146.0
Other/Combined Technology[6]	8	8		27	33	*	55.5	71.6
Business Studies	2	3		27	34	*	127.0	40.1
Classics				35	33		2.6	0.5
History	2	2		6	13	*	132.2	142.6
Religious Education	2	2		22	30	*	101.4	118.8
Geography	1	1		8	15	*	132.2	147.8
Other Social Studies	2	1		56	66	*	43.5	6.0
Combined Arts/ Humanities/ Social Studies	3	1	*	65	77	*	38.8	25.2
Music	5	5		5	8	*	68.5	84.3
Drama	5	5		22	24	*	69.3	68.6
Art and Design	5	4		9	12	*	109.6	114.7
Physical Education	2	2		9	9		214.2	249.2
Careers Education	13	12		86	88	*	4.7	4.3
PSHE	0	1		99	99	*	29.6	43.9
General Studies	-	-		100	100		10.5	0.9
Citizenship	3	2		84	84		15.7	23.0
Other	-	-		-	-		51.9	60.4
Total[3]	**3**	**3**	*	**19**	**22**	*	**2855.1**	**2915.9**

see footnotes on page 44

6.4 Periods taught by post A-level qualifications by teachers' gender and age

When the proportions of periods taught by teachers with different levels of post A-level qualification were broken down by age and gender the resulting patterns were much the same as observed in the analysis described in Section 5 of this report. Looking at proportions of periods taught by teachers with different levels of post A-level qualifications showed little difference between male and female teachers. However, the proportions of periods offered overall by male and female teachers showed some differences. Overall, more periods were taught by female teachers than male teachers. In some subjects however, more periods were taught by male teachers than female teachers. Notably in ICT, Physics and Design and Technology more periods were taught by male than female teachers. Table 6.4.1 shows the percentage of periods taught by male and female teachers for each subject.

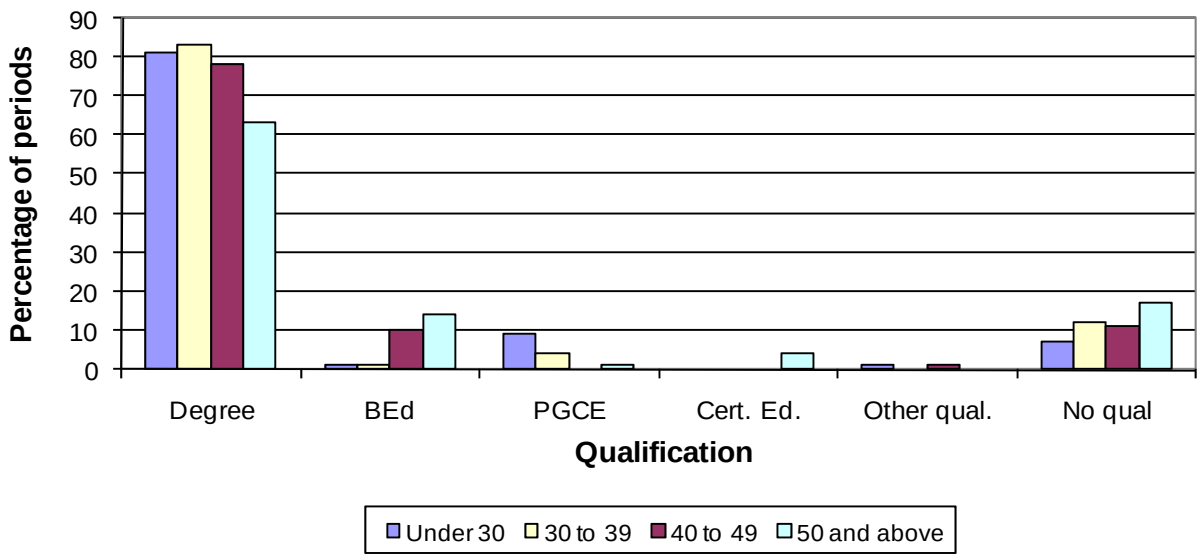
Table 6.4.1 Proportions of periods taught by female and male teachers

	Female %	Male %	Total (000's)
Mathematics	53	47	721.6
English	76	24	701.1
Combined / General science	54	46	527.6
Biology	63	37	103.6
Chemistry	51	49	98.5
Physics	39	61	87.9
Other sciences	60	40	61.0
French	80	20	253.6
German	70	30	94.1
Spanish	78	22	67.6
Other modern languages	78	22	31.5
Design and technology	48	52	305.3
ICT	44	56	304.0
Other / combined technology	75	25	127.1
Business Studies	56	44	167.0
Classics	68	32	3.2
History	53	47	274.5
Religious education	69	31	220.0
Geography	49	51	279.9
Other social studies	57	43	49.4
Combined arts/humanities/social studies	62	38	64.1
Music	56	44	152.6
Drama	70	30	137.5
Art and design	69	31	223.7
Physical education	49	51	462.6
Careers education	43	57	9.0
PSHE	65	35	73.5
General studies	46	54	11.4
Citizenship	63	37	38.7
Other	75	25	112.0
Missing	-	-	7.4
Total	60	40	5771.0

Base: 5,771,022
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

Looking at periods taught by teachers' age showed that, in most subjects, younger teachers with relevant post A-level qualifications delivered higher proportions of periods than older colleagues. This provides the same picture as was observed in the analysis of qualifications in subjects taught by teacher age. The chart below shows the proportions of Geography periods taught by teachers with different levels of post A-level qualification by age band. The pattern here is very similar to the pattern seen in most subjects.

Chart 6.4.1 Proportions of Geography periods taught by teachers by qualification and age band



Base: 275,369
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

Following on from this, it is interesting to look at the proportions of periods taught by teachers in different age bands. Table 6.4.2 shows the percentage of periods taught by teachers in each age band by subject. It shows variation between subjects, some where the proportions of periods taught were fairly evenly spread across the teacher age bands, whilst others had higher proportions in particular bands than others. Mathematics had similar proportions of periods taught in each teacher age band, with slightly higher proportions in the oldest band. In Other/Combined Technology, Careers Education, Classics and PSHE considerably higher proportions of periods were taught by teachers in the two oldest age bands. Conversely, in Biology, Spanish, Music, Drama and Physical Education the majority of periods were taught by teachers in the two youngest age bands.

Table 6.4.2 Proportions of periods taught by teachers in different age bands

	Under 30	30 to 39	40 to 49	50 and over	Total (1000's)
Mathematics	24	27	25	27	713.8
English	27	28	22	25	689.6
Combined / General science	27	31	22	22	515.4
Biology	28	32	19	23	102.3
Chemistry	19	36	23	24	97.4
Physics	18	35	21	29	87.1
Other sciences	25	24	32	21	58.7
French	22	33	22	25	248.7
German	22	30	20	30	93.7
Spanish	33	37	18	14	67.7
Other modern languages	17	33	24	28	31.5
Design and technology	17	29	31	26	298.3
ICT	21	29	30	22	299.2
Other / combined technology	14	25	33	29	125.1
Business Studies	25	30	24	23	164.8
Classics	20	19	25	38	3.2
History	29	29	21	23	270.6
Religious education	26	33	23	20	217.2
Geography	31	28	18	25	275.4
Other social studies	22	28	23	29	48.9
Combined arts / humanities / social studies	30	35	21	17	62.8
Music	32	35	21	13	150.2
Drama	35	32	20	14	134.7
Art and design	23	38	21	21	220.2
Physical education	51	27	15	10	458.1
Careers education	10	11	29	52	8.9
PSHE	20	23	29	31	73.0
General studies	13	35	26	27	11.3
Citizenship	35	24	20	23	36.8
Other	12	18	26	45	110.5
Missing data	-	-	-	-	95.9
Total	27	30	23	23	5771.0

Base: 5,771,022
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

6.5 Periods taught by post A-level qualifications by teachers' role in school

As was observed in Section 5 when we focused on qualification level by role, Advanced Skills Teachers had high levels of post A-level qualification. As would be expected given the very small proportion of Advanced Skills Teachers in the population, they only delivered a small proportion (1%) of the periods taught overall. The majority of periods were taught by QTS or post-threshold teachers. Of periods taught by QTS teachers, high proportions of these were given by teachers with post A-level qualifications. Post-threshold teachers tended to have slightly fewer post A-level qualifications in the subjects they taught than QTS classroom teachers. The table below illustrates the proportions of periods taught over all subjects by teachers with different roles.

Table 6.5.1 Proportions of periods taught over all subjects by teacher role

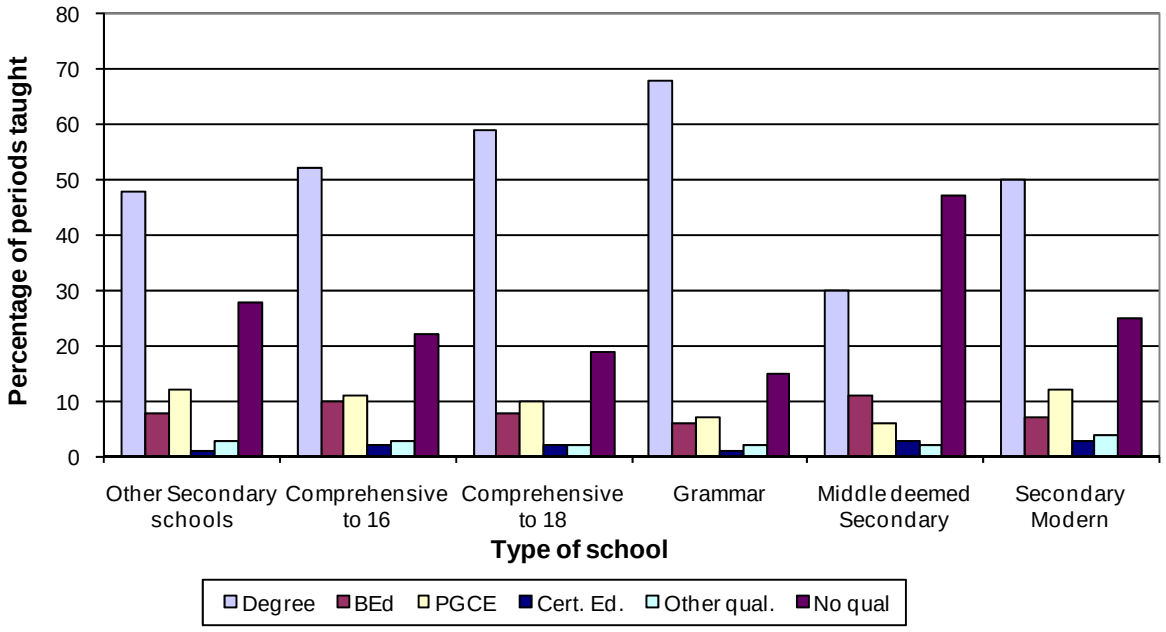
	Percentage of periods taught	Percentage of teachers in dataset
	%	%
Headteacher	<1	2
Deputy headteacher	1	3
Assistant headteacher	4	6
Advanced Skills teacher	1	1
Post-threshold teacher	45	44
QTS classroom teacher	42	38
Non-QTS classroom teacher	4	4
Missing	3	3
Total (000s)	5771.0	214.3

Base: 5,771,022 periods and 214,300 teachers
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

6.6 Periods taught by post A-level qualifications by school type

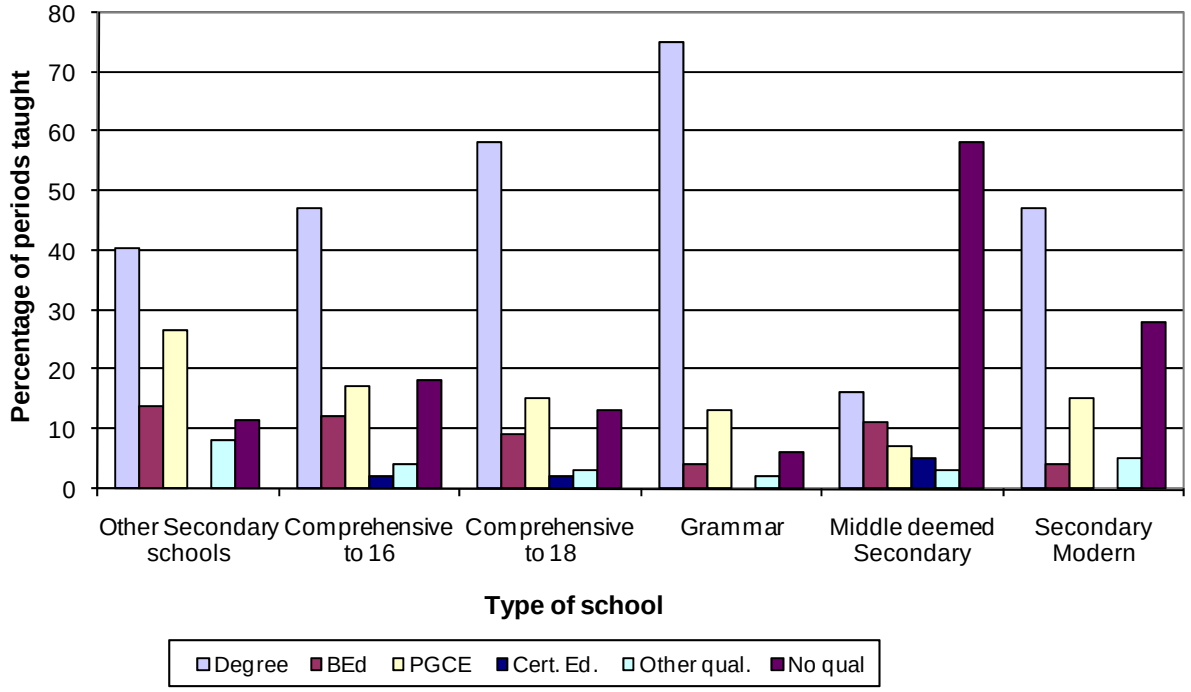
There was a distinct pattern in the proportions of periods taught by school type, which was similar to that observed in the analysis of qualifications by subjects taught (Section 5). In most subjects Grammar schools had the highest proportions of periods taught by post A-level qualified teachers, with some variation within particular subjects. In most subjects, Comprehensives to 18 had higher proportions of periods with post A-level qualifications compared to Comprehensive to 16. Chart 6.6.1 shows the proportions of periods taught across all subjects by school type. Chart 6.6.2 shows the proportions of periods taught for Mathematics by school type and Chart 6.6.3 shows English. A table showing the proportions of periods taught by teachers with relevant post A-level qualifications for all subjects is given as supplementary analysis on page 79.

Chart 6.6.1 Proportions of periods taught by post A-level qualifications of teachers for each type of school across all subjects



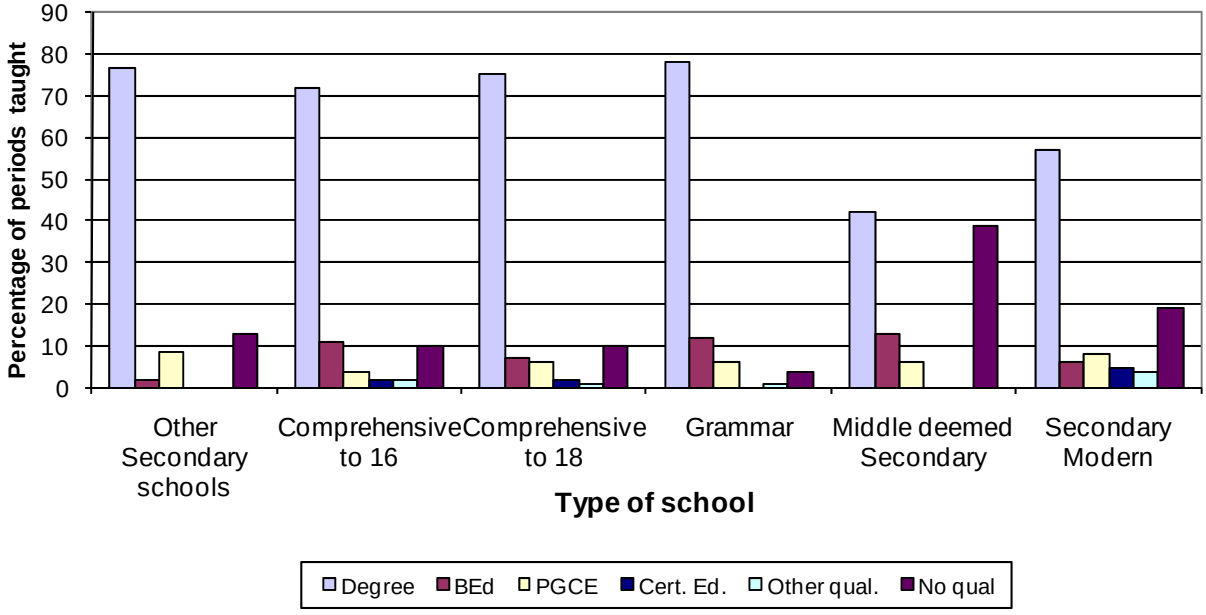
Base: 5,771,022
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

Chart 6.6.2 Proportions of Mathematics periods taught by post A-level qualifications of teachers for each type of school



Base: 722,463
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

Chart 6.6.3 Proportions of English periods taught by post A-level qualifications of teachers for each type of school



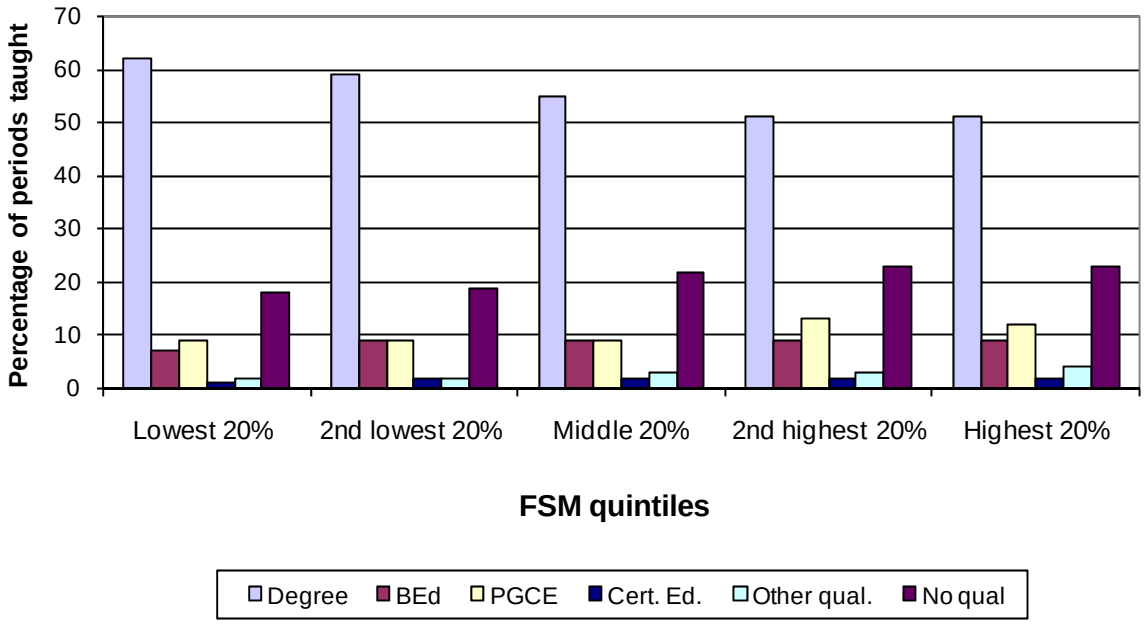
Base: 701,693
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

6.7 Periods taught by post A-level qualifications by Free School Meals eligibility

The analysis of periods taught by free school meals (FSM) showed that schools with the highest proportions of pupils eligible for FSM had smaller proportions of periods taught by teachers with post A-level qualifications. It was evident that a higher proportion of periods were taught by teachers with degrees in the subject in schools with the fewest pupils eligible for FSM compared to those with the most. This was particularly noticeable in Mathematics where 64% of periods taught in the lowest quintile of FSM were given by teachers with degrees compared to 44% of periods in the highest quintile. In Physics and Chemistry there were also considerably higher proportions of periods taught by teachers with degrees in the lowest FSM quintile compared to the highest.

The chart below shows the total proportions of periods taught by teachers with different levels of post A-level qualifications across all subjects. The pattern shown in the chart illustrates the patterns seen in the majority of subjects and was similar to the pattern observed in the analysis of qualifications of teachers in each subject (Section 5). However, there were some subjects where the pattern was different, for example, in ICT 68% of periods were taught by post A-level qualified teachers in the highest quintile compared to 50% in the lowest quintile.

Chart 6.7.1 Proportions of periods taught by post A-level qualified teachers in each quintile of FSM for all subjects



Base: 5,750,847
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

6.8 Periods taught by post A-level qualifications by region

As seen in the analysis of qualifications of teachers in each subject there was a great deal of variation between subjects when the proportions of periods taught were subdivided into regions, although the differences were small. Table 6.8.1 shows the proportions of periods taught by teachers with any post A-level qualification in relevant subjects, by region, for each subject and overall (total). The analysis shows that across all subjects the lowest proportions of periods taught by post A-level qualified teachers were seen in the East Midlands (77%) and Eastern (77%) regions. The North West and London had the overall highest proportions (81%) of periods taught by teachers with relevant post A-level qualifications. However, it should be noted that these differences were very small and the variation between subjects was considerable (see Table 6.8.1).

Table 6.8.1 Proportions of periods taught by teachers with any post A-level qualification in the subject taught by region

	North East	North West	Yorkshire & The Humber	East Midlands	West Midlands	Eastern	London	South East	South West
	%	%	%	%	%	%	%	%	%
Mathematics	84	86	87	78	83	78	83	87	86
English	91	89	89	90	87	89	92	90	89
Combined / General science	77	82	79	75	83	77	83	73	87
Biology	97	89	95	98	97	96	99	97	100
Chemistry	93	94	100	92	94	93	99	98	100
Physics	89	90	95	96	86	101	87	89	97
Other sciences	40	40	74	65	79	71	72	54	61
French	89	84	71	85	89	85	88	81	83
German	60	73	90	87	79	70	91	83	92
Spanish	69	76	79	65	68	76	69	73	62
Other modern languages	91	31	10	79	36	18	4	63	83
Design and technology	51	74	70	68	59	76	79	71	72
ICT	46	70	48	49	56	47	61	55	48
Other / combined technology	66	86	63	57	72	60	56	76	63
Business Studies	63	70	80	79	77	68	75	67	67
Classics	0	0	94	0	79	100	0	84	100
History	89	89	89	94	89	84	93	92	92
Religious education	73	72	79	86	76	79	71	69	64
Geography	88	87	85	89	91	77	91	90	96
Other social studies	78	26	42	33	50	57	41	47	22
Combined arts / humanities / social studies	0	36	35	19	20	42	32	45	17
Music	97	88	94	93	93	90	92	98	93
Drama	81	70	68	73	84	76	81	79	83
Art and design	79	94	92	87	87	90	94	91	89
Physical education	90	93	96	95	90	90	87	91	92
Careers education	13	0	40	56	0	0	0	0	0
PSHE	1	7	0	0	1	0	0	0	2
General studies	0	0	0	0	0	0	0	0	0
Citizenship	5	9	15	33	3	21	16	22	1
Other	-	-	-	-	-	-	-	-	-
Total	78	81	79	77	80	77	81	79	80

Base: 5,771,022
Source: NFER Secondary School Curriculum and Staffing Survey 2007
Note: analysis based on periods taught to years 7 to 13

7 Comparisons with the 2002 survey results

7.1 Qualifications by subjects taught for 2007 compared to 2002

Table 7.1.1 shows the proportions of teachers against highest post A-level qualifications in the subjects they taught for the 2007 survey results compared to the 2002 survey results. The equivalent table from the 2002 survey showing comparisons with the 1996 survey is given in Annex 4.

In order to provide a good comparison with 2002, Table 7.1.1 is based on full time teachers only grossed up to represent the population of full time teachers.

In 2007 the proportions of teachers holding relevant post A-level qualifications in the subjects they taught was higher by five percentage points than in 2002. Across all subjects there was an increase in the proportions of teachers with degrees in the subjects they taught by ten percentage points between 2007 and 2002. The increase in the proportion of teachers with degrees was seen in many subjects and varied in scale. One of the most marked was in Physical Education where the proportion of teachers with degrees rose to 50% in 2007 from 25% in 2002. In Drama the increase was thirteen percentage points. In Mathematics 47% of teachers had a degree in the subject in 2007 compared to 42% in 2002.

There was a decrease of three percentage points in the proportions of teachers with BEds across all subjects and a decrease of four percentage points in the proportions of teachers with Certificates in Education. Across all subjects the proportion of PGCEs remained virtually the same in 2007 as in 2002, but the difference between the two years figures varied considerably between subjects. For example, in Business Studies the proportion of teachers with PGCEs dropped to 2% in 2007 from 9% in 2002. Conversely, in Mathematics the proportion of PGCEs increased with 14% in 2007 compared to 9% in 2002. In Biology, Chemistry and Physics the increase in the proportion of teachers with degrees in 2007 compared to 2002 was 15, 12 and 9 percentage points respectively.

There was a particularly noticeable difference in the qualifications of teachers of Design and Technology between 2007 and 2002. In 2007, 47% of teachers of Design and Technology had no relevant post A-level qualifications in related subjects compared to a much lower 24% in 2002.

Table 7.1.1 Highest post A-level qualifications[1] held by full time teachers in the subjects[2] they taught to year groups 7 to 13 in 2007 compared to 2002

	Highest post A-level qualification									
	Degree [3]					BEd				
	2002		2007			2002		2007		
	%	±CI	%	±CI	Sig[6]	%	±CI	%	±CI	Sig[6]
Mathematics	42	± 3	47	± 2	↑	15	± 2	9	± 1	↓
English	51	± 3	63	± 2	↑	15	± 2	8	± 1	↓
Combined/General Science	62	± 3	58	± 2		12	± 2	5	± 1	↓
Biology[4]	71	± 5	86	± 3	↑	7	± 3	4	± 2	
Chemistry[4]	72	± 5	84	± 4	↑	6	± 3	4	± 2	
Physics[4]	63	± 6	72	± 4		11	± 4	6	± 2	
Other Sciences[4]	10	± 6	36	± 6	↑	4	± 4	1	± 1	
French	54	± 3	56	± 3		7	± 2	5	± 2	
German	47	± 5	61	± 5	↑	6	± 3	2	± 1	↓
Spanish	37	± 7	50	± 6	↑	8	± 4	1	± 1	↓
Other Modern Languages	18	± 8	23	± 7		0	± 0	-	± 0	
Design and Technology[5]	26	± 3	27	± 2		20	± 3	11	± 1	↓
ICT[5]	13	± 2	24	± 3	↑	6	± 1	4	± 1	
Other/ Combined Technology[5]	30	± 10	26	± 4		13	± 8	18	± 4	
Business Studies	30	± 5	40	± 4	↑	11	± 4	4	± 1	↓
Classics	33	± 7	60	± 16	↑	0	± 0	-	± 0	
History	57	± 4	63	± 3		9	± 2	5	± 1	↓
Religious Education	22	± 3	31	± 3	↑	8	± 2	5	± 1	
Geography	53	± 4	62	± 3	↑	9	± 2	6	± 2	
Other Social Studies	35	± 5	27	± 5		6	± 3	1	± 1	↓
Combined Arts/Humanities/ Social studies	5	± 3	14	± 3	↑	4	± 2	0	± 0	↓
Music	59	± 5	64	± 3		15	± 4	6	± 2	↓
Drama	25	± 4	38	± 4	↑	10	± 3	4	± 2	↓
Art and Design	54	± 4	51	± 4		10	± 3	6	± 2	
Physical Education	25	± 3	50	± 3	↑	31	± 3	24	± 2	↓
Careers Education	2	± 2	-	± 0		1	± 2	1	± 2	
Personal Social and Health	1	± 0	0	± 0	↓	1	± 0	0	± 0	↓
General Studies	1	± 1	-	± 0		2	± 1	-	± 0	
Citizenship	2	± 1	1	± 1		1	± 1	-	± 0	
Other										
Total [2,6]	**33**	**± 0**	**43**	**± 0**	↑	**10**	**± 0**	**7**	**± 0**	↓

Base: 359,000 Source: NFER Secondary School Curriculum and Staffing Survey 2007

1. Where a teacher had more than one post A-level the highest level was determined by reading from left (Degree) to right (Other Qual.). For example, teachers shown under PGCE had a qualification in the same subject, the qualification level was determined by the highest level reading from left (Degree) to right (Other Qual.). Teachers shown under PGCE had a PGCE but not a degree or BEd in the subject, while those with a PGCE and a degree were shown only under Degree.
2. Teachers were counted once against each subject they were teaching.
3. Included higher degrees but excluded BEds.
4. Teachers qualified in combined/general science were treated as qualified to teach biology, chemistry, or physics. Teachers qualified in biology, chemistry or physics were treated as qualified to teach combined/general science.
5. Teachers qualified in other/combined technology were treated as qualified to teach design & technology or information & communication technology. Teachers qualified in design & technology or information & communication technology were treated as qualified to teach other/combined technology.
6. Sig is marked ↑ or ↓ if the change between 2002 and 2007 was statistically significant (where %s are missing from 2002 or 2007 there was no sig measure). An up arrow indicates an increase and a down arrow indicates a decrease.

Table 7.1.1 Highest post A-level qualifications[1] held by full time teachers in the subjects[2] they taught to year groups 7 to 13 in 2007 compared to 2002 (continued)

	Highest post A-level qualification									
	PGCE					Cert Ed				
	2002		2007			2002		2007		
	%	±CI	%	±CI	Sig[6]	%	±CI	%	±CI	Sig[6]
Mathematics	9	± 2	14	± 2	↑	7	± 1	2	± 1	↓
English	7	± 1	5	± 1		6	± 1	2	± 1	↓
Combined/General Science	10	± 2	15	± 2	↑	4	± 1	1	± 0	↓
Biology[4]	11	± 4	5	± 2	↓	3	± 2	0	± 1	
Chemistry[4]	12	± 4	8	± 4		1	± 1	0	± 1	
Physics[4]	15	± 4	9	± 3		3	± 2	1	± 1	
Other Sciences[4]	5	± 4	2	± 2		0	± 0	0	± 1	
French	10	± 2	11	± 2		3	± 1	2	± 1	
German	13	± 4	7	± 3	↓	1	± 1	0	± 1	
Spanish	19	± 6	9	± 3	↓	0	± 0	-	± 0	
Other Modern Languages	9	± 7	7	± 4		0	± 0	-	± 0	
Design and Technology[5]	7	± 2	9	± 1		21	± 3	2	± 1	↓
ICT[5]	8	± 2	10	± 2		2	± 1	0	± 0	↓
Other/ Combined Technology[5]	16	± 7	8	± 3		18	± 9	6	± 2	↓
Business Studies	9	± 3	2	± 1	↓	4	± 2	0	± 0	↓
Classics	2	± 4	-	± 0		2	± 0	-	± 0	
History	6	± 2	6	± 2		6	± 2	1	± 1	↓
Religious Education	8	± 2	7	± 2		4	± 1	2	± 1	
Geography	6	± 2	3	± 1	↓	5	± 2	1	± 1	↓
Other Social Studies	2	± 2	2	± 2		2	± 1	-	± 0	
Combined Arts/Humanities/ Social studies	7	± 3	4	± 2		1	± 1	-	± 0	
Music	5	± 2	11	± 3	↑	6	± 3	1	± 1	↓
Drama	12	± 3	8	± 2		6	± 2	2	± 1	↓
Art and Design	7	± 2	15	± 3	↑	9	± 3	3	± 1	↓
Physical Education	6	± 2	4	± 1		13	± 2	3	± 1	↓
Careers Education	3	± 3	-	± 0		4	± 4	-	± 0	
Personal Social and Health	2	± 1	0	± 0	↓	1	± 0	-	± 0	
General Studies	1	± 1	-	± 0		0	± 1	-	± 0	
Citizenship	2	± 1	4	± 2		0	± 1	-	± 0	
Other										
Total [2,6]	**7**	**± 0**	**8**	**± 0**	↑	**5**	**± 0**	**1**	**± 0**	↓

see footnotes on page 58

Table 7.1.1 Highest post A-level qualifications[1] held by full time teachers in the subjects[2] they taught to year groups 7 to 13 in 2007 compared to 2002 (continued)

	Highest post A-level qualification										Total
	Other qual					No qual					numbers
	2002		2007			2002		2007			(000s)
	%	±CI	%	±CI	Sig[6]	%	±CI	%	±CI	Sig[6]	
Mathematics	2	± 1	3	± 1		24	± 2	26	± 2		28.3
English	1	± 1	1	± 1		20	± 2	20	± 2		29.8
Combined/General Science	1	± 1	2	± 1		11	± 2	19	± 2	↑	29.5
Biology[4]	0	± 1	1	± 1		7	± 3	4	± 2		8.1
Chemistry[4]	1	± 1	1	± 1		7	± 3	4	± 2		7.5
Physics[4]	0	± 0	2	± 1	↑	8	± 3	10	± 3		6.8
Other Sciences[4]	0	± 0	5	± 3	↑	80	± 8	55	± 6	↓	4.5
French	2	± 1	2	± 1		23	± 3	24	± 3		13.0
German	2	± 1	1	± 1		30	± 5	29	± 5		5.8
Spanish	3	± 2	-	± 0		33	± 7	40	± 6		4.8
Other Modern Languages	3	± 4	-	± 0		71	± 10	70	± 8		1.8
Design and Technology[5]	2	± 1	4	± 1	↑	24	± 3	47	± 2	↑	32.9
ICT[5]	3	± 1	3	± 1		69	± 3	59	± 3	↓	17.0
Other/ Combined Technology[5]	2	± 3	7	± 2		20	± 9	35	± 5	↑	6.9
Business Studies	3	± 2	2	± 1		43	± 5	51	± 4		11.0
Classics	0	± 0		± 0		63	± 7	40	± 16		0.2
History	0	± 0	1	± 1	↑	23	± 3	24	± 3		14.6
Religious Education	2	± 1	2	± 1		57	± 4	53	± 3		14.3
Geography	1	± 1	1	± 1		25	± 3	27	± 3		14.1
Other Social Studies	0	± 1	1	± 1		54	± 6	69	± 6	↑	4.7
Combined Arts/Humanities/ Social studies	1	± 1	2	± 1		83	± 5	81	± 4		6.5
Music	2	± 2	4	± 2		13	± 4	13	± 3		5.9
Drama	2	± 1	4	± 2		45	± 5	45	± 4		8.3
Art and Design	1	± 1	4	± 2	↑	20	± 4	21	± 3		9.1
Physical Education	2	± 1	2	± 1		22	± 2	17	± 2	↓	20.2
Careers Education	3	± 4	7	± 4		87	± 7	92	± 5		1.8
Personal Social and Health	0	± 0	0	± 0		95	± 1	100	± 0	↑	22.8
General Studies	0	± 0	-	± 0		95	± 2	100	± 0	↑	3.8
Citizenship	0	± 0	1	± 1	↑	94	± 2	94	± 2		9.7
Other											15.3
Total [2,6]	**1**	**± 0**	**2**	**± 0**	**↑**	**44**	**± 0**	**39**	**± 0**	**↓**	**359.0**

see footnotes on page 58

7.2 Periods taught by post A-level qualifications in 2007 compared to 2002

The 2007 analysis of periods taught by teachers holding different levels of post A-level qualification was compared to the results from the 2002 survey to produce Table 7.2.1.

In order to provide a good comparison with 2002, Table 7.2.1 was based on full time teachers only, grossed up to represent the population of full time teachers. Periods taught were standardised to represent a forty period one week timetable cycle.

The comparison showed that overall there was an increase of five percentage points in the proportions of periods being taught by teachers with degrees in the subject. This varied across subjects with some showing quite marked differences. For example, in Business Studies and Physical Education the percentage of periods taught by degree level teachers rose by twenty-four and twenty-three percentage points, respectively. In contrast, there was a decline in the proportions of periods taught by teachers with BEds and Certificates in Education. Overall this meant that more lessons were being taught in 2007 by teachers with no post A-level qualifications in the subjects taught for most subjects than in 2002. In Physical Education[1], despite the increase in the proportions of lessons offered by teachers with degrees in the subject, the overall proportion of lessons taught by teachers with no relevant post A-level qualification in the subject rose to 9% in 2007 compared to 6% in 2002.

For Mathematics, the Science and Innovation Investment Framework 2004-2014: next steps report (HM Treasury, 2006) recommended that 95% of lessons will be taught by specialists in the subject by 2014. The SSCSS analysis shows that there has been slight decline in the proportions of periods taught by teachers with post A-level qualifications in relevant subjects since 2002, with 84% in 2007 compared to 88% in 2002.

In English the proportion of periods taught by teachers with no post A-level qualifications in relevant subjects was 10% in 2007 compared to 9% in 2002. In Design and Technology the figure was 30% in 2007 compared to 13% in 2002. Across all of the subjects the total proportion of periods taught by teachers with no relevant post A-level qualifications was 21% in 2007 compared to 17% in 2002.

In total, across all subjects the proportions of teachers holding PGCEs was a little higher in 2007 compared to 2002. However, in a few subjects there were notably more periods taught by PGCE qualified teachers in 2007 compared to 2002. In Mathematics the figure rose to 16% in 2007 from 10% in 2002. In Music it was 13% in 2007 compared to 4% in 2002 and most marked was the change in Art and Design with a rise to 18% in 2007 from 7% in 2002.

[1] Teachers with PE, Sports Science, Dance or Performing Arts qualifications, or a combined qualification including PE, were counted as having relevant qualifications for Physical Education.

Table 7.2.1 Periods[1] taught[3] in years 7 to 13 by post A-level qualifications[2] of full time teachers in 2007 compared to full time teachers in 2002

	Highest post A-level qualification									
	Degree[4]					BEd				
	2002		2007			2002		2007		
	%	±CI	%	±CI	sig[7]	%	±CI	%	±CI	sig[7]
Mathematics	52	± 1	54	± 0	↑	17	± 0	9	± 0	↓
English	62	± 1	73	± 0	↑	15	± 0	8	± 0	↓
Combined/General Science[5]	65	± 1	50	± 1	↓	13	± 0	4	± 0	↓
Biology[5]	76	± 1	88	± 1	↑	6	± 1	3	± 0	↓
Chemistry[5]	80	± 1	84	± 1	↑	5	± 1	3	± 0	↓
Physics[5]	73	± 2	73	± 1		9	± 1	6	± 1	↓
Other Sciences	11	± 2	51	± 2	↑	3	± 1	1	± 0	↓
French	61	± 1	62	± 1		8	± 0	6	± 0	↓
German	59	± 1	74	± 1	↑	8	± 1	2	± 0	↓
Spanish	43	± 2	61	± 2	↑	13	± 1	0	± 0	↓
Other Modern Languages	27	± 2	28	± 2		0	± 0	-	± 0	
Design and Technology[6]	30	± 1	32	± 1	↑	25	± 1	19	± 1	↓
ICT[6]	22	± 1	30	± 1	↑	11	± 1	6	± 0	↓
Other/Combined Technology[6]	37	± 3	28	± 1	↓	11	± 2	18	± 1	↑
Business Studies	35	± 1	59	± 1	↑	11	± 1	6	± 0	↓
Classics	71	± 2	80	± 4	↑	0	± 0	-	± 0	
History	70	± 1	77	± 1	↑	10	± 1	4	± 0	↓
Religious Education	44	± 1	49	± 1	↑	12	± 1	8	± 0	↓
Geography	69	± 1	77	± 1	↑	10	± 1	6	± 0	↓
Other Social Studies	54	± 2	37	± 2	↓	7	± 1	1	± 0	↓
Combined Arts/ Humanities/ Social Studies	6	± 1	23	± 1	↑	10	± 1	0	± 0	↓
Music	66	± 1	67	± 1		18	± 1	7	± 1	↓
Drama	43	± 1	56	± 1	↑	14	± 1	5	± 0	↓
Art and Design	65	± 1	60	± 1	↓	11	± 1	4	± 0	↓
Physical Education	35	± 1	58	± 1	↑	37	± 1	25	± 1	↓
Careers Education	3	± 1	-	± 0		5	± 2	0	± 1	↓
Personal Social and Health Education	2	± 0	0	± 0	↓	2	± 0	0	± 0	↓
General Studies	1	± 1	-	± 0		2	± 1	-	± 0	
Citizenship	2	± 1	2	± 0		2	± 1	-	± 0	
Other										
Total[3]	**51**	**± 0**	**56**	**± 0**	↑	**15**	**± 0**	**8**	**± 0**	↓

Base: 5,376,100 Source: NFER Secondary School Curriculum and Staffing Survey 2007

1. The number of periods in one complete timetable cycle standardised to a one 40 week timetable.
2. Where a teacher had more than one post A level qualification in the same subject, the qualification level was determined by the highest level reading from left (Degree) to right (Other Qual.). For example, teachers shown under PGCE had a PGCE but not a degree or BEd in the subject, while those with a PGCE and a degree were shown only under Degree.
3. Teachers were counted once against each subject which they were teaching.
4. Included higher degrees but excluded BEds.
5. Teachers qualified in combined/general science were treated as qualified to teach biology, chemistry, or physics. Teachers qualified in biology, chemistry or physics were treated as qualified to teach combined/general science.
6. Teachers qualified in other/combined technology were treated as qualified to teach design & technology or information & communication technology. Teachers qualified in design & technology or information & communication technology were treated as qualified to teach other/combined technology.
7. Sig is marked ↑ or ↓ if the change between 2002 and 2007 was statistically significant (where %s were missing from 2002 or 2007 there was no sig measure). An up arrow indicates an increase and a down arrow indicates a decrease.

Table 7.2.1 Periods[1] taught[3] in years 7 to 13 by post A-level qualifications[2] of full time teachers in 2007 compared to full time teachers in 2002 (continued)

	Highest post A-level qualification									
	PGCE					Cert Ed				
	2002		2007			2002		2007		
	%	±CI	%	±CI	sig[7]	%	±CI	%	±CI	sig[7]
Mathematics	10	± 0	16	± 0	↑	8	± 0	2	± 0	↓
English	6	± 0	5	± 0	↓	6	± 0	2	± 0	↓
Combined/General Science[5]	10	± 0	22	± 0	↑	5	± 0	1	± 0	↓
Biology[5]	10	± 1	4	± 1	↓	3	± 1	1	± 0	↓
Chemistry[5]	8	± 1	8	± 1		1	± 0	0	± 0	↓
Physics[5]	9	± 1	9	± 1		2	± 1	1	± 0	↓
Other Sciences	4	± 1	2	± 0	↓	0	± 0	0	± 0	↑
French	10	± 0	11	± 1	↑	4	± 0	3	± 0	↓
German	13	± 1	5	± 1	↓	1	± 0	-	± 0	
Spanish	22	± 2	10	± 1	↓	0	± 0	-	± 0	
Other Modern Languages	8	± 2	9	± 1		0	± 0	-	± 0	
Design and Technology[6]	7	± 0	12	± 0	↑	23	± 1	3	± 0	↓
ICT[6]	11	± 1	14	± 1	↑	3	± 0	1	± 0	↓
Other/Combined Technology[6]	12	± 2	6	± 1	↓	28	± 3	8	± 1	↓
Business Studies	12	± 1	3	± 0	↓	6	± 1	1	± 0	↓
Classics	2	± 1	-	± 0		1	± 0	-	± 0	
History	6	± 0	7	± 0		6	± 0	1	± 0	↓
Religious Education	11	± 1	12	± 1	↑	6	± 1	2	± 0	↓
Geography	7	± 0	4	± 0	↓	5	± 0	1	± 0	↓
Other Social Studies	3	± 0	3	± 1		1	± 0	-	± 0	
Combined Arts/ Humanities/ Social Studies	11	± 1	5	± 1	↓	0	± 0	-	± 0	
Music	4	± 0	13	± 1	↑	7	± 1	2	± 0	↓
Drama	11	± 1	10	± 1		9	± 1	2	± 0	↓
Art and Design	7	± 0	18	± 1	↑	8	± 1	3	± 0	↓
Physical Education	5	± 0	4	± 0	↓	15	± 1	3	± 0	↓
Careers Education	7	± 2	-	± 0		13	± 4	-	± 0	
Personal Social and Health Education	2	± 0	1	± 0	↓	2	± 0	-	± 0	
General Studies	1	± 1	-	± 0		0	± 0	-	± 0	
Citizenship	3	± 1	12	± 1	↑	0	± 0	-	± 0	
Other										
Total[3]	**8**	**± 0**	**10**	**± 0**	↑	**8**	**± 0**	**2**	**± 0**	↓

see footnotes on page 62

Table 7.2.1 Periods[1] taught[3] in years 7 to 13 by post A-level qualifications[2] of full time teachers in 2007 compared to full time teachers in 2002 (continued)

	Highest post A-level qualification								
	Other qual				No qual				Number of periods
	2002		2007		2002		2007		
	%	±CI	%	±CI	sig[7]	%	±CI	%	±CI	sig[7]	(000s)
Mathematics	1	± 0	3	± 0	↑	12	± 0	16	± 0	↑	675.1
English	1	± 0	1	± 0		9	± 0	10	± 0	↑	652.1
Combined/General Science[5]	1	± 0	2	± 0	↑	6	± 0	21	± 0	↑	494.3
Biology[5]	0	± 0	1	± 0		5	± 1	3	± 0	↓	95.8
Chemistry[5]	2	± 0	1	± 0	↓	5	± 1	3	± 0	↓	93.3
Physics[5]	0	± 0	2	± 0	↑	6	± 1	9	± 1	↑	83.0
Other Sciences	0	± 0	5	± 1	↑	82	± 2	40	± 2	↓	53.6
French	3	± 0	2	± 0	↓	15	± 1	17	± 1	↑	225.3
German	3	± 0	1	± 0	↓	16	± 1	18	± 1		86.5
Spanish	4	± 1	-	± 0		18	± 2	29	± 1	↑	63.5
Other Modern Languages	1	± 1	-	± 0		63	± 2	63	± 2		28.5
Design and Technology[6]	2	± 0	4	± 0	↑	13	± 0	30	± 1	↑	288.4
ICT[6]	4	± 0	5	± 0	↑	49	± 1	44	± 1	↓	292.0
Other/Combined Technology[6]	6	± 1	8	± 1	↑	6	± 2	32	± 1	↑	113.9
Business Studies	4	± 1	2	± 0	↓	33	± 1	29	± 1	↓	156.7
Classics	0	± 0	-	± 0		26	± 2	20	± 4		2.4
History	0	± 0	2	± 0	↑	8	± 0	10	± 0	↑	259.3
Religious Education	3	± 0	2	± 0		24	± 1	26	± 1	↑	205.1
Geography	1	± 0	1	± 0		9	± 1	11	± 0	↑	263.4
Other Social Studies	0	± 0	2	± 1	↑	35	± 2	57	± 2	↑	45.7
Combined Arts/ Humanities/ Social Studies	3	± 1	2	± 0	↓	70	± 2	70	± 2		59.4
Music	2	± 0	5	± 0	↑	4	± 0	7	± 1	↑	140.9
Drama	2	± 0	5	± 0	↑	22	± 1	23	± 1		129.6
Art and Design	1	± 0	5	± 0	↑	8	± 1	10	± 1	↑	206.9
Physical Education	2	± 0	2	± 0		6	± 0	9	± 0	↑	439.9
Careers Education	4	± 2	14	± 3	↑	68	± 5	86	± 3	↑	8.2
Personal Social and Health Education	1	± 0	0	± 0	↓	92	± 1	99	± 0	↑	68.7
General Studies	0	± 0	-	± 0		95	± 1	100	± 0	↑	10.7
Citizenship	0	± 0	3	± 1	↑	93	± 2	84	± 1	↓	36.6
Other											97.2
Total[3]	**2**	**± 0**	**3**	**± 0**	↑	**17**	**± 0**	**21**	**± 0**	↑	**5376.1**

see footnotes on page 62

8 The new Diplomas

8.1 What is covered by the new Diplomas

The new Diplomas are a new type of qualification being introduced for the 14-19 age groups from September 2008[12]. The Diploma is intended to open up choices for young people to take up different ways of learning and offers different routes into Higher Education. The Diplomas will be suitable for pupils working at a range of abilities:

> Level 1 Diploma will be comparable in terms of average length of study to a programme of four to five GCSEs
>
> Level 2 Diploma will be comparable in terms of average length of study to a programme of five to six GCSEs
>
> Level 3 Diploma will be comparable in terms of average length of study to a programme of three A-levels (a level 3 award is also being developed which will be broadly comparable with two A-levels).

The new Diplomas will be introduced over a number of years with the first five being offered in some schools and colleges from September 2008, the next five from September 2009 and four from September 2010. In addition, the DCSF announced that three new Diplomas would be offered from September 2011. National entitlement will be in place by 2013, when all local areas will need to offer all of the lines of learning to those young people wishing to access them.

Lines of learning	**Development**
Information technology Society, health and development Engineering Creative and media Construction and built environment	First offered from September 2008
Land-based and environmental Manufacturing and product design Hair and beauty Business administration and finance Hospitality and catering	First offered from September 2009
Public services Sport and leisure Retail Travel and tourism	First offered from September 2010

[12] http://www.qca.org.uk/libraryAssets/media/qca-07-3084_The_Diploma_web.pdf

The three Diplomas, announced in October in 2007, will be Languages, Sciences and Humanities and will be offered from September 2011, but since the announcement of these was made after the analysis of the data for this report was undertaken, this section focuses on the first fourteen Diplomas.

Each Diploma will have a mix of theoretical and practical learning and functional skills in Mathematics, English and ICT. The core content of each Diploma will include learning related to the particular area of industry and sector of the economy. They have a broad focus in relation to their particular area with opportunities for students to pursue areas of interest and specialisation. For example, the Construction and Built Environment Diploma might cover urban renewal, health and safety issues, house building, construction of roads, railways and utilities, civil engineering and facilities management. The Creative and Media Diploma has four broad themes: creativity in context, thinking and working creatively, the principles, process and practices behind the work and commercial skills for creative business and enterprise. These might be related to fashion design, creative writing, advertising, music or other creative or media area of the industry. Since the analysis for the SSCSS study was carried out the content of the first fourteen Diplomas has been finalised and so there may be differences between the categorisation in this report and the final subject content of each Diploma. However, the analysis still provides a reasonable picture of the situation in terms of what was taught and the qualifications of teachers in school in relation to the implementation of the Diplomas.

There is no expectation that schools would be able to provide the whole range of Diploma areas. It is expected that the Diplomas will be offered by groups of schools and colleges, employers and other providers. However, all young people who wish to take any of the Diplomas should have access to them by 2013. The 2007 Secondary School Curriculum and Staffing Survey provides some information to help build a picture of teachers' qualifications and subjects taught in schools which relate to the Diplomas.

8.2 Subjects taught in schools in 2007 in relation to the lines of learning

The subjects taught data collected in the 2007 survey was linked to the areas covered by each line of learning to create a flavour of what was already on offer in schools in terms of the Diploma lines of learning. The tables in this section show the percentages of schools where teachers recorded the particular subject as taught. The subjects have been placed under the Diploma line of learning in which they best fit. Each table represents lines of learning. The list of subjects linked to each line of learning by no means covers the entire content of the line of learning, it merely presents what is already being taught in the secondary schools that took part in the SSCSS survey. Only subjects related to the specific industry area are included in each table, and so functional skills offered in each Diploma are not included although, of course, they are widely offered in schools already.

The tables show that in the areas of Creative and Media, ICT, Sport and Business Studies there were quite large proportions of schools offering relevant subjects in 2007. The lines of learning of the other Diplomas were less well covered.

Table 8.2.1 Percentage of schools where each subject is taught in relation[4] to lines of learning of the new Diplomas

Business Administration & Finance	
	%
Business studies	67
Economics	16
Accounting	3
Business Studies/Economics	3

Construction & Built Environment	
	%
Public services	2
Construction	4

Creative & Media	
	%
Product design, (CAD)[2], (CAM)[3]	65
Food/textiles	3
Dance	21
Textiles	43
Graphics	31
Art and Design	84
Drama inc Performing Arts	74
Music	79
Media studies including film, photography	46
English/Media studies	1
Art/Textiles	1
Dance/Drama	2
Technology/Graphics	<1
Drama/Citizenship	1
Art design/Media	2
Art/Graphics	1
Product design/Textiles	1
PE/Dance	1
Graphics/Textiles	<1
Resistant materials/textiles	<1
Art/Technology	<1

Engineering	
	%
Engineering	10

Hair & Beauty	
	%
Catering/Hair & Beauty	<1
Hairdressing	2

Society, Health and Development	
	%
Community	2
Medical ethics	2
Child care/development, CACHE[1]	27
Health & social care	44
PSHE	70
PSE/Citizenship	9
Current affairs/social and cultural studies	1
Public services	2

Hospitality/catering	
	%
Food technology/Home Economics/FT	63
Catering, Hospitality	8
D&T/Food	2
Food/enterprise	1
Food/textiles	3

[1] CACHE - Council for awards in children's care and education
[2] (CAD) Computer Assisted Design
[3] (CAM) Computer Aided Manufacture
[4] The subjects covered in each Diploma were not finalised when this analysis was carried out

Table 8.2.1 Percentage of schools where each subject is taught in relation to lines of learning of the new Diplomas (continued)

IT	
	%
ICT	91
IT/Computer Science	23
CIDA/DIDA (Certificate/Diploma in Digital Applications)	4

Land-Based & Environmental	
	%
Earth Science	<1
Geology	2
Geography	92
Environmental science	2

Manufacturing and Product Design	
	%
Manufacturing	2
Resistant materials	30
Design and Technology	65
Combined Technology	44
D&T and Resistant materials	3
Product Design and textiles	1

Retail	
	%
Business studies	67

Sport & Leisure	
	%
Physical education including Sports science, games	94
Dance	21

Travel & Tourism	
	%
Leisure & tourism	40

Public Services	
	%
Public services	2

8.3 Qualifications of teachers in schools in 2007 in relation to the lines of learning

This section looks at how well placed schools would be to offer aspects of the new Diplomas in terms of teacher qualifications. To try to illustrate this, the qualifications of teachers collected in the 2007 survey were linked to relevant lines of learning. Analysis was then carried out to measure the proportion of schools that had teachers with these qualifications. The tables below show the percentage of schools with at least one teacher in each subject. This gives some indication at a school level of how the existing teaching workforce's qualifications match up to the new requirements brought into the curriculum by the new Diplomas.

The analysis showed that for nine out of the first fourteen lines of learning there was a large proportion of relevant expertise in the teaching workforce in terms of qualifications. These areas were Business Administration and Finance, Manufacturing and Product Design, Land Based and Environmental, Society, Health and Development, Engineering, IT, Creative and Media, Sport and Leisure and Hospitality and Catering. The picture here indicates that although schools, unsurprisingly, appeared to be offering a very small proportion of subjects related to the new Diplomas, the teaching workforce actually held a range of qualifications that would be relevant to the new lines of learning. For example, in Business Administration and Finance only four subjects related to that line of learning were evident from our dataset in terms of what was being taught in schools, compared to 12 relevant qualification areas amongst the teaching workforce. It is interesting to note that 53% and 44% of schools had at least one teacher with a qualification in Economics or Management Studies respectively. In the area of Engineering, over 40% of schools had at least one teacher with a qualification specifically in Engineering. In Land Based and Environmental there was a high proportion of schools with at least one qualified Geographer, but there were also quite sizeable proportions of schools with expertise in other relevant sciences such as Zoology and Geology.

Very small proportions of schools had teachers with any qualifications related to Hair and Beauty, Travel and Tourism, Retail and Public Services.

Table 8.3.1 Percentage of schools with at least one teacher with a post A-level qualification in the subject listed[13] in relation to the Diploma areas

Business Administration & Finance	
	%
Public administration	5
Marketing	15
Consumer studies	3
Economics	53
Accounting	19
Business Administration	14
Business Studies	72
Finance	10
Human Resource Management	6
Management studies	44
Administration	2
Human resource development	1

Creative & Media	
	%
Design & Technology/Product design	72
Design management	3
Food & Textiles	23
Dance	22
Art & Design/Illustration	84
Drama	76
Textiles	37
Graphics	19
Ceramics	8
Media studies/Photography/Visual studies	39
Interior Design	2
Creative arts	9
Combined Arts/Humanities/Social studies	33
Fashion design & Costume design	14
Film, TV & Radio	9
Performing Arts	14
Theatre studies	18
Handicraft	6
Journalism	3
Music	79
Piano teaching/Violin/Clarinet	5

Engineering	
	%
Electronic and Electrical Engineering	21
Other Engineering	40
Mechanical engineering	8
Production and Manufacturing Engineering	6

Society, Health and Development	
	%
Social Sciences/Sociology/Social work	69
Health & Social Care	8
Counselling	15
Anatomy, Physiology and Pathology/osteopathy	18
Aural and Oral Sciences	0
Biology	85
Health	9
Medicine	5
Microbiology	15
Molecular Biology, Biophysics and Biochemistry	43
Nursing	3
Nutrition	6
Psychology	57
Neuroscience	2
Drugs education	<1

Construction & Built Environment	
	%
Production and Manufacturing Engineering	6
Metalwork	1
Surveying	1
Industrial studies	4
Architecture	5
Building	4
Landscape Design	2
Planning (Urban, Rural and Regional)	2

[13] The subjects covered in each Diploma were not finalised when this analysis was carried out

Table 8.3.1 Percentage of schools with at least one teacher with a post A-level qualification in the subject listed in relation to the Diploma areas (continued)

IT	
	%
Computer Science	45
ICT	71

Land Based & Environmental	
	%
Agriculture	9
Forestry	<1
Geology	30
Geography (Physical & social)	94
Environmental Sciences	37
Zoology	26
Ecology/Entomology	7
Botany	14

Manufacturing and Product Design	
	%
Materials Science	6
Design & Technology/Product design	72
Design management	3
Production and Manufacturing Engineering	6

Public Services	
	%
Public services	<1
Public administration	5

Hair & Beauty	
	%
Hair and Beauty	1

Hospitality/Catering	
	%
Catering & Hospitality	7
Food and Beverage studies	45
Food & Textiles	23

Sport & Leisure	
	%
Sports science/PE/Sports Coaching	95
Dance	22

Travel & Tourism	
	%
Tourism, Transport and Travel	15

Retail	
	%
Marketing	15
Consumer studies	3

9 Conclusion

Overall teachers in secondary schools were well qualified, with 96% holding a degree, PGCE, BEd or higher degree and the rest holding other forms of post A-level qualifications such as Certificates of Education.

Looking at the qualifications of teachers in the subjects they taught showed considerable variation between the proportions of teachers with different levels of post A-level qualifications across the subjects. The majority of subjects had over 70% of teachers with a relevant post A-level qualification. Combined and General Science, Biology, Chemistry, Physics, French, German, History, Geography, Art and Design, Music and Physical Education had the largest proportions of teachers with post A-level qualifications. Not surprisingly, very few teachers of Careers, PSHE and Citizenship had qualifications in the subject. Subjects that appeared to be under-resourced in terms of teachers with relevant post A-level qualifications were ICT, Religious Education, Design and Technology and Business Studies.

The 2007 results showed a ten percentage point increase overall compared to 2002, in the proportions of teachers with degrees or higher degrees in the subjects they taught. For example, in Physical Education the proportion of teachers with degrees rose considerably to 50% in 2007 from 25% in 2002. Across all subjects there were falls in the proportions of BEds and Certificates in Education by three and four percentage points, respectively. Overall the proportions of teachers holding PGCEs (without a degree in that subject) changed by one percentage point, however the proportions had changed sharply in some subjects, such as Biology where only 5% held a PGCE in 2007 compared to 11% in 2002. In Mathematics the proportions of PGCEs rose to 14% in 2007 from 9% in 2002.

The proportions of subject periods taught by teachers with relevant degrees had increased in 2007 compared to 2002 by five percentage points. However, declines in terms of other types of post A-level qualifications, such as BEds and Certificates in Education, meant that overall smaller proportions of lessons were being taught by teachers with relevant post A-level qualifications in 2007 compared to 2002 by four percentage points over all subjects.

In the exam years (years 9, 11, 12 and 13) higher proportions of periods were taught by teachers with relevant post A-level qualifications than in the non-exam years (years 7, 8 and 10). Overall the proportions of periods taught by teachers with relevant post A-level qualifications were three percentage points higher in the exam years compared to the non-exam years.

Younger teachers were more likely to have post A-level qualifications, and in particular degrees, compared to teachers in the older age groups. The proportions of teachers with Certificates in Education have declined since the 2002 survey and in the 2007 survey were predominantly seen amongst teachers aged over 44.

Grammar schools and schools with low proportions of pupils eligible for FSM had relatively high proportions of teachers with post A-level qualifications and higher proportions of periods delivered by these teachers compared to other schools in most subjects. In terms of FSM, the exception to this was seen in Design and Technology and ICT, where the highest proportions of

teachers with related post A-level qualifications were in schools with the highest levels of FSM entitlement.

Advanced Skills Teachers had high proportions of post A-level qualifications, however, as would be expected given the small proportion of these teachers in the workforce, they taught a very small proportion of lesson time. QTS classroom teachers had relatively high proportions of post A-level qualifications and delivered around 42% of periods. Post-threshold teachers had slightly smaller proportions of teachers with post A-level qualifications compared to QTS teachers and delivered 45% of periods.

There were some minor regional variations in the analysis of both qualifications and periods taught. Overall the North West and London regions had slightly higher proportions of periods delivered by teachers with relevant post A-level qualifications in the subjects they taught than in other regions. Areas where there were slightly smaller proportions of periods taught by post A-level qualified teachers were the East Midlands and Eastern regions. It should be noted that there was a great deal of variation between subject categories.

Some comparisons can be made between the results of this survey and the findings of the Deployment of Mathematics and Science Study 2005 (DMS) (Moor H et al, 2006). However, the data were collected and presented differently in that study and so comparisons need to be treated with some caution. The DMS study identified an apparent shortage of post A-level qualified teachers teaching Mathematics. Although not directly comparable the two surveys had similar proportions of teachers of Mathematics with no relevant post A-level qualifications in the subject. The Secondary School Curriculum and Staffing Survey showed that 25% of Mathematics teachers had no post A-level qualification in related subjects. The DMS study found that of those teachers deployed to teach Mathematics 24% were non-specialists[14]. In Science the DMS study found that 8% of teachers deployed to teach the subject were non-specialists. In the 2007 survey the analysis was broken down into the individual Science subjects, but showed a similar picture with 4% of teachers of Biology or Chemistry being non-specialists and 10% of Physics teachers being non-specialists. In Science, both studies showed that there was an inequity between the qualifications of teachers teaching Biology, Chemistry and Physics, showing that there were more teachers qualified in Biology than the other two main sciences. Both studies found that schools with fewer pupils eligible for free school meals had higher proportions of teachers with relevant qualifications, and in particular degrees.

The first of the new Diplomas will start to be offered in schools from September 2008. The analysis of subjects taught in 2007 showed that schools were already teaching some aspects of some Diplomas, in particular in Creative and Media, IT, Sport and Leisure and Business Studies lines of learning. In terms of qualifications there were large proportions of schools that had teachers with expertise relevant to nine out of the first fourteen of the lines of learning. It appears that schools will be well placed to deliver aspects of Business Administration and Finance, Manufacturing, Land Based and Environmental, Health and Social Care, Engineering, IT, Creative and Media, Sport and Leisure and Hospitality and Catering.

[14] Specialist was used to describe teachers who held a degree or initial teacher training qualification in a subject related to the subject they taught.

10 Supplementary Analysis

10.1 Science subject specialism breakdown (supporting information for Table 5.2.1)

The tables below show which subjects were counted under each science subject category given in Table 5.2.1 in Section 5.2 of this report. The individual subject codes were created by the NFER project team based on actual responses given by teachers in the survey. The figures relate to the sub-set of subjects categorised into each of Biology, Chemistry, Physics, Other Science and non-science subjects for the analysis shown in Table 5.2.1. The analysis was based on the specialisms of the sub-set of science teachers selected from the grossed sample of SSCSS data. The subjects listed do not exactly match the coding mapping given in Annex 5, which was used to underpin the rest of the analyses in the report. The subjects counted in the analysis for Table 5.2.1 were selected to be comparable with the Deployment of Mathematics and Science Teachers study (Moor H et al, 2006), and so teachers were not counted as specialists in Biology, Chemistry and Physics if they had qualifications in Combined or Applied Science in Table 5.2.1 but were counted as qualified to teach those subjects in the rest of the SSCSS analysis. The tables below show actual cases that occurred in the analysis, whereas the code mapping in Annex 5 shows all possible links between qualifications and subjects taught, hence some subjects listed in Annex 5 do not appear in the tables below.

Table 10.1.1 Science subject specialisms analysis - subjects included as Biology

Biology Subjects	Cases of specialism	Percent
Anatomy, Physiology and Pathology / osteopathy	828	5
Biology	9829	56
Botany	586	3
Ecology / Entomology	333	2
Genetics	475	3
Medicine	142	1
Microbiology	801	5
Molecular Biology, Biophysics and Biochemistry	2874	16
Neuroscience	92	1
Nursing	50	<1
Nutrition	116	1
Zoology	1521	9
Total	17647	100

Table 10.1.2 Science subject specialisms analysis - subjects included as Chemistry

Chemistry Subject	Cases of specialism	Percent
Chemistry	7240	71
Medicine	142	1
Molecular Biology, Biophysics and Biochemistry	2874	28
Total	10256	100

Table 10.1.3 Science subject specialisms analysis - subjects included as Physics

Physics Subject	Cases of specialism	Percent
Electronic and Electrical Engineering	474	5
Materials Science	248	2
Mechanical Engineering	96	1
Molecular Biology, Biophysics and Biochemistry	2874	28
Other Engineering	901	9
Physics	5612	55
Production and Manufacturing Engineering	27	<1
Total	10233	100

Table 10.1.4 Science subject specialisms analysis - subjects included as Other Science

Other Science Subject	Cases of specialism	Percent
Applied Science	767	10
Environmental Sciences	596	7
Food and Beverage Studies	143	2
Forensic and Archaeological Science/Pathology/Criminology	154	2
Health	50	1
Industrial Studies	32	<1
Medical Technology	44	1
Ophthalmics	19	<1
Pharmacology, Toxicology and Pharmacy	142	2
Podiatry	30	<1
Psychology	1940	24
Radiography	19	<1
Science (including combined science)	3977	49
Veterinary Medicine and Dentistry and Physiology	124	2
Total	8036	100

Table 10.1.5 Science subject specialisms analysis - subjects included as non-science

Non - science subjects Subjects	Cases of specialism	Percent
Academic studies in Education (including secondary education)	516	8
Accounting	37	1
Agriculture	71	1
American studies	35	1
Anthropology	32	1
Art & Design / Illustration	223	4
Art History	13	<1
Building	56	1
Business Studies	153	2
Ceramics	22	<1
Citizenship	16	<1
Classical studies & Latin	40	1
Combined Arts / Humanities / Social studies	8	<1
Computer Science	74	1
Counselling	47	1
Cultural Studies	19	<1
Design & Technology / Product Design	630	10
Development studies	40	1
Drama	60	1
Economics	142	2
Education Management (Ed Man / Ed Mgt)	72	1
English as a Foreign Language / TESL / TEFLA	23	<1
English/Literacy	352	6
European Studies	22	<1
Fashion Design & Costume Design	11	<1
Food & Textiles	51	1
French	110	2
Geography (Physical & Social)	331	5
Geology	150	2
German	46	1
Handicraft	53	1
Health & Social Care	37	1
History	356	6
History in Education	21	<1
ICT	59	1
Italian	18	<1
Japanese	22	<1
Languages / Linguistics	13	<1
Management Studies	56	1
Marketing	32	1

Non - science subjects (continued)		
Subjects	Cases of specialism	Percent
Mathematics	412	7
Media studies / Photography / Visual Studies	19	<1
Metalwork	13	<1
Music	40	1
Other e.g. various, open	81	1
Other Technology	136	2
Performing Arts	19	<1
Philosophy	9	<1
Philosophy, Politics & Economics	32	1
Politics	108	2
Primary Education	57	1
Public Administration	41	1
Public Services	21	<1
SEN	194	3
Social Sciences / Sociology / Social work/Social care	199	3
Spanish	46	1
Sports science / PE / Sports Coaching	581	9
Statistics	19	<1
Teaching / Pedagogy	49	1
Theatre studies	32	1
Theology and Religious Studies	67	1
Tourism, Transport and Travel	19	<1
Total	6254	100

10.2 Proportions of periods taught broken down by subject and school type

Table 10.2.1 Proportions of periods taught broken down by subject and school type

Subject	School type	Degree %	Bed %	PGCE %	Cert. Ed. %	Other qual. %	No qual %	Total (1000's)
Mathematics	Comprehensive to 16	47	12	17	2	4	18	244.1
Mathematics	Comprehensive to 18	58	9	15	2	3	13	389.8
Mathematics	Grammar	75	4	13		2	6	34.9
Mathematics	Middle deemed Secondary	16	11	7	5	3	58	15.7
Mathematics	Other Secondary schools	40	14	26		8	12	16.4
Mathematics	Secondary Modern	47	4	15		5	28	21.8
English	Comprehensive to 16	72	11	4	2	2	10	238.8
English	Comprehensive to 18	75	7	6	2	1	10	387
English	Grammar	78	12	6		1	4	24.8
English	Middle deemed Secondary	42	13	6			39	14.6
English	Other Secondary schools	77	2	9			13	15.0
English	Secondary Modern	57	6	8	5	4	19	21.8
Combined/General science	Comprehensive to 16	37	5	31	1	3	23	206.6
Combined/General science	Comprehensive to 18	60	4	17	1	2	16	267.5
Combined/General science	Grammar	78		9	3		10	6.9
Combined/General science	Middle deemed Secondary	20	9	22			49	9
Combined/General science	Other Secondary schools	41	2	12			45	20.7
Combined/General science	Secondary Modern	45	2	22	2	3	26	17.4
Biology	Comprehensive to 16	84	4	4	0	2	6	22.9
Biology	Comprehensive to 18	90	3	3	1	0	3	64.1
Biology	Grammar	91	0	6		1	2	12.1
Biology	Middle deemed Secondary	100						0.1
Biology	Other Secondary schools	82		18				1.8
Biology	Secondary Modern	72	11	14			3	2.8
Chemistry	Comprehensive to 16	78	6	7	0	1	8	23
Chemistry	Comprehensive to 18	84	2	10	1	1	2	57.4
Chemistry	Grammar	95	3	1			1	14.3
Chemistry	Middle deemed Secondary	100						0.2
Chemistry	Other Secondary schools	79	2	2			17	1.4
Chemistry	Secondary Modern	61	23	11			5	2.5

Subject	School type	Degree %	Bed %	PGCE %	Cert. Ed. %	Other qual. %	No qual %	Total (1000's)
Physics	Comprehensive to 16	63	10	12		3	12	21.1
Physics	Comprehensive to 18	75	6	8	1	1	8	53.7
Physics	Grammar	89		7	1		3	10.7
Physics	Middle deemed Secondary	100						0.1
Physics	Other Secondary schools	69	3				28	1.1
Physics	Secondary Modern	76	5	11			8	1.5
Other sciences	Comprehensive to 16	19		0		4	77	6.9
Other sciences	Comprehensive to 18	59	0	1	0	6	33	47.7
Other sciences	Grammar	63					37	3.8
Other sciences	Middle deemed Secondary						100	0.2
Other sciences	Other Secondary schools	16	31	24			28	1.8
Other sciences	Secondary Modern	30					70	1
French	Comprehensive to 16	59	7	12	3	2	18	83.9
French	Comprehensive to 18	66	4	10	2	2	15	138.6
French	Grammar	70	6	4	1	3	16	13.5
French	Middle deemed Secondary	44	11	7	13		25	7.5
French	Other Secondary schools	42	10	18		14	16	3.7
French	Secondary Modern	57	4	19	7		14	7
German	Comprehensive to 16	66	2	5	0	1	26	28.1
German	Comprehensive to 18	78	1	5	0	2	14	54.4
German	Grammar	82		5		3	11	9.5
German	Middle deemed Secondary	74					26	0.7
German	Other Secondary schools	33		33			34	1.8
German	Secondary Modern	76					24	0.8
Spanish	Comprehensive to 16	60	0	6			33	19.5
Spanish	Comprehensive to 18	68		7			25	36.6
Spanish	Grammar	36	5	27			31	6
Spanish	Middle deemed Secondary							0
Spanish	Other Secondary schools	48					52	3.0
Spanish	Secondary Modern	39		46			14	3
Other modern languages	Comprehensive to 16	29		16			56	10.1
Other modern languages	Comprehensive to 18	27		4			70	19
Other modern languages	Grammar	64		15			21	2.2
Other modern languages	Middle deemed Secondary							0
Other modern languages	Other Secondary schools						100	0.4
Other modern languages	Secondary Modern							0

Subject	School type	Degree %	Bed %	PGCE %	Cert. Ed. %	Other qual. %	No qual %	Total (1000's)
Design and technology	Comprehensive to 16	33	19	9	3	4	32	94.8
Design and technology	Comprehensive to 18	34	20	13	3	3	27	172.5
Design and technology	Grammar	33	19	10	5	6	28	13.7
Design and technology	Middle deemed Secondary	19	7	6	3	5	60	5.9
Design and technology	Other Secondary schools	28	7	11	6		48	9.9
Design and technology	Secondary Modern	25	19	7	5	14	30	9.6
ICT	Comprehensive to 16	35	6	8	1	7	42	95.4
ICT	Comprehensive to 18	30	4	18	0	4	44	173.6
ICT	Grammar	14	8	15		5	59	9.8
ICT	Middle deemed Secondary	19	1	4	6	0	70	4.8
ICT	Other Secondary schools	25	20	6		4	46	10.8
ICT	Secondary Modern	20	10	3			66	10.1
Other/combined technology	Comprehensive to 16	24	21	4	12	10	29	46.6
Other/combined technology	Comprehensive to 18	28	23	7	6	6	31	69.7
Other/combined technology	Grammar	53	18	2	6	6	15	2.2
Other/combined technology	Middle deemed Secondary	20		14			66	2.1
Other/combined technology	Other Secondary schools	14	5	33		9	38	2.6
Other/combined technology	Secondary Modern	37			2	21	40	4.2
Business Studies	Comprehensive to 16	44	1	5		3	46	24.7
Business Studies	Comprehensive to 18	61	7	4	1	2	25	124.3
Business Studies	Grammar	76		1		3	19	9.8
Business Studies	Middle deemed Secondary							0
Business Studies	Other Secondary schools	51	13			7	29	3.6
Business Studies	Secondary Modern	60		9			31	5
Classics	Comprehensive to 16	69					31	0.3
Classics	Comprehensive to 18	64					36	1.5
Classics	Grammar	67					33	1.5
Classics	Middle deemed Secondary							0
Classics	Other Secondary schools							
Classics	Secondary Modern							0

Subject	School type	Degree %	Bed %	PGCE %	Cert. Ed. %	Other qual. %	No qual %	Total (1000's)
History	Comprehensive to 16	78	4	5	2	0	11	87.8
History	Comprehensive to 18	77	4	7	1	3	8	153.7
History	Grammar	92	1	1			6	13.7
History	Middle deemed Secondary	44	14	3	3		36	5.4
History	Other Secondary schools	68	0	20			12	6.1
History	Secondary Modern	63	9	5	5		18	8.5
Religious education	Comprehensive to 16	47	7	10	3	1	32	72.7
Religious education	Comprehensive to 18	51	9	14	2	2	22	124.2
Religious education	Grammar	57	10	8	0	4	21	9.9
Religious education	Middle deemed Secondary	15			3	8	74	3.6
Religious education	Other Secondary schools	48	10	22			20	5.8
Religious education	Secondary Modern	50	13	9	6	6	17	4.4
Geography	Comprehensive to 16	76	6	2	1	1	14	85.5
Geography	Comprehensive to 18	78	5	5	1	1	10	163.4
Geography	Grammar	89	5	2	0	0	4	12.9
Geography	Middle deemed Secondary	48	7			1	44	5.1
Geography	Other Secondary schools	67	17	4			11	6.1
Geography	Secondary Modern	68		14	10		8	7.3
other social studies	Comprehensive to 16	20	1	1		2	75	3.5
other social studies	Comprehensive to 18	36	1	3	0	3	57	40.2
other social studies	Grammar	54					46	3.9
other social studies	Middle deemed Secondary							0
other social studies	Other Secondary schools	40					60	1.2
other social studies	Secondary Modern	29					71	0.9
Combined arts/humanities/social studies	Comprehensive to 16	15	0	4		1	79	13.5
Combined arts/humanities/social studies	Comprehensive to 18	24		6		3	67	42.3
Combined arts/humanities/social studies	Grammar	27		4		2	66	1.9
Combined arts/humanities/social studies	Middle deemed Secondary	3					97	1.9
Combined arts/humanities/social studies	Other Secondary schools	49					51	2.6
Combined arts/humanities/social studies	Secondary Modern	20		6			74	2.2

Subject	School type	Degree %	Bed %	PGCE %	Cert. Ed. %	Other qual. %	No qual %	Total (1000's)
Music	Comprehensive to 16	62	9	14	3	5	7	50.7
Music	Comprehensive to 18	70	6	11	2	5	7	84.5
Music	Grammar	79		14		5	2	5.9
Music	Middle deemed Secondary	47	26	8	7		13	3.1
Music	Other Secondary schools	78	17				5	3.2
Music	Secondary Modern	45	12	30		3	9	5.7
Drama	Comprehensive to 16	51	8	6	1	5	29	37.7
Drama	Comprehensive to 18	58	5	12	1	5	20	86.5
Drama	Grammar	56	10	18	1	1	13	4.2
Drama	Middle deemed Secondary	42				3	56	1.3
Drama	Other Secondary schools	49					51	4.1
Drama	Secondary Modern	51		8	16	2	23	4.4
Art and design	Comprehensive to 16	58	7	19	3	2	11	69.6
Art and design	Comprehensive to 18	59	4	18	3	6	10	122.3
Art and design	Grammar	61	4	14	3	5	14	11
Art and design	Middle deemed Secondary	35	11		7	8	39	3.5
Art and design	Other Secondary schools	65		19	8	1	7	9.0
Art and design	Secondary Modern	61	9	20		8	2	9.1
Physical education	Comprehensive to 16	57	26	3	4	2	8	161
Physical education	Comprehensive to 18	57	26	4	3	2	8	255.2
Physical education	Grammar	48	25	4	8	2	14	16.8
Physical education	Middle deemed Secondary	42	32	4	1	5	16	7
Physical education	Other Secondary schools	49	19		4	9	19	8.8
Physical education	Secondary Modern	75	12	2	2	1	8	15
Careers education	Comprehensive to 16		1			18	81	4.6
Careers education	Comprehensive to 18					6	94	4
Careers education	Grammar						100	0.2
Careers education	Middle deemed Secondary							0
Careers education	Other Secondary schools					15	85	0.4
Careers education	Secondary Modern						100	0.1

Subject	School type	Degree %	Bed %	PGCE %	Cert. Ed. %	Other qual. %	No qual %	Total (1000's)
PSHE	Comprehensive to 16	0				1	99	22.8
PSHE	Comprehensive to 18		0	1			99	41.4
PSHE	Grammar					0	100	3.1
PSHE	Middle deemed Secondary					2	98	2.4
PSHE	Other Secondary schools						100	1.2
PSHE	Secondary Modern					5	95	2.9
General studies	Comprehensive to 16						100	0.5
General studies	Comprehensive to 18						100	9
General studies	Grammar						100	1.1
General studies	Middle deemed Secondary							0
General studies	Other Secondary schools						100	0.9
General studies	Secondary Modern						100	0.1
Citizenship	Comprehensive to 16			10		5	85	15.6
Citizenship	Comprehensive to 18	3		10		1	85	19.7
Citizenship	Grammar			32			68	0.7
Citizenship	Middle deemed Secondary						100	0.3
Citizenship	Other Secondary schools			54			46	1.4
Citizenship	Secondary Modern			11			89	1.2
Other	Comprehensive to 16	3		0		0	96	39.1
Other	Comprehensive to 18	1		0		1	99	65.1
Other	Grammar						100	1.2
Other	Middle deemed Secondary						100	0.6
Other	Other Secondary schools						100	3.2
Other	Secondary Modern					1	99	3.5
Total	Comprehensive to 16	51	10	11	2	3	23	1830.1
Total	Comprehensive to 18	58	8	10	2	2	21	3267.5
Total	Grammar	68	6	7	1	2	15	260.9
Total	Middle deemed Secondary	30	11	6	3	2	48	94
Total	Other Secondary schools	47	8	12	1	2	30	146.6
Total	Secondary Modern	49	6	12	3	4	26	172.4

10.3 Analysis of qualifications of teachers by age in 2007 compared to 2002

Table 10.3.1 Proportions of teachers by age in 2007 compared to 2002

	Age											
	Under 30						30-39					
	2002			2007			2002			2007		
	%	±CI		%	±CI	Sig [3]	%	±CI		%	±CI	Sig [3]
Mathematics	16	±	2	21	±	2 ↑	22	±	3	24	±	2
English	22	±	2	26	±	2	22	±	2	27	±	2 ↑
Combined/General Science	21	±	3	17	±	3	28	±	3	27	±	3
Biology	23	±	4	24	±	2	20	±	4	30	±	2 ↑
Chemistry	13	±	4	17	±	3	22	±	5	29	±	3
Physics	13	±	4	16	±	2	24	±	5	28	±	3
Other Sciences	30	±	7	25	±	1	24	±	6	28	±	1
French	24	±	4	23	±	2	24	±	4	29	±	3
German	19	±	6	21	±	3	24	±	7	29	±	3
Spanish	41	±	10	24	±	3 ↓	34	±	10	29	±	3
Other Modern Languages	19	±	8	23	±	2	29	±	9	30	±	2
Design and Technology	10	±	2	20	±	2 ↑	24	±	3	31	±	3 ↑
ICT	17	±	5	24	±	2 ↑	31	±	6	31	±	2
Other/Combined Technology	10	±	7	19	±	2 ↑	19	±	8	30	±	2 ↑
Business Studies	19	±	5	23	±	3	36	±	6	31	±	3
Classics	10	±	10	22	±	9	23	±	13	17	±	8
History	19	±	3	21	±	2	23	±	3	26	±	3
Religious Education	26	±	5	21	±	3	21	±	5	33	±	4 ↑
Geography	23	±	3	25	±	2	21	±	3	28	±	2 ↑
Other Social Studies	17	±	5	26	±	3 ↑	25	±	5	29	±	3
Combined Arts/Humanities/ Social studies	14	±	5	25	±	1 ↑	27	±	7	28	±	1
Music	28	±	5	32	±	4	28	±	5	33	±	5
Drama	37	±	7	41	±	5	22	±	6	29	±	4
Art and Design	19	±	4	25	±	3	27	±	4	32	±	4
Physical Education	31	±	3	43	±	3 ↑	23	±	3	26	±	2
Careers Education	0	±	0	0	±	0	9	±	9	0	±	0
Personal Social and Health	10	±	8	22	±	4	26	±	10	25	±	5
General Studies	7	±	12	0	±	0	0	±	0	46	±	21 ↑
Citizenship	31	±	43	22	±	4	31	±	43	34	±	5
Other	-	±	-	12	±	2	-	±	-	17	±	2
Total [2]	**20**	**±**	**1**	**24**	**±**	**1 ↑**	**24**	**±**	**1**	**28**	**±**	**1 ↑**

1. Where a teacher had more than one post A-level qualification in the same subject, the qualification level was determined by the highest.

2. Teachers were counted once against each subject they were teaching.

3. Changes since 2002 were calculated taking the 95% confidence intervals into consideration and rounded.

	Age									
	40-49					50 or over				
	2002		2007			2002		2007		
	%	±CI	%	±CI	Sig [3]	%	±CI	%	±CI	Sig [3]
Mathematics	31	± 3	26	± 2		31	± 3	29	± 3	
English	29	± 3	23	± 2	↓	27	± 3	24	± 2	
Combined/General Science	27	± 3	27	± 3		24	± 3	29	± 3	
Biology	30	± 5	21	± 2	↓	27	± 4	24	± 2	
Chemistry	30	± 5	26	± 3		35	± 5	28	± 3	
Physics	29	± 6	28	± 3		34	± 6	28	± 3	
Other Sciences	26	± 6	23	± 1		21	± 6	24	± 1	
French	27	± 4	22	± 2		25	± 4	25	± 2	
German	38	± 8	23	± 3	↓	20	± 6	26	± 3	
Spanish	14	± 7	22	± 3		11	± 7	25	± 3	↑
Other Modern Languages	28	± 9	23	± 2		24	± 9	25	± 2	
Design and Technology	34	± 3	30	± 3		32	± 3	20	± 2	↓
ICT	30	± 6	25	± 2		22	± 5	20	± 2	
Other/Combined Technology	42	± 11	28	± 2	↓	30	± 11	23	± 2	
Business Studies	26	± 6	25	± 3		20	± 5	22	± 2	
Classics	32	± 15	27	± 10		35	± 12	35	± 10	
History	27	± 4	26	± 3		30	± 4	27	± 3	
Religious Education	27	± 5	24	± 4		26	± 5	22	± 3	
Geography	25	± 4	24	± 2		30	± 4	23	± 2	↓
Other Social Studies	29	± 6	22	± 2		29	± 6	23	± 2	
Combined Arts/Humanities/ Social studies	34	± 7	23	± 1	↓	25	± 7	24	± 1	
Music	27	± 5	21	± 4		18	± 5	14	± 4	
Drama	24	± 6	15	± 3		17	± 5	15	± 3	
Art and Design	26	± 4	23	± 3		27	± 4	21	± 3	
Physical Education	27	± 3	16	± 2	↓	19	± 3	15	± 2	
Careers Education	33	± 16	0	± 0	↓	58	± 19	100	± 0	↑
Personal Social and Health	33	± 13	23	± 4		31	± 11	30	± 5	
General Studies	61	± 23	0	± 0	↓	33	± 22	54	± 21	
Citizenship	37	± 0	25	± 4	↓	0	± 0	19	± 4	↑
Other	-	± -	28	± 3		-	± -	43	± 3	
Total [2]	**29**	**± 1**	**24**	**± 1**	**↓**	**27**	**± 1**	**25**	**± 1**	**↓**

see footnotes on page 85

Annexes

Annex 1 Technical notes on analysis

Coding

Subjects taught and qualifications of teachers were collected in open form, so teachers recorded the subjects and qualifications in their own words. These were coded using a coding frame developed to reflect the developing school workforce census codes, tailored to the responses of the teachers and reflecting the lines of learning for Diplomas. The codes were then manually matched to create a link between subject taught and qualification held. Subject categorisations were then created to use as categories used in this report. Annex 5 shows the mapping of the subjects taught to teachers' qualifications subjects.

Weighting and grossing

The data collected from the survey was only from a sample of teachers. To represent the national figures and to remove any biases due to sample design, it was necessary to produce weighting factors to represent the national population.

The first step in producing these factors was to use the Annual School Census dataset (2007) to ascertain the national figures for full time (FT) and full time equivalent teachers (FTE) for the following school types:

Comprehensive 11-16
Comprehensive 11-18
Middle deemed secondary
Grammar
Secondary Modern
Other secondary schools
CTC schools

Additionally, since there were such a large number of teachers within comprehensive schools, teachers in these schools were divided into further groups according to the size of the school; three size groupings in Comprehensives 11-16 (each containing a third of schools) and four size groups in Comprehensives 11-18 (each containing a quarter of schools).

For each of the 12 school types (or strata), the numbers of teachers in the sample (as FT and FTE) within each school type and the corresponding national figures were established. Grossing factors (or weights) were then calculated by dividing the national figures for each stratum by the sample figures.

These weights were applied to the data to represent the national figures to create two datasets, one for FT and one for FTE teachers, and analysis was carried out using this data.

Counting teachers and periods taught

Each teacher was counted once against each subject they taught. All of the analyses in the main body of the report were based on both full and part time teachers. Analyses of full time only teachers were given in Section 7 to compare to the 2002 analyses which were based on full time only teachers. In order to carry out the analysis of these two groups, two datasets were produced and grossed to form the basis of each set of analyses.

As in 2002, the 2007 periods data were standardised on the basis of a one 40 period week.

The method can be described as follows:

Teacher $_i$ = Total Periods $_{Pi}$ = Total for school questionnaire

Subject $_j$ = P_{ij} = Periods for subject j teacher i

"Standardised periods" for teacher i subject j

$$X_{ij} = \frac{P_{ij}}{P_i} \times 40$$

Then, gross up X_{ij} by grossing factor.

Calculation of confidence intervals

The calculations for deriving the 2007 confidence intervals (CIs) were carried out in the same manner as the method used to derive the 2002 confidence intervals.

The method took into account each subject taught and the total number of teachers or periods taught within each qualification level within each stratum (discussed in the grossing and weighting method). The method took into account the grossed, ungrossed and overall grossed figures. The steps below illustrate how 2007 CIs were calculated.

The variance for each subject was calculated as follows;

1. (The grossed figure of Subject A stratum 1 divided by the overall grossed figures of total teachers or periods) squared.

2. Grossed figure of Subject A stratum 1 minus the ungrossed figure* of Subject A stratum 1.
   *(*Ungrossed figures equals figures for Subject A stratum 1 divided by the total for Subject A stratum 1.)*

3. Ungrossed figure of Subject A stratum 1 multiplied by the grossed figure of Subject A stratum 1 minus 1.

4. The outcome of 2 (above) was divided by the outcome of 3 (above).

5. Ungrossed figure of Subject A stratum 1 multiplied by 1 minus the ungrossed figure of Subject A stratum 1.

6. The product of 1, 4 and 5 (as above) was calculated.

This process was repeated for the remaining strata and then summed up over the different strata to produce the variance. The square root of this variance was multiplied by 1.96. This figure was then multiplied by 100 to get the percentage variance.

Difference measures were based on the percentages and confidence interval limits to derive the lower and upper limits, which were used to derive whether there was a significant change (i.e. 2007 outputs were different from 2002 results) or no significant change (i.e. 2007 outputs were not different from 2002 results). This was highlighted in the 'sig' column with up and down arrows indicating an increase or decrease between 2002 and 2007. Where there were blank cells in either the 2002 or the 2007 columns difference measures were not applied and so the -'s in those 'sig' cells were -'s and not necessarily non-significant.

Other data sources

The Annual School Census data 2007 was used to weight and gross the dataset. It was also used to provide categories for analysis by background factors such as Free School Meals eligibility.

The report of the findings of the 2007 (provisional) 618G survey was used to compare the sample of teachers in the survey to the national population of teachers by role in school.

Ranking qualifications

Qualifications were ranked in the same way as in the 2002 survey. Degrees and higher degrees were grouped under 'degree' and ranked the highest in the analysis. This is followed by BEd, then PGCE, then CertEd and then other post A-level qualifications.

PGCEs were counted only when the teacher did not hold a degree or higher degree in that subject.

Annex 2 Index of tables and charts

Annex 3 Data collections instruments 2007

Secondary School Curriculum and Staffing Survey 2007

This survey is the latest in a series of periodic sample surveys that have run every 4 - 6 years since 1965. It provides a picture of the teaching workforce, which is used to inform teacher training places and to examine the qualifications of teachers in relation to the curriculum they deliver. It is an important part of the research design that all teachers within a school complete their questionnaires so that a truly comprehensive picture of the teaching population can be created. Although participation in this survey is voluntary, we would be very grateful if you could complete this questionnaire and return it to, NAME, the contact person for this project in your school. They will return the questionnaires to us at NFER.

Participating schools who provide data for at least 80% of their total teaching workforce will receive a payment of £100, in recognition of the time put into completing this questionnaire.

This questionnaire should only be completed by

- **teachers with Qualified Teacher Status**
- **those on the Graduate Teacher and Registered Teacher Programmes**
- **those on the Overseas Trained Teacher Programme and TeachFirst**
- **teachers and instructors without Qualified Teacher Status.**

This should not include supply or support staff.

1. Gender: (please ✓one box)

male ☐

female ☐

2a. Is your teaching post in this school full-time or part-time?: (please ✓one box)

full-time ☐

part-time (please go to part b) ☐

2b. For part-time roles, please enter the proportion of full-time hours that you work (e.g. enter 0.2 for 1 day a week, 0.4 for 2 days a week, etc.) ☐

3. Age: (please ✓one box)

Under 25	☐	**40 - 44**	☐
25 - 29	☐	**45 - 49**	☐
30 - 34	☐	**50 - 54**	☐
35 - 39	☐	**55 - 59**	☐
		60 or over	☐

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4. Role in school: (please ✓one box)

Headteacher	☐
Deputy headteacher	☐
Assistant headteacher	☐
Advanced skills teacher (AST)	☐
Excellent teacher	☐
Post-threshold teacher	☐
QTS classroom teacher	☐
Non-QTS classroom teacher	☐

5. Please tick to indicate ALL the post A-level qualifications you hold and then write in the main subject(s) for each qualification. If you have more than one qualification of a particular type or a qualification that isn't listed, please tick 'other' and enter the qualification and its main subject(s) in the 'other' box below.

Qualification	Please tick all that apply		Subject 1	Subject 2
BA	☐	1		
BEd	☐	2		
BSc	☐	3		
HND	☐	4		
MA	☐	5		
MPhil	☐	6		
MSc	☐	7		
PGCE	☐	8		
PhD	☐	9		
Post Grad Certificate	☐	10		
Post Grad Diploma	☐	11		
Other*	☐	12		

*Please state other qualification(s) and subject(s):

6. Please enter the subjects you usually teach in this school in the boxes below.

One-week timetables:

Enter for each subject the number of periods you will teach for the week commencing 5th February 2007.

Two-week timetables:

Enter for each subject the number of periods you will teach for the two weeks commencing 5th February 2007. If your two-week timetable is already underway on this date, please enter this data for the two weeks commencing 29th January 2007.

Other timetables

If you do **not** run either a one or two week timetable, please enter for each subject the number of periods you will teach for the week commencing 5th February 2007.

Leave blank any year groups you do not teach.

In calculating the number of periods, please give the total in terms of single periods (i.e. 1 double = 2 periods).

	Number of periods taught						
Subjects taught (please be as detailed as possible)	**Y7**	**Y8**	**Y9**	**Y10**	**Y11**	**Y12**	**Y13**
see example below:							
Biology	02	04	06	02	04		

Please note we will ask the contact person in your school for the length of a standard teaching period and details about your timetable so that the data supplied by each school can be compared.

Thank you for completing this questionnaire. Please pass it to the contact person in your school who will return it to NFER in the pre-paid envelope we have provided. Please note that any report or statistics published as a result of this research will not refer to any organisation or individual, but will simply describe the aggregated data. All data will be treated in the strictest confidence in accordance with the Data Protection Act 1998. If you have any queries about completing this questionnaire or would like to ask about the project in general please contact **Alison Marsh on 01753 637360 or email cur@nfer.ac.uk**

Tell us about your timetables

This data is very important and will enable us to make comparisons between schools.

Please complete the questions below and return this form with the teacher data.

1. Which timetable system does your school operate? (Please tick one box)

1-week timetable ☐

2-week timetable ☐

Other (please specify) ☐

2. How many periods are there in one rotation of your school's timetable?

(If your school has a mixture of double and single periods please count each individual period e.g. 1 double = 2 singles).

3. How long is one period? (Please state the length of one single period in minutes)

Thank you very much for your help with our survey. Details of how to return materials to us are included in the guidance notes document.

Annex 4 1996 and 2002 survey results

Table A.4.1 Highest post A-level qualifications held by full time teachers in the subjects they teach to year groups 7 to 13 in 2002 compared to 1996

Table 7: Highest post A level qualification[1] held by full time teachers in the subjects they teach[2] to year groups 7-13 (provisional)

England

Percentages

	Highest Level of Qualification[1]									
	Degree[3]					BEd				
	1996		2002			1996		2002		
	%	± CI	%	± CI	Change[4]	%	± CI	%	± CI	Change[4]
Subject										
Mathematics	40	1.9	41	2.5	*0*	16	1.5	15	1.9	*0*
English	43	1.8	50	2.5	*3*	14	1.3	15	1.9	*0*
Combined/General Science	57	1.9	60	2.5	*0*	12	1.2	12	1.8	*0*
Biology	63	4.2	70	5.1	*0*	11	2.7	7	2.8	*0*
Chemistry	75	4.0	69	5.2	*0*	5	2.0	7	2.7	*0*
Physics	62	4.7	61	5.8	*0*	8	2.5	10	3.6	*0*
Other Sciences	23	6.0	10	6.1	*-1*	0	0.0	3	3.6	*0*
French	50	2.5	53	3.4	*0*	10	1.6	8	1.9	*0*
German	47	3.4	47	5.3	*0*	8	1.9	6	2.6	*0*
Spanish	45	5.8	37	6.7	*0*	3	2.0	8	4.0	*0*
Other Modern Languages	22	6.8	16	7.8	*0*	2	2.3	0	0.0	*0*
Design and Technology	13	1.6	25	2.7	*8*	18	1.8	20	2.5	*0*
Information & Communication Technology	10	1.9	13	2.1	*0*	5	1.3	6	1.5	*0*
Other/Combined Technology	14	3.0	29	8.8	*3*	21	3.6	11	7.1	*0*
Home Economics	8	2.3	-	-	-	20	3.6	-	-	-
Business Studies	16	2.8	29	4.7	*6*	13	2.6	11	3.5	*0*
Classics	57	12.6	37	7.3	*0*	0	0.0	0	0.0	*0*
History	47	2.7	56	3.7	*3*	10	1.6	9	2.2	*0*
Religious Education	19	2.1	22	3.0	*0*	10	1.7	8	2.1	*0*
Geography	38	2.5	52	3.7	*7*	15	1.9	10	2.3	*-1*
Other Social Studies	36	4.1	34	5.3	*0*	6	2.2	6	2.6	*0*
Combined Arts/Humanities/Social Studies	8	2.0	5	2.6	*0*	3	1.4	4	2.1	*0*
Music	49	4.2	59	5.2	*1*	13	2.9	14	3.9	*0*
Drama	16	2.4	24	4.2	*2*	10	2.0	10	2.9	*0*
Art and Design	41	3.2	53	4.3	*5*	12	2.2	10	2.8	*0*
Physical Education	11	1.5	25	2.6	*9*	34	2.2	31	2.8	*0*
Careers Education	2	1.7	2	2.6	*0*	1	1.4	2	3.3	*0*
Personal, Social and Health Education	1	0.1	1	0.3	*0*	0	0.1	1	0.4	*0*
General Studies	1	0.8	1	1.0	*0*	2	1.2	2	1.4	*0*
Citizenship	-	-	2	1.3	-	-	-	2	1.1	-
Other Subjects Not Covered Above	-	-	-	-	-	-	-	-	-	-
Total[2,5]	**27**	**0.5**	**32**	**0.7**	**4**	**10**	**0.3**	**10**	**0.4**	***0***

Source: *http://www.dfes.gov.uk/rsgateway/DB/SFR/s000413/sfr25-2003.pdf*

Note the figures here are different to those presented in section 7 of this report. The figures in this annex are the provisional report of the 2002survey, whilst the figures used in section 7 were the final 2002 results.

Table A.4.1 Highest post A-level qualifications held by full time teachers in the subjects they teach to year groups 7 to 13 in 2002 compared to 1996 (continued)

England

Percentages

	Highest Level of Qualification[1]									
	PGCE					Cert Ed				
	1996		2002			1996		2002		
	%	± CI	%	± CI	Change[4]	%	± CI	%	± CI	Change[4]
Subject										
Mathematics	11	1.3	9	1.5	*0*	12	1.3	7	1.4	*-2*
English	9	1.1	7	1.3	*0*	12	1.3	6	1.2	*-4*
Combined/General Science	13	1.3	9	1.5	*-1*	9	1.1	4	1.1	*-3*
Biology	15	3.1	11	3.5	*0*	5	1.9	3	1.9	*0*
Chemistry	15	3.3	12	3.7	*0*	2	1.3	1	1.1	*0*
Physics	21	3.9	15	4.5	*0*	3	1.6	3	1.9	*0*
Other Sciences	4	2.9	5	4.3	*0*	2	2.2	0	0.0	*0*
French	13	1.7	10	2.1	*0*	7	1.3	3	1.2	*-1*
German	14	2.4	13	3.5	*0*	2	1.1	1	1.2	*0*
Spanish	13	3.6	17	5.4	*0*	0	0.0	0	0.0	*0*
Other Modern Languages	3	2.6	8	6.4	*0*	0	0.0	0	0.0	*0*
Design and Technology	6	1.1	7	1.6	*0*	20	1.9	21	2.5	*0*
Information & Communication Technology	5	1.3	8	1.7	*0*	3	1.0	2	0.9	*0*
Other/Combined Technology	5	1.9	18	7.8	*3*	19	3.4	20	9.1	*0*
Home Economics	3	1.6	-	-	-	44	4.4	-	-	-
Business Studies	11	2.4	9	3.0	*0*	9	2.3	4	2.1	*-1*
Classics	0	0.0	2	3.3	*0*	0	0.0	2	3.3	*0*
History	10	1.6	5	1.6	*-1*	8	1.5	6	1.8	*0*
Religious Education	7	1.4	7	2.0	*0*	9	1.6	4	1.4	*-2*
Geography	8	1.5	6	1.7	*0*	11	1.7	5	1.7	*-3*
Other Social Studies	5	1.7	2	1.7	*0*	2	1.2	2	1.5	*0*
Combined Arts/Humanities/Social Studies	2	1.1	6	2.9	*0*	1	1.0	1	1.1	*0*
Music	8	2.3	4	2.2	*0*	15	3.2	6	2.7	*-3*
Drama	9	1.8	12	3.1	*0*	11	2.1	6	2.4	*0*
Art and Design	7	1.7	7	2.2	*0*	18	2.5	9	2.6	*-5*
Physical Education	5	1.0	6	1.5	*0*	23	1.9	13	2.1	*-6*
Careers Education	1	1.6	3	2.9	*0*	3	2.4	4	4.1	*0*
Personal, Social and Health Education	0	0.1	1	0.4	*1*	0	0.2	1	0.3	*0*
General Studies	2	1.1	1	1.2	*0*	1	0.8	0	0.6	*0*
Citizenship	-	-	2	1.5	-	-	-	0	0.6	-
Other Subjects Not Covered Above	-	-	-	-	-	-	-	-	-	-
Total[2,5]	**7**	**0.3**	**7**	**0.4**	***0***	**9**	**0.3**	**5**	**0.3**	***-3***

Table A.4.1 Highest post A-level qualifications held by full time teachers in the subjects they teach to year groups 7 to 13 in 2002 compared to 1996 (continued)

England

Percentages

	Highest Level of Qualification[1]									
	Other					No Qual.				
	1996		2002			1996		2002		
	%	± CI	%	± CI	Change[4]	%	± CI	%	± CI	Change[4]
Subject										
Mathematics	2	0.6	2	0.7	*0*	20	1.6	26	2.3	*2*
English	0	0.2	1	0.5	*0*	22	1.6	21	2.1	*0*
Combined/General Science	0	0.2	1	0.5	*0*	9	1.1	13	1.8	*2*
Biology	0	0.0	0	0.6	*0*	6	2.0	9	3.2	*0*
Chemistry	0	0.0	1	1.2	*0*	3	1.6	10	3.4	*2*
Physics	0	0.3	0	0.0	*0*	6	2.3	11	3.7	*0*
Other Sciences	0	0.0	0	0.0	*0*	71	6.6	81	7.9	*0*
French	2	0.7	2	1.0	*0*	18	2.0	24	3.0	*1*
German	2	0.9	2	1.3	*0*	27	3.1	31	4.9	*0*
Spanish	4	2.3	2	2.2	*0*	35	5.6	35	7.0	*0*
Other Modern Languages	1	1.6	3	3.6	*0*	73	7.4	73	9.7	*0*
Design and Technology	1	0.6	2	0.8	*0*	42	2.3	26	2.7	*-12*
Information & Communication Technology	5	1.3	2	1.0	*0*	73	2.7	70	3.0	*0*
Other/Combined Technology	2	1.3	3	3.9	*0*	39	4.2	18	8.3	*-8*
Home Economics	2	1.4	-	-	-	23	3.7	-	-	-
Business Studies	4	1.6	3	1.7	*0*	47	3.8	45	5.2	*0*
Classics	0	0.0	0	0.0	*0*	43	12.6	59	8.0	*0*
History	1	0.5	0	0.0	*0*	25	2.4	24	3.2	*0*
Religious Education	1	0.4	2	1.0	*0*	55	2.7	58	3.7	*0*
Geography	0	0.2	1	0.8	*0*	27	2.3	27	3.3	*0*
Other Social Studies	1	1.0	0	0.7	*0*	50	4.3	56	5.6	*0*
Combined Arts/Humanities/Social Studies	0	0.0	1	1.0	*0*	85	2.7	84	4.4	*0*
Music	2	1.1	2	1.6	*0*	13	2.9	14	3.8	*0*
Drama	2	1.0	1	1.0	*0*	53	3.3	47	4.9	*0*
Art and Design	2	1.0	1	1.0	*0*	19	2.5	21	3.7	*0*
Physical Education	0	0.3	2	0.8	*0*	26	2.0	23	2.5	*0*
Careers Education	3	2.3	4	4.5	*0*	91	4.1	85	7.7	*0*
Personal, Social and Health Education	0	0.1	0	0.1	*0*	98	0.3	96	0.7	*-1*
General Studies	0	0.0	0	0.0	*0*	94	1.5	95	2.1	*0*
Citizenship	-	-	0	0.0	-	-	-	94	2.3	-
Other Subjects Not Covered Above	-	-	-	-	-	-	-	-	-	-
Total[2,5]	**1**	**0.1**	**1**	**0.2**	***0***	**46**	**0.5**	**45**	**0.7**	***0***

[1] Where a teacher has more than one post A level qualification in the same subject, the qualification level is determined by the highest level reading from left (Degree) to right (Other). For example, teachers shown under PGCE have a PGCE but not a degree or BEd in the subject, while those with a PGCE and a degree are shown only under Degree.

[2] Teachers are counted once against each subject which they are teaching.

[3] Includes higher degrees but excludes BEds.

[4] Changes since 1996 have been calculated taking the 95% confidence intervals into consideration and rounded.

[5] 'Other' subjects not included in total percentages.

Table A.4.2 Proportion of subject periods taught to year groups 7-13 by full time teachers holding a post A-level qualification in that subject in 2002 compared to 1996

England

Percentages

	Highest Level of Qualification[1]									
	Degree[3]					BEd				
	1996		2002			1996		2002		
	%	± CI	%	± CI	Change[4]	%	± CI	%	± CI	Change[4]
Subject										
Mathematics	47	0.4	51	0.6	*3*	18	0.3	17	0.4	*0*
English	53	0.4	61	0.5	*8*	15	0.3	15	0.4	*0*
Combined/General Science	59	0.4	64	0.5	*4*	12	0.2	13	0.4	*1*
Biology	67	1.2	74	1.4	*4*	9	0.8	6	0.8	*-2*
Chemistry	80	1.2	78	1.5	*0*	5	0.7	5	0.8	*0*
Physics	67	1.4	72	1.6	*2*	7	0.7	8	0.9	*0*
Other Sciences	28	1.9	11	1.6	*-14*	0	0.4	3	0.9	*2*
French	56	0.5	61	0.8	*5*	11	0.3	8	0.4	*-3*
German	56	0.8	59	1.3	*2*	9	0.5	8	0.7	*0*
Spanish	56	1.4	42	1.8	*-10*	3	0.5	13	1.2	*9*
Other Modern Languages	29	2.0	24	2.3	*-1*	2	0.6	0	0.0	*-1*
Design and Technology	14	0.3	29	0.6	*14*	22	0.4	24	0.6	*1*
Information & Communication Technology	16	0.7	22	0.8	*5*	7	0.5	11	0.6	*3*
Other/Combined Technology	14	0.7	34	2.4	*17*	23	0.9	10	1.9	*-11*
Home Economics	9	0.7	-	-	-	24	1.0	-	-	-
Business Studies	21	0.7	34	1.3	*12*	17	0.7	11	0.9	*-5*
Classics	83	2.1	73	2.4	*-6*	0	0.0	0	0.0	*0*
History	59	0.6	69	0.8	*9*	11	0.4	10	0.5	*0*
Religious Education	35	0.7	43	1.0	*7*	17	0.5	12	0.7	*-3*
Geography	51	0.6	67	0.8	*15*	16	0.4	10	0.5	*-6*
Other Social Studies	44	1.2	53	1.6	*5*	7	0.6	7	0.8	*0*
Combined Arts/Humanities/Social Studies	9	0.6	6	1.0	*-1*	4	0.4	9	0.9	*3*
Music	56	0.8	65	1.1	*7*	15	0.6	17	0.9	*1*
Drama	25	0.7	41	1.3	*14*	15	0.6	14	0.8	*0*
Art and Design	50	0.6	64	0.9	*13*	13	0.4	11	0.6	*0*
Physical Education	15	0.4	34	0.6	*18*	47	0.5	37	0.7	*-8*
Careers Education	1	0.8	3	1.4	*0*	2	0.9	7	3.0	*2*
Personal, Social and Health Education	1	0.1	2	0.3	*0*	1	0.1	2	0.3	*1*
General Studies	3	0.9	1	0.6	*0*	9	1.2	2	0.7	*-5*
Citizenship	-	-	2	1.0	-	-	-	2	1.0	-
Other Subjects Not Covered Above	-	-	-	-	-	-	-	-	-	-
Total[2,5]	**42**	**0.1**	**50**	**0.2**	*8*	**16**	**0.1**	**15**	**0.1**	*-1*

Source: *http://www.dfes.gov.uk/rsgateway/DB/SFR/s000413/sfr25-2003.pdf*

Table A.4.2 Proportion of subject periods taught to year groups 7-13 by full time teachers holding a post A-level qualification in that subject in 2002 compared to 1996 (continued)

England

Percentages

	Highest Level of Qualification[1]									
	PGCE					Cert Ed				
	1996		2002			1996		2002		
	%	± CI	%	± CI	Change[4]	%	± CI	%	± CI	Change[4]
Subject										
Mathematics	12	0.3	10	0.3	-2	12	0.3	8	0.3	-4
English	10	0.2	6	0.3	-4	12	0.2	6	0.3	-6
Combined/General Science	14	0.3	10	0.3	-4	10	0.2	5	0.2	-5
Biology	13	0.8	10	1.1	-1	5	0.5	2	0.5	-2
Chemistry	11	0.9	8	1.0	-2	2	0.3	1	0.3	-1
Physics	20	1.1	9	1.1	-9	3	0.5	2	0.6	0
Other Sciences	5	1.1	4	1.0	0	3	0.6	0	0.0	-2
French	13	0.3	9	0.5	-3	8	0.3	4	0.3	-4
German	15	0.6	13	0.9	-1	3	0.3	1	0.2	-2
Spanish	12	0.9	20	1.5	5	0	0.0	0	0.0	0
Other Modern Languages	3	1.0	8	1.6	3	0	0.0	0	0.0	0
Design and Technology	7	0.2	7	0.3	0	24	0.4	23	0.5	0
Information & Communication Technology	7	0.5	11	0.6	2	4	0.4	3	0.3	0
Other/Combined Technology	5	0.4	12	1.7	5	24	0.9	30	2.8	2
Home Economics	4	0.4	-	-	-	44	1.2	-	-	-
Business Studies	13	0.6	12	0.9	0	12	0.6	5	0.6	-5
Classics	0	0.0	2	0.9	1	0	0.6	1	0.7	0
History	11	0.4	6	0.4	-5	7	0.3	6	0.4	0
Religious Education	12	0.5	11	0.6	-1	14	0.5	6	0.5	-7
Geography	10	0.3	6	0.4	-3	11	0.4	5	0.4	-6
Other Social Studies	6	0.5	3	0.5	-2	3	0.4	1	0.4	-1
Combined Arts/Humanities/Social Studies	2	0.3	10	1.1	6	2	0.3	0	0.2	-2
Music	9	0.5	4	0.4	-4	15	0.6	7	0.6	-7
Drama	9	0.5	10	0.8	0	15	0.6	9	0.7	-5
Art and Design	8	0.3	7	0.5	-1	20	0.5	8	0.5	-11
Physical Education	5	0.2	5	0.3	0	27	0.4	15	0.5	-11
Careers Education	1	0.7	7	1.4	4	6	1.6	12	3.6	1
Personal, Social and Health Education	0	0.1	2	0.3	1	1	0.2	2	0.3	0
General Studies	6	1.1	2	0.6	-3	1	0.5	0	0.3	0
Citizenship	-	-	3	1.2	-	-	-	0	0.4	-
Other Subjects Not Covered Above	-	-	-	-	-	-	-	-	-	-
Total[2,5]	**10**	**0.1**	**8**	**0.1**	**-2**	**13**	**0.1**	**8**	**0.1**	**-5**

Table A.4.2 Proportion of subject periods taught to year groups 7-13 by full time teachers holding a post A-level qualification in that subject in 2002 compared to 1996 (continued)

England

Percentages

	Highest Level of Qualification[1]									
	Other					No Qual.				
	1996		2002			1996		2002		
	%	± CI	%	± CI	Change[4]	%	± CI	%	± CI	Change[4]
Subject										
Mathematics	2	0.1	1	0.1	*0*	9	0.3	13	0.4	*4*
English	0	0.0	1	0.1	*1*	10	0.3	11	0.3	*0*
Combined/General Science	0	0.0	1	0.1	*1*	5	0.2	8	0.3	*2*
Biology	0	0.0	0	0.2	*0*	5	0.8	7	0.9	*0*
Chemistry	0	0.1	1	0.4	*1*	1	0.7	7	0.9	*4*
Physics	0	0.1	0	0.0	*0*	3	0.8	9	0.9	*4*
Other Sciences	0	0.0	0	0.0	*0*	64	2.0	82	2.0	*14*
French	2	0.2	3	0.3	*0*	10	0.4	15	0.6	*4*
German	1	0.2	3	0.4	*1*	17	0.7	17	1.0	*0*
Spanish	5	0.6	4	0.7	*0*	25	1.3	21	1.6	*-1*
Other Modern Languages	3	0.9	1	0.6	*0*	63	2.2	66	2.4	*0*
Design and Technology	1	0.1	2	0.2	*0*	31	0.5	14	0.4	*-16*
Information & Communication Technology	7	0.5	3	0.3	*-3*	58	0.9	50	1.0	*-6*
Other/Combined Technology	2	0.3	7	1.6	*4*	33	1.1	7	1.6	*-23*
Home Economics	2	0.3	-	-	-	17	0.9	-	-	-
Business Studies	5	0.4	4	0.6	*-1*	31	0.9	34	1.3	*0*
Classics	0	0.0	0	0.0	*0*	17	2.1	24	2.3	*3*
History	0	0.1	0	0.0	*0*	12	0.5	9	0.5	*-2*
Religious Education	1	0.1	3	0.3	*1*	21	0.6	25	0.9	*3*
Geography	0	0.1	1	0.2	*0*	11	0.4	11	0.6	*0*
Other Social Studies	1	0.2	0	0.1	*0*	40	1.2	37	1.5	*0*
Combined Arts/Humanities/Social Studies	0	0.0	2	0.6	*2*	82	0.8	72	1.6	*-8*
Music	2	0.2	2	0.3	*0*	3	0.5	5	0.5	*1*
Drama	4	0.3	1	0.3	*-1*	32	0.9	25	1.1	*-6*
Art and Design	2	0.2	1	0.2	*-1*	7	0.4	9	0.6	*1*
Physical Education	0	0.1	2	0.2	*1*	6	0.3	7	0.3	*1*
Careers Education	3	1.3	5	2.5	*0*	87	2.3	66	5.1	*-14*
Personal, Social and Health Education	1	0.1	1	0.2	*0*	96	0.3	92	0.6	*-3*
General Studies	0	0.0	0	0.0	*0*	81	0.7	95	1.1	*12*
Citizenship	-	-	0	0.0	-	-	-	92	1.8	-
Other Subjects Not Covered Above	-	-	-	-	-	-	-	-	-	-
Total[2,5]	**1**	**0.0**	**2**	**0.0**	***0***	**18**	**0.1**	**18**	**0.1**	***0***

[1] Where a teacher has more than one post A level qualification in the same subject, the qualification level is determined by the highest level reading from left (Degree) to right (Other). For example, teachers shown under PGCE have a PGCE but not a degree or BEd in the subject, while those with a PGCE and a degree are shown only under Degree.

[2] Teachers are counted once against each subject which they are teaching.

[3] Includes higher degrees but excludes BEds.

[4] Changes since 1996 have been calculated taking the 95% confidence intervals into consideration and rounded.

[5] 'Other' subjects not included in total percentages.

Annex 5 Subject / qualifications mapping

Table A.5.1 Subject / qualifications mapping

Each table section covers a subject category used in this report. The shaded rows are the subject taught categories as used in the report, the bold header rows within each table are the 'coded' subjects taught as given on the survey returns. The lists under the bold header rows are the 'coded' qualification subjects given by teachers on the survey returns.

Art and Design
Art and Design
Ceramics
Art & Design / Illustration
Art / Graphics
Ceramics
Art & Design / Illustration
Graphics
Art Design / Media
Media studies / Photography / Visual studies
Art & Design / Illustration
Creative arts
Film, TV & Radio
Ceramics
Biology
Biology
Anatomy, Physiology and Pathology / osteopathy
Aural and Oral Sciences
Biology
Medicine
Microbiology
Molecular Biology, Biophysics and Biochemistry
Nursing
Nutrition
Zoology
Physiology
Ecology / Entomology
Neuroscience
Genetics
Botany
Science (including combined science)
Applied science
Business Studies
Accounting
Accounting
Business Administration
Business Studies
Finance
Management studies
Public administration

Combined Arts / Humanities / Social Studies
Careers / Citizenship
Careers Education
Citizenship
Combined Arts / Humanities / Social Studies
Journalism
Law
Media studies / Photography / Visual studies
Philosophy, Politics & Economics
Creative arts
Combined Arts / Humanities / Social studies
Cultural Studies
Film, TV & Radio
Philosophy
Information Services
Jewish Civilisation
English/Drama
English / Literacy
Languages / Linguistics
Drama
Performing Arts
Theatre studies
Geography / History
Geology
Geography
History
Art History
History in Education
Media Studies including Film, Photography
Media studies / Photography / Visual studies
Film, TV & Radio
World studies / R.E / Citizenship
International studies
Cultural Studies
Theology and Religious studies
Citizenship
European studies
American studies
Combined / General Science
Combined / General Science
Science (including combined science)

Business Studies	Applied science
Economics	
Accounting	*all Biology, Chemistry and Physics codes*
Business Administration	**Careers Education**
Business Studies	**Careers Education including Work Related Learning (WRL)**
Finance	Careers Education
Human Resource Management	**Chemistry**
Management studies	**Chemistry**
Marketing	Chemistry
Tourism, Transport and Travel	Medicine
Consumer studies	Molecular Biology, Biophysics and Biochemistry
Administration	Science (including combined science)
Education Management	**Citizenship**
Public administration	**Citizenship**
Educational Leadership	Citizenship
Human resource development	**Citizenship / RME**
Business Studies / Economics	Theology and Religious studies
Economics	Citizenship
Accounting	**Classics**
Business Administration	**Classics**
Business Studies	Classical studies & Latin
Finance	**Other**
Human Resource Management	**Asdan / Duke of Edinburgh / Princes Trust**
Management studies	**Behaviour / Learning Support**
Marketing	**Catering, Hospitality**
Tourism, Transport and Travel	Catering & Hospitality
Consumer studies	**Community**
Administration	**English / Maths**
Education Management	Mathematics
Public administration	Statistics
Educational Leadership	English / Literacy
Human resource development	Languages / Linguistics
Economics	**English / Maths / Sports**
Economics	English / Literacy
Philosophy, Politics & Economics	Languages / Linguistics
Leisure & Tourism, L&T	Mathematics
Tourism, Transport and Travel	Statistics
Catering & Hospitality	Sports science / PE / Sports Coaching
Design and Technology	Dance
D&T / ASDAN	**Enrichment**
Design & Technology / Product Design	**First Aid**
Textiles	**Food Technology / Child Development**
Design management	Food and Beverage studies
Graphics	Design & Technology / Product Design
Metalwork	Other Technology
Interior Design	Food & Textiles
Fashion design & Costume design	Community studies / Child & Youth studies
D&T / Electronics	Child development
Design & Technology / Product Design	Nutrition
Other Technology	**Hairdressing**

Electronic and Electrical Engineering	**Key skills (Communication, application of Numeracy, IT)**
Design & technology (DT), Product design, CAD, CAM	**Mentoring**
Design & Technology / Product Design	**Motor Vehicles**
Textiles	Mechanical engineering
Design management	**Non teaching subjects (e.g. SSCO, FORM, Assembly)**
Graphics	**Not Applicable e.g. GCSE Yr10/11, option o, walkabout**
Metalwork	**PD (Physical Disabilities)**
Interior Design	**Self supported study, Tutor time, personal tutor, support, Pastoral care**
Fashion design & Costume design	**SEN, Dyslexia, (Special Educational Needs), SPLD (Specific learning difficulties)/ Behaviour support**
D&T / Resistant Materials	**SEN / Basic skills**
Design & Technology / Product Design	**SEN / English**
Textiles	**Study skills, Learn 2 learn**
Design management	**Other subjects (e.g. AA), LSU, RG, PS, CORE, B/ED, LSC, PSD**
Graphics	**Vocational Studies, VOC**
Metalwork	**Medical Ethics**
Interior Design	Aural and Oral Sciences
Fashion design & Costume design	Dentistry
Materials Science	Medical Technology
Graphics	Medicine
Graphics	Nursing
ICT	Ophthalmics
Computer Science	Pharmacology, Toxicology and Pharmacy
Other / Combined technology (Systems & control), CDT(woodwork)	Anatomy, Physiology and Pathology/osteopathy
Other Technology	Genetics
Production and Manufacturing Engineering	**Child Care / Development, CACHE**
Surveying	Community studies / Child & Youth studies
Food & Textiles	Child development
Architecture	Early Years
Building	**Other Modern Languages**
Landscape Design	**French / German**
Planning (Urban, Rural and Regional)	French
Product Design / Textiles	German
Design & Technology / Product Design	**French / Spanish**
Other Technology	French
Production and Manufacturing Engineering	Spanish
Textiles	**Greek**
Design management	Greek
Food & Textiles	**Italian**
Resistant Materials / Graphics	Italian
Design & Technology / Product Design	**Japanese**
Textiles	Japanese
Design management	**Languages**

Graphics	Other Modern Foreign Languages (MFL)
Metalwork	**Latin**
Interior Design	Latin
Fashion design & Costume design	Classical studies & Latin
Textiles	**Mandarin / Chinese**
Textiles	Mandarin / Chinese
Food & Textiles	**Other languages (Language & social related module)**
Design & Technology / Product Design	Other Modern Foreign Languages (MFL)
Fashion design & Costume design	**Russian**
Interior Design	Russian
Other Sciences	**Turkish**
Applied Science	Turkish
Applied science	**Urdu**
Earth Science	Urdu
Forestry	**Drama**
Geology	**Drama / Citizenship**
Geography	Drama
Environmental Sciences	Performing Arts
Zoology	Theatre studies
Ecology / Entomology	Citizenship
Electronics	**Dance / Drama**
Electronic and Electrical Engineering	Drama
Engineering	Performing Arts
Electronic and Electrical Engineering	Theatre studies
Production and Manufacturing Engineering	Dance
Other Engineering	**Drama including Performing Arts / Performance studies, Expressive Arts**
Mechanical engineering	Drama
Environmental Science	Performing Arts
Environmental Sciences	Theatre studies
Forensic Science	**PSHE / Drama**
Forensic and Archaeological Science / Pathology / Criminology	Drama
Resistant Materials / Electronics	Performing Arts
Materials Science	Theatre studies
Design & Technology / Product Design	PSHE
Other Technology	Family life / PSE
Production and Manufacturing Engineering	**English**
Rural / Agricultural Sciences	**English / Latin**
Agriculture	Classical studies & Latin
Forestry	English / Literacy
Scientific Enquiry	Languages / Linguistics
Applied science	**English, Literacy, Literature, Literacy support**
Sports Science	English / Literacy
Sports science / PE / Sports Coaching	Languages / Linguistics
General Studies / Science	**English / Media studies**
Science (including combined science)	Journalism
Applied science	Media studies / Photography / Visual studies
Anatomy, Physiology and Pathology / osteopathy	English / Literacy

Aural and Oral Sciences
Biology inc holistic therapy / massage
Medicine
Microbiology
Molecular Biology, Biophysics and Biochemistry
Nursing
Nutrition
Psychology
Zoology
Physiology
Ecology / Entomology
Neuroscience
Genetics
Botany
Chemistry
Materials Science
Physics
Agriculture
Dentistry
Food and Beverage studies
Forensic and Archaeological Science / Pathology / Criminology
Forestry
Health
Medical Technology
Ophthalmics
Pharmacology, Toxicology and Pharmacy
Environmental Sciences
Veterinary Medicine and Dentistry and Physiology
Movement studies
Radiography
Podiatry
Electronic and Electrical Engineering
Other Engineering
Mechanical engineering
Industrial studies
General Studies

Life science

Anatomy, Physiology and Pathology / osteopathy
Aural and Oral Sciences
Biology inc holistic therapy / massage
Medicine
Microbiology
Molecular Biology, Biophysics and Biochemistry
Nursing
Nutrition
Psychology
Film, TV & Radio
Languages / Linguistics

French

French and French / German

French

French / Child Development

Community studies / Child & Youth studies
Child development
French

General Studies

General Studies

General Studies

General Studies / PSHE

General Studies
PSHE
Family life / PSE

Geography

Geography

Geology
Geography (Physical & social)
Environmental Sciences

Geography / ICT

Geology
Geography (Physical & social)
Computer Science
ICT

Geology

Geology
Geography (Physical & social)

German

German and German / French

German

History

History

History
Art History
History in Education

ICT

CIDA / DIDA (Certificate in Digital Applications)

Computer Science
ICT

ICT (Information & Communication technology)

ICT / Business

ICT
Computer Science

Zoology	Economics
Physiology	Accounting
Ecology / Entomology	Business Administration
Neuroscience	Business Studies
Genetics	Finance
Botany	Human Resource Management
Other Sciences	Management studies
Dentistry	Marketing
Food and Beverage studies	Tourism, Transport and Travel
Forensic and Archaeological Science / Pathology / Criminology	Consumer studies
Forestry	Administration
Health	Education Management
Medical Technology	Public administration
Ophthalmics	Educational Leadership
Pharmacology, Toxicology and Pharmacy	Human resource development
Veterinary Medicine and Dentistry and Physiology	**ICT/Computing**
Movement studies	Computer Science
Applied science	ICT
Radiography	**I.T / Computer Science**
Podiatry	Computer Science
Electronic and Electrical Engineering	ICT
Other Engineering	**ICT / PSHE**
Mechanical engineering	ICT
Industrial studies	Computer Science
Maths	PSHE
Mathematics	**Other Social Studies**
Mathematics	**Archaeology**
Statistics	Forensic and Archaeological Science / Pathology / Criminology
Statistics	**Current affairs / social and cultural studies**
Mathematics	Politics
Statistics	Cultural Studies
Music	**International Studies**
Music	International studies
Music	European studies
Piano teaching / Violin / Clarinet	American studies
Physical Education	Irish studies
Dance	Jewish Civilisation
Performing Arts	**Law**
Dance	Law
Sports science / PE / Sports Coaching	**Other Social Studies**
PE / Dance	Anthropology
Sports science / PE / Sports Coaching	Social Sciences/Sociology/Social work/Social care
Dance	Politics
Physical education including Sports science, games	International studies
Sports science / PE / Sports Coaching	European studies
Dance	American studies
Public service / PE (fitness)	Health & Social Care

Sports science / PE / Sports Coaching	Public services
Dance	Counselling
Public services	Community studies / Child & Youth studies
Other / Combined Technology	Irish studies
Art / Technology	Ethics / Human rights
Design & Technology / Product Design	Women's studies
Textiles	**Politics**
Design management	Politics
Graphics	Philosophy, Politics & Economics
Metalwork	**Philosophy**
Interior Design	**Public services**
Fashion design & Costume design	Public services
Ceramics	Public administration
Art & Design / Illustration	**Sociology**
Art / Textiles	Social Sciences/Sociology/Social work/Social care
Textiles	**World studies**
Design management	International studies
Graphics	European studies
Ceramics	American studies
Food & Textiles	Irish studies
Art & Design / Illustration	Jewish Civilisation
Creative arts	**Psychology**
Fashion design & Costume design	Psychology
Catering / Hair & Beauty	**Physics**
Hair and Beauty	**Astronomy**
Food & Textiles	Physics
Catering & Hospitality	**Physical science**
Food and Beverage studies	Physics
Nutrition	**Physics**
Construction	Physics
Surveying	Materials Science
Architecture	Science (including combined science)
Building	Applied science
Planning (Urban, Rural and Regional)	Molecular Biology, Biophysics and Biochemistry
D&T / Food	**Physics / Engineering**
Design & Technology / Product Design	Physics
Other Technology	Materials Science
Textiles	Applied science
Design management	Electronic and Electrical Engineering
Graphics	Production and Manufacturing Engineering
Metalwork	Other Engineering
Food & Textiles	Mechanical engineering
Food and Beverage studies	**PSHE**
Fashion	**PHSE / Careers**
Textiles	Citizenship
Fashion design & Costume design	PSHE
Food / Enterprise	Family life / PSE
Food and Beverage studies	**PSE / Citizenship**
Design & Technology / Product Design	Citizenship
Food & Textiles	PSHE
Catering & Hospitality	Family life / PSE

Food/ICT	**PSHE, PSE, Life skills, Sex Ed, PSHCE, PSHCE, Basic skills, PSVE**
Food and Beverage studies Computer Science ICT Food & Textiles Catering & Hospitality	PSHE Family life / PSE **Form / PSHE** Citizenship PSHE Family life / PSE
Food Technology / Home Economics/FT Food and Beverage studies Food & Textiles Catering & Hospitality Nutrition	**Tutor group / PSHE** Citizenship PSHE Family life / PSE
Food/Textiles Catering & Hospitality Food & Textiles Textiles Design & Technology / Product Design Food and Beverage studies	**Vocational / PHSE** Citizenship PSHE Family life / PSE **Health & social care, H&Sc, H.S.C** Health Social Sciences/Sociology/Social work/Social care Health & Social Care PSHE
Graphics / Textiles Food & Textiles Graphics Textiles Design & Technology / Product Design	**Religious Education** **RS / Citizenship**
Manufacturing Design & Technology / Product Design Production and Manufacturing Engineering Industrial studies Design management	Theology and Religious studies **Philosophy / Theology-RE** Philosophy, Politics & Economics Philosophy Theology and Religious studies
Resistant Materials Design & Technology / Product Design Other Technology Materials Science	**Religious ED (RE,RS)/PSE** Theology and Religious studies **Religious Education / Theology / Religious studies/ RS/ RE/ Ethics** Theology and Religious studies
Resistant Materials / Textiles Food & Textiles Textiles Design & Technology / Product Design Materials Science Design & Technology / Product Design Other Technology Production and Manufacturing Engineering	**Spanish** **Spanish and Spanish/French** Spanish
Technology / Graphics Other Technology Production and Manufacturing Engineering Surveying Food & Textiles Architecture Building Landscape Design	

Planning (Urban, Rural and Regional)	
Design & Technology / Product Design	
Textiles	
Design management	
Graphics	
Metalwork	
Interior Design	
Fashion design & Costume design	

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