Contents

1. Overview

1.1. Background and what the report covers

This report is the latest in a long line of similar studies produced for the NASUWT but this year is the first to be published against a backdrop of historically high inflation levels. In fact, inflation did not feature a great deal in our previous research because levels have been low for some time but according to the latest available statistics as of December 2021, the UK Consumer Prices Index (CPI) stood at 5.4% while the Retail Prices Index (RPI) was even higher at 7.5%. The last time levels of this magnitude were experienced was over 30 years ago.

Economists agree that the upward pressure on prices has resulted from pandemic-related supply chain shortages as well as a rise in the cost of oil and gas and the big question is whether and how long these high levels are likely to endure. Many experts believe that these pressures are likely to subside in a year or two but, despite this, current and future inflation levels are likely to be at the forefront of the minds of many teachers in England when they reflect on their earnings levels over the next year, especially as basic pay was frozen for most teachers in 2021.

Although since rescinded, the Government's pay freeze policy determined the School Teachers' Review Body's (STRB) headline pay recommendations for 2021. Nevertheless, as we emerge out of a pandemic in which school teachers have played an important role, the current acceleration in prices will present something of a challenge for the STRB, alongside the other issues under consideration.

While pay for most teachers in England did not change at the last review, many of the other factors affecting the profession continue to be influenced by the pandemic and its associated impacts on the economy and labour market. Issues such as pay progression, recruitment, retention and pay relativities with other occupations remain important and much of the recent STRB report was focused on these issues. For example, an analysis of pay levels by age by the STRB showed that, with the exception of those over 60, teachers' median earnings were below those of other professional occupations in each age band, both in London and the rest of England. Moreover, across all age categories, the relative
earnings of teachers have deteriorated over the period from 2012/13, with teachers in the youngest age group (21-30) comparing least favourably.

This ties in with the STRB's finding that leaving rates for those in the early years of their teaching careers are highest of all. For example, it found that for those within the first three years of joining, some 27% leave the profession. As a result, the STRB concluded that teacher retention remains a pressing concern, with the overall leaving rate standing at 9.2% based on the latest data from 2019. Recruitment, by contrast, appears to have improved a little. In 2020/21, overall recruitment to Initial Teacher Training (ITT) increased by 23% on the previous year although several key subjects continued to recruit substantially below the required number of trainees needed. The STRB also reflected on the experience of the 2008 recession which suggested that improved recruitment numbers may be relatively short-lived as the wider economy recovers.

This is the background to our latest research for the NASUWT which follows on from a series of reports going back a number of years. In 2015, our report covered the UK as a whole but in the last few years the research has focused specifically on England. As in previous reports, this latest study presents a detailed picture of how earnings for teachers have varied in relation to those for other professional occupations.

Three years ago, the study included a change in the period under focus compared to previous reports, examining the years since 2007 rather than 1998. One reason for the change was that the economic and working environments had altered markedly since 1998, so a 20-year period of comparison was considered no longer such a useful barometer of change. In particular, we wanted to examine the period just before the economic crisis that began in 2008, as well as the period since then. Additionally, since 1998, a few of the job categories defined by the Office for National Statistics (ONS) have undergone slight changes which have implications for some cross-year comparisons over the longer period.

This year, therefore, we continue to focus on a shorter timeframe from 2007 up to the latest year for which figures are available – 2021. The latest report examines pay data drawn from the ONS Annual Survey of Hours and Earnings (ASHE) for school teachers and a basket of selected comparator professional occupations at three points over the 15-year period from 2007 to 2021. The first year, 2007, marks the year before the onset of the economic crisis, in 2008. We next focus on 2014 as this is the midpoint of the period to date while 2021 is of obvious interest as it is the latest year for which data is available. More specifically, the report focuses on basic and gross weekly full-time earnings in England from ASHE for 11 non-teaching occupations. This allows an examination of how their

earnings compare to those for school teachers – both secondary teachers and those in primary and nursery schools – over the same period.

The 11 professional occupations used for comparisons are:

- Chemical scientists
- Biological scientists and biochemists
- Physical scientists
- Engineering professionals
- Information technology and telecommunications professionals
- Health professionals
- Pharmacists
- Legal professionals
- Chartered and certified accountants
- Management consultants and business analysts
- Chartered surveyors.

Last year, we added the information technology and telecommunications professionals to the non-teaching comparator group because this type of work has grown significantly in recent years. As a result, it is now a major area of employment for graduates in the labour market with the area's prominence having increased further as a result of the pandemic. In particular, the health emergency has accelerated the existing trend for online operations to become more important for organisations of all sorts, including schools.

While the main focus of the report is on comparisons of actual earnings, we also examine developments in teachers' pay in England in the wider context of changes in the graduate labour market in the UK as a whole. In particular, the report outlines how the salaries of teachers in England in the early stages of their careers compare with pay levels found in other major graduate professions. This analysis uses information collected by the latest IDR pay and progression for graduate survey. The survey collects a range of data from major UK graduate recruiters including graduate starting salaries, and details of salary progression for graduates three and five years after initial hire. We have also used other sources of data on graduate salaries.

1.2. A number of caveats…

As with our previous reports, due to the nature and composition of ASHE data, a number of caveats need to be highlighted. While the ASHE survey is an invaluable source of occupational pay data for the UK, it does have a number of limitations which need to be borne in mind. In particular, there are sample size limitations in some years for certain occupations meaning variations in pay levels across years can appear quite significant. Two in particular stand out – chemical and physical scientists – because the number of these roles is relatively low in the ASHE sample for England. While median and average data is shown for both jobs in every year of the analysis, the sample size limitations are reflected by the fact that quartile and decile figures are not present in some years. More broadly, some of the other professions were excluded from our analysis of deciles for the same reason.

A further consideration worth noting is that changes to some of the job definitions were made in 2010. This was part of the ONS' regular review process which recognises that jobs are not static categories but can change over time. There have been numerous changes over the years and in 2010 the ONS tightened the definitions for managerial occupations and ensured recognition of relatively new areas of work such as call centres. Moreover, in 2010, the ONS also created a new 3-digit 'health professionals' subgroup which excluded general medical practitioners (GPs). Prior to this the 2-digit major group named 'health professionals' included both GPs and other health professionals. As a result of this change, all the earnings figures for the aggregate health professional group decreased between 2010 and 2011.

The final caveat is that while the job groups examined have been chosen specifically because they are well-defined professions, because of the changing sample sizes and shifting job definitions all the cross-year comparisons are unmatched and need to be treated with the appropriate degree of caution.

1.3. Structure of the report

In this chapter we provide an overview of the report as well as summarising the findings before reflecting on some of the conclusions that can be drawn. Chapter 2 provides a brief context for the research, highlighting the STRB's main findings as well as drawing on other statistics, while in Chapter 3 we look more closely at how annual pay awards for school teachers in England have compared with whole-economy pay reviews since 2007.

Chapter 4 provides an overview of the graduate labour market in England and analyses results from the IDR 2021 graduate recruitment and salary survey and reviews how salaries for graduates compare with those for school teachers at various stages of their careers.

Chapter 5 focuses specifically on the ASHE analysis and reviews the median and average earnings differentials between school teachers and other comparator graduate professions for three of the 15 years – 2007, 2014 and 2021 – to establish earnings trends at the start, middle and end of the review period. In recent years, where the data is available we have conducted an extended analysis focusing on lower and upper earnings quartiles as well deciles for all the professions. This is important because it helps determine how differentials vary at the lower and upper ends of the pay ranges for each of the professions we examine and we have carried out this analysis again this year.

Appendices 1 to 8 provide full details of median and average actual full-time earnings for all of the occupations over the 15-year period. Our methodology in using ASHE for this research is shown in Appendix 9.

1.4. Recent pay deals

Teachers' pay rises mostly lagged behind inflation for the first decade or so of our analysis period, but 2018 represented an improvement, a development that was broadly maintained in 2019 and 2020. The following year, however, saw pay paused under a short-lived Government pay freeze for many, though not all, public servants.

Comparison of teachers' pay rises with those elsewhere shows that initially, teachers' recommended uplifts were behind those of other groups, in 2007 and 2008. The following two years signalled a rebound as private sector pay rises were curtailed by the recession while teachers' pay was protected by a long-term deal agreed in 2008. However, over the period between 2011 and 2018, increases for teachers in England mostly trailed those received by other occupational groups. In 2011 and 2012, for example, the teaching profession was subject to the two-year public sector pay freeze and since then schools have mostly had to work within a policy of tight restraint. Up to 2017, the limit was for increases of just 1%. In 2017, the cap was raised a little with a 2% rise for teachers on the main range (though teachers on the upper range only received 1%).

In 2018, pay awards were differentiated with real-terms increases for the 43% of teachers on the main pay range who received 3.5% but below-inflation rises of 1.5% and 2% for those on the leadership and upper pay ranges. In 2019, a 2.75% increase applied to all pay and allowance ranges in England from September of that year.

In September 2020, the review led to increases to pay scales ranging from 2.75% to 5.5% with the higher rise focused on lower-paid teachers, notably the starting rate. The 5.5% increase to entry-level rates was intended to be the first stage of a plan to ensure that all teachers earned above £30,000 by 2022/23 but this target now looks harder to achieve following the pay freeze that took place in 2021. As mentioned earlier, the overall effect of the 2020 review was to increase the pay bill by 3.1%.

In 2021, salaries were paused for most teachers in England. An exception was made for around 6,000 mostly unqualified teachers, with full-time equivalent basic earnings of less than £24,000 (nationally, with higher limits for London and fringe areas) who received a consolidated award of £250.

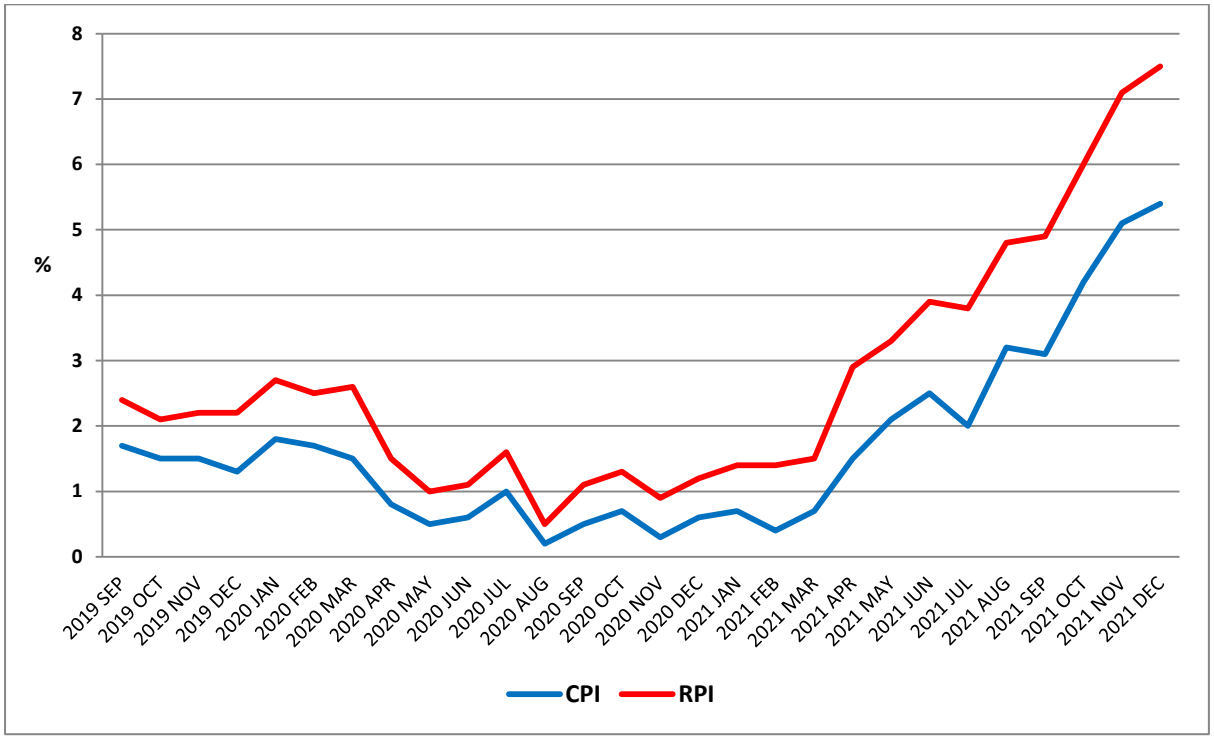
Up until 2014, the impact of low or no pay rises may have been mitigated to some extent for eligible staff by automatic salary progression increases. However, since then schools in England have had discretion over how and whether to award pay progression increases to individual teachers unless they are at the bottom of the salary range and so, in a significant departure from the previous pay system, some teachers in have not received progression rises in some years.

A new era of higher inflation?

A new dimension that has emerged this year, that could have an impact on the future pay awards of teachers in England, has been the acceleration in inflation. The trend in the last couple of years is illustrated in Figure 1. It also shows that the latest RPI and CPI figures, for the year to December 2021, stood at 7.5% and 5.4% respectively, the highest levels in nearly 30 years. These rises have arisen largely as a result of pandemic-related supply chain shortages alongside higher energy and oil prices.

How long these high levels of inflation will endure is currently unclear with most forecasters predicting that they will not significantly decline until autumn 2022. At the same time, some projections consider that inflation could persist for longer, mainly due to the surge of the Omicron variant of coronavirus and its associated effects. Either way, current high levels of price rises are likely to be a factor in the review body's deliberations, though not the only factor.

Figure 1: UK CPI and RPI September 2019 to date



Source: ONS

1.5. Pay rankings

In the past, we have reported on the views of teachers in England based on NASUWT membership surveys and these have shown that large majorities of teachers were either seriously considering leaving their jobs or quitting the profession altogether. The last such survey was conducted in 2019 and, due to the pandemic, more up-to-date research is not available. As a result, it is difficult to determine whether these views have become further entrenched or softened to some extent.

Notwithstanding the lack of survey evidence, the last two years have seen significant changes in the teaching environment with teachers having to adapt to new ways of working. Given that many of the factors underpinning teachers' negative perceptions of the profession have not altered and that some, such as workload, may even have deteriorated, we might assume that attitudes today may be similar. From a pay perspective, the 2019 NASUWT survey showed that many teachers were dissatisfied with their salary levels and while the September 2020 above-inflation increases may have appeased some, the recent pay freeze will probably have disappointed many given the contribution teachers have made during the pandemic.

To understand the actual position of teachers' pay relative to those of the 11 non-teaching professions in our comparator group it is important to look at the latest evidence from official data. Using ASHE data it is possible to compare the median and average gross earnings of teachers with

those of the 11 other graduate professions. Overall, our analyses show that teachers' perceptions of comparatively low pay levels are supported in respect of earnings relativities for primary and nursery teachers, and partially so for their secondary school counterparts.

Table 1 below, for example, illustrates that when measured by **median** gross earnings the two teaching groups were ranked at the middle (secondary teachers) and bottom (primary teachers) of the pay comparison table in 2007. The secondary teacher ranking fell to tenth position in 2014 before recovering to ninth position in the latest comparison. By contrast, primary and nursery teachers were placed bottom in 2007 and twelfth in both 2014 and 2021.

Table 1: Ranking of median gross earnings levels of 13 graduate professions in England 2007, 2014 and 2021

Group	2007 rank	2014 rank	2021 rank
Secondary education teachers	7	10	9
Primary and nursery education teachers	13	12	12

Source: ASHE

Examining different statistics can produce quite a different picture as illustrated by Table 2 below which presents the equivalent rankings relating to **average** gross earnings. Measured in this way, the teachers' rankings tended to be lower in most cases. In 2021, primary and nursery teachers fell to the bottom of the ranking while the position of secondary teachers improved slightly to eighth place (although the relevant teaching figure was less than £5 per week higher than the corresponding amounts for the three professions in ninth to eleventh positions).

As well as teachers, some other professions also show comparatively low average earnings. Most notable among this group were chemical scientists and chartered surveyors, both ranked within the bottom four positions for both the median and average gross earnings analysis.

Differences between the median and average figures occur because medians, since they register the middle value within a distribution, tend to measure 'typical' earnings. In contrast, averages factor in the whole distribution to a greater extent and so are more strongly affected by very high or low values.

Table 2: Ranking of average gross earnings levels of 13 graduate professions in England 2007 to 2021

Group	**2007 rank**	**2014 rank**	**2021 rank**

Secondary education teachers	10	10	8
Primary and nursery education teachers	13	13	13

Source: ASHE

For most professional and managerial occupations, average pay figures usually exceed medians because these groups often contain a significant proportion of senior employees with higher pay levels and greater access to different types of variable pay. In the past, the distribution of teachers' pay has not followed this pattern as in some years medians have actually been larger than averages. This year, though, both of the teaching groups' average gross earnings figures were higher than the equivalent median levels. Despite this, the differences were significantly smaller than those for almost every one of the non-teaching professions.

For example, the secondary teacher 2021 average gross earnings figure was only 0.8% greater than the corresponding median while the equivalent differential for primary and nursery school teachers was just 1.5%. By contrast, the average-median differentials for ten of the other 11 professions ranged from 4.4% for engineers to 24.9% for legal professionals. The only exception was the pharmacist group where the average was 2.9% lower than the corresponding median. Despite this, the average of all the differences in median and average gross earnings for each of the 11 non-teaching professions was 9.2%, significantly more than either of the equivalent teaching figures.

1.6. Magnitude of pay gaps

Despite these differences, it is somewhat of a surprise that the relative rankings of teachers' pay differs very little when based on median gross earnings as opposed to the corresponding average statistics in the tables above. What these rankings do not show, however, is the magnitude of gaps currently existing between the earnings of teachers and those of other professions. Figure 2 below supplements the rankings by contrasting the earnings figures for each of the comparator groups with those of the two teacher groups, making it possible to assess the extent of the differentials that exist. As it demonstrates, some are quite significant.

One of the notable aspects of the graph below is that both legal and health professionals' average gross earnings far exceed those for the other groups. In 2021, these professions were followed by two others – information technology professionals and management consultants – which also featured near the top end of the earnings table in 2007 and 2014. In 2021, the top four professions were followed by chartered accountants, engineers and physical scientists with secondary teachers lying in eighth position. As the graph below also demonstrates, in 2021, the average figures for four

professions stood at around £800 per week. The highest of these, at £803.80, related to secondary teachers while the lowest, at just £3.20 per week less, was for pharmacists with average gross earnings of at £800.60. Some way behind these professions were chemical scientists with primary and nursery teachers propping up the average gross earnings table in 2021.

Figure 2: Comparison of average gross earnings of all comparator graduate professions including school teachers in England: 2007, 2014 and 2021

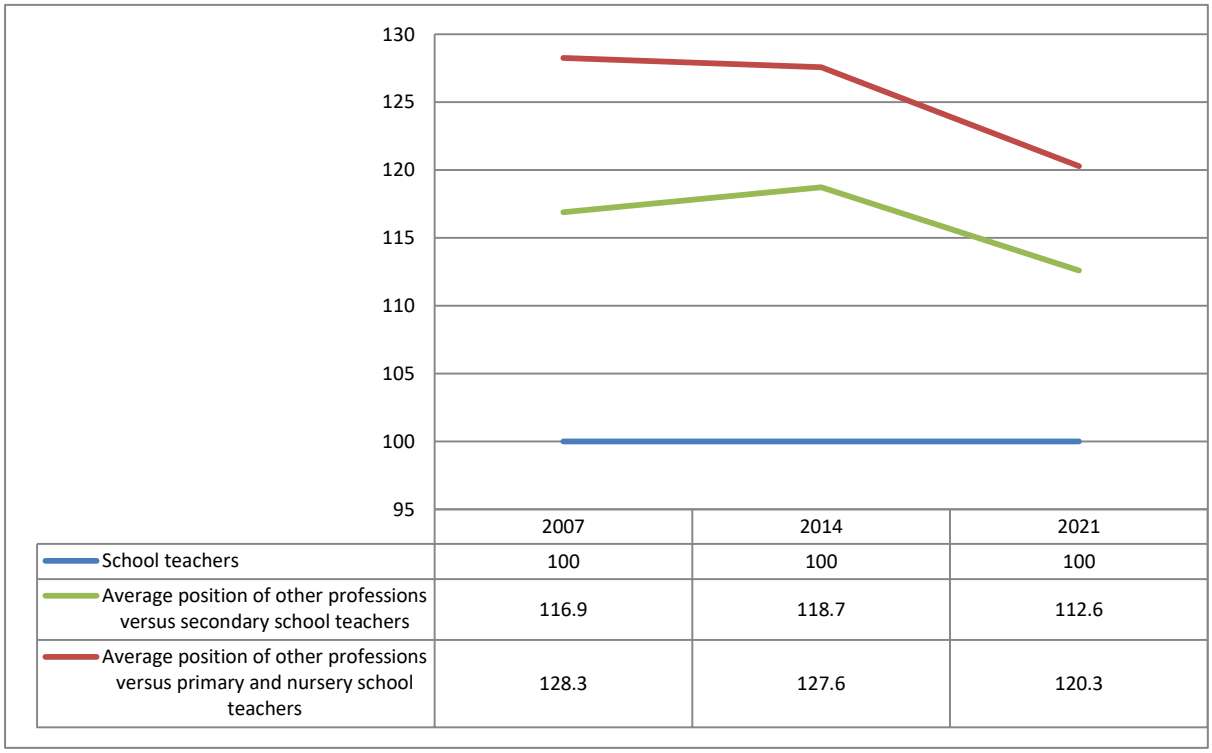
Source: ASHE

1.7. Teachers' earnings persistently lag behind

As in previous years, we have again used another method by which to observe the differences in earnings between the various professions. In Figure 3 below, we have aggregated the earnings data for non-teaching professions in order to compare this joint figure with the earnings for each of the teaching groups. The results of this approach are presented on an indexed basis, using school teachers' gross earnings as the base (=100) for each year.

As we found in previous years, the results show very significant differences between earnings for both teaching groups and those for the combined professions group. In 2021, for example, average gross earnings for all comparator professions were 12.6% above those for secondary school teachers and 20.3% ahead of average earnings for primary school teachers. Over the whole period, the differentials have narrowed somewhat although it is clear that the gaps have remained significant for both teaching groups.

Figure 3: Indexed average gross earnings lead of all comparator graduate professions over school teachers: 2007, 2014 and 2021



	2007	2014	2021
School teachers	100	100	100
Average position of other professions versus secondary school teachers	116.9	118.7	112.6
Average position of other professions versus primary and nursery school teachers	128.3	127.6	120.3

Source: ASHE

This type of analysis has its weaknesses, however, because combining all the earnings data for the other occupations into one aggregate figure risks the resulting amount being heavily influenced by

particularly high or low pay levels. For example, legal and health professionals stand out as groups that earn significantly more than most other professional occupations and are likely to present upward pressure on the combined figure.

Table 3 below addresses this by presenting the individual pay differentials between the two teaching groups and each of the other graduate professions in 2021, illustrating that median and average gross weekly earnings for teachers in England trailed those for the majority of the other graduate professions.

To provide greater clarity, the table is colour-coded with differentials shaded blue where teachers' earnings are lower than those for the other professions and red where they are higher. It is clear that the table is predominantly blue – over 80% – and also that, in many cases, the differentials are significant, especially when the average levels are considered.

Looking at both median and average amounts, four professions showed earnings figures below at least one of the teaching groups. These were chartered surveyors, chemical scientists, pharmacists and biological scientists. Analysis of averages shows that gross earnings figures for primary and nursery teachers trailed those for every non-teaching profession. An examination of the corresponding secondary school teacher amount illustrated that only four non-teaching professions had average gross earnings. These included biological scientists, chartered surveyors, pharmacists and chemical scientists where the non-teaching amounts were ahead of those of teachers by between zero and 3.8%. By contrast, where non-teaching average amounts were higher, the leads tended to be much greater with differentials over the secondary teacher amounts ranging from 5% for physical scientists to 56.3% for legal professionals. When compared to the corresponding primary and nursery figure, average gross earnings for the non-teaching professions were all greater with leads of between 2.8% for chemical scientists and 67% for the legal group.

Table 3: Median and average gross weekly earnings differentials of 11 graduate professions versus teachers in England 2021

Group	Average gross weekly pay £pw	Diff. with secondary teachers	Diff. with primary and nursery teachers	Median gross weekly pay £pw	Diff. with secondary teachers	Diff. with primary and nursery teachers
Legal professionals	1,256.6	56.3	67.0	1,006.2	26.2	35.7
Health professionals	1,040.8	29.5	38.3	905.1	13.5	22.1
Information technology and telecommunications professionals	955.4	18.9	27.0	893.1	12.0	20.4
Management consultants and business analysts	921.0	14.6	22.4	835.5	4.8	12.7
Chartered and certified accountants	884.5	10.0	17.6	809.3	1.5	9.1
Engineering professionals	874.2	8.8	16.2	837.4	5.0	12.9
Physical scientists	844.3	5.0	12.2	802.6	0.7	8.2
Biological scientists and biochemists	803.7	0.0	6.8	747.5	-6.2	0.8
Chartered surveyors	800.8	-0.4	6.4	756.0	-5.2	2.0
Pharmacists	800.6	-0.4	6.4	824.2	3.4	11.2
Chemical scientists	773.3	-3.8	2.8	688.6	-13.6	-7.1
Secondary education teaching professionals	803.8			797.3		
Primary and nursery education teaching professionals	752.3			741.5		

Source: ASHE

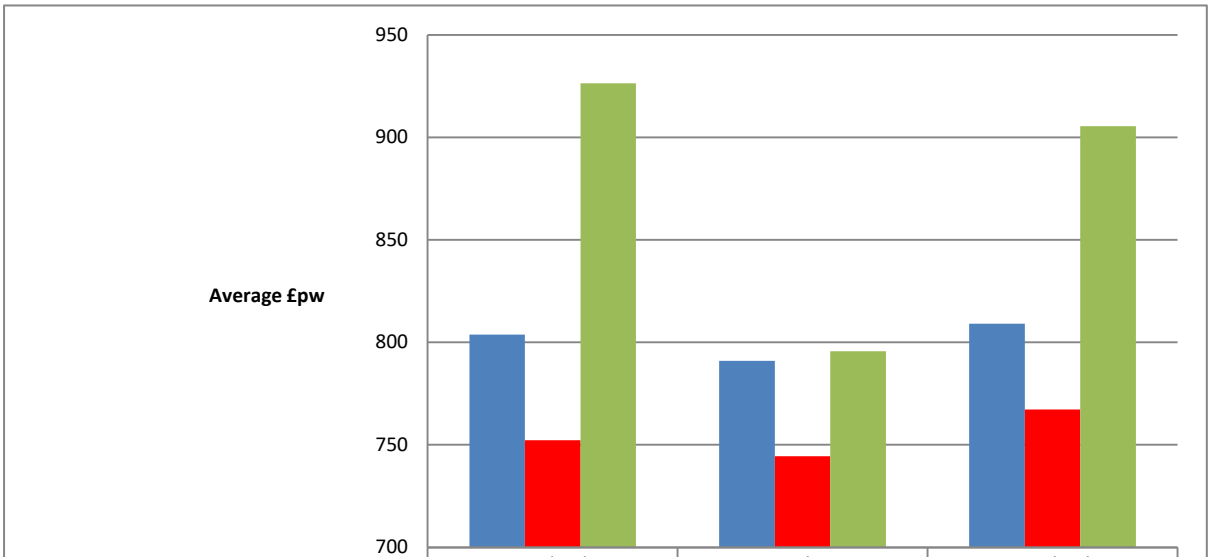
As the table above also shows, the corresponding analysis of median gross earnings was very similar although the differentials tended to be narrower. Where the non-teaching figures were lower than the secondary teaching levels, shortfalls ranged between 5.2% for chartered surveyors and 13.6% for chemical scientists. Chemical scientists were also the only profession that had median gross earnings that were lower than the corresponding primary and nursery teacher level with a 7.1% deficit. Some of the differentials in favour of non-teaching professions were also quite wide with notable leads exhibited by both legal and health professionals.

1.8. England compared to Wales and Scotland

In our previous reports on England we have taken a broader perspective by examining how the average gross earnings of teachers in England, Scotland and Wales compared to those for other

professions in each respective country. Here we do the same, recognising that while the system for setting teachers' pay now differs in each of the three countries, this does not mean that there is no job mobility across the different locations. For some graduates in England, major cities in Scotland and Wales may be easier to reach than major employment hubs in parts of England and so may provide viable career opportunities.

*Figure 4: Average gross earnings of teachers and combined selection of professional groups in the UK 2021**



	England	Wales	Scotland
Secondary education teaching professionals	803.8	791.0	809.1
Primary and nursery education teaching professionals	752.3	744.5	767.3
Average of non-teaching professions	926.4	795.7	905.5

Source: ASHE

*Non-teaching occupational data are based on the same nine jobs in all countries.

Figure 4 above shows average gross earnings for secondary and primary teachers in each of England, Scotland and Wales in comparison to the average of a group of the same nine non-teaching professions from all three countries – biological scientists, engineering professionals, health professionals, pharmacists, legal professionals, chartered surveyors, IT professionals, chartered accountants and management consultants. Only nine non-teaching occupations are used because data was not available for all 11 groups in both Scotland and Wales in 2021 due to sample size limitations.

As Figure 4 shows, within all three countries, the non-teaching combined figures are higher than the corresponding teaching groups. This is most apparent in England and Scotland whereas in Wales,

the non-teaching combined amount is only slightly higher than the corresponding secondary teaching average. In England, for example, the non-teaching amount was £926.40 per week compared to £803.80 for secondary teachers and £752.30 for their primary and nursery colleagues. In Scotland, there was a similar pattern with the non-teaching amount standing at £905.50 per week, again significantly ahead of the equivalent teaching levels. In Wales, the corresponding non-teaching level of £795.70 is over £100 per week lower than the equivalent figures in England and Scotland which explains why the differentials with both teaching groups in that country were smaller.

Another striking feature of the graph is the degree of variation between the teaching amounts across the three countries. When measured by average gross earnings, English secondary teachers trail those in Scotland, while primary teachers were highest-paid in Scotland again followed by England. The rates in Wales were lowest in the case of both teaching groups.

It is difficult to precisely explain these differences because each workforce will have variations in its age or seniority profiles with older teachers, in particular, likely to be earning larger sums. In the past, these types of factors could explain most of the variations but now that the three countries have adopted different pay systems and scales, a greater degree of divergence may become apparent.

Currently, a lot of attention has been paid to starting rates, particularly in England and Wales, while Scotland's Chartered Teacher scales take classroom teachers up to much higher salaries without taking on management responsibilities, as does 'Leading Practitioner' status in England.

Because of the increasing divergence in pay systems, different workforce profiles in terms of age and seniority and distinct approaches to progression, cross-country comparisons of this sort are likely to take on greater importance in the future and as such will require monitoring.

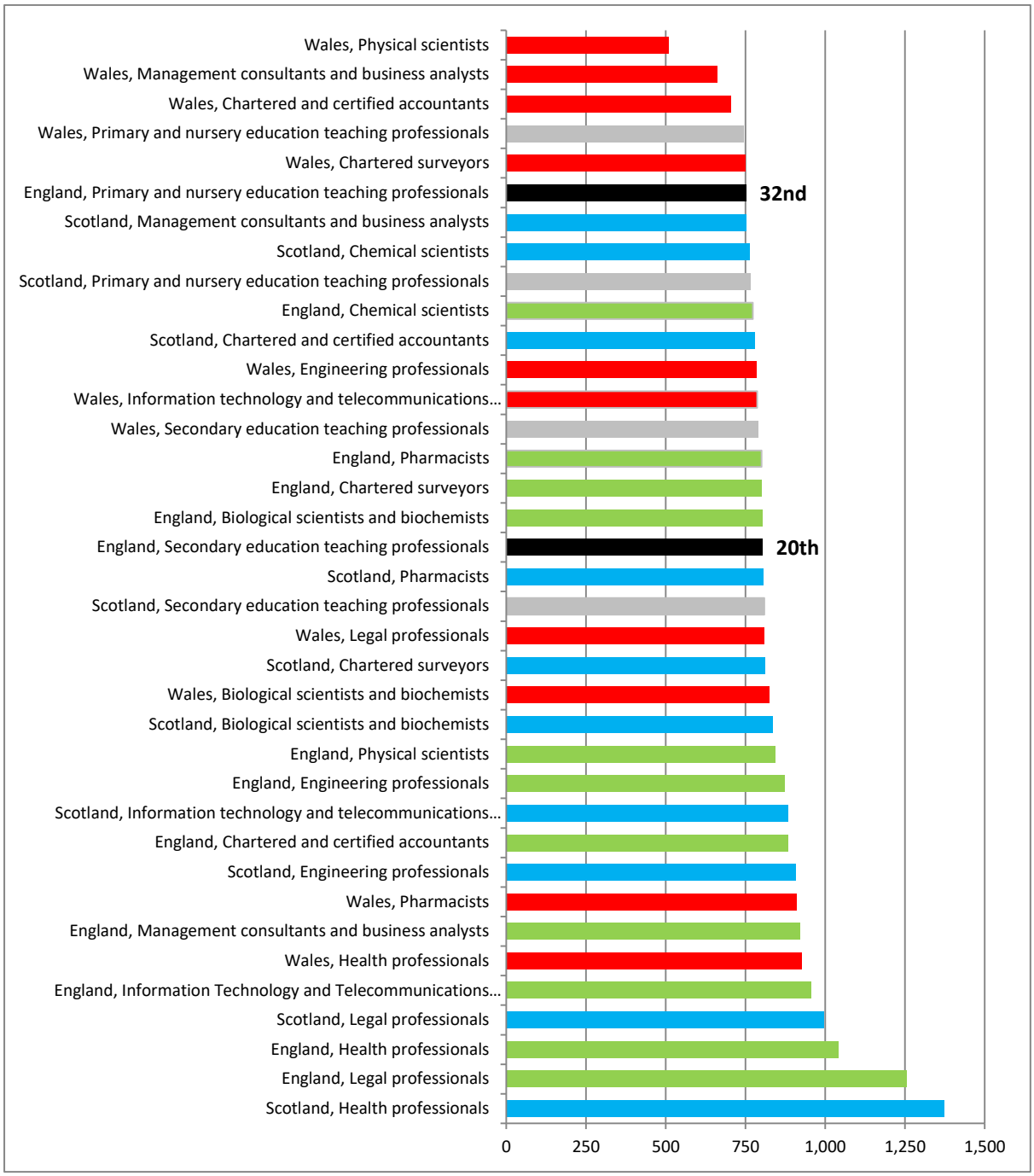
1.9. All teaching and non-teaching professions in Wales, England and Scotland

While the divergence in pay scales is something that is likely to have a greater impact in the future, opportunities within teaching and other professions outside of England are already available to new and experienced teachers alike.

As a result, as in previous years we decided to make a more detailed examination of earnings data for all the featured professions in all the three countries. More specifically, where data is available, the comparison involves an examination of earnings for all of the professions considered in the report in each of England, Scotland and Wales, plus the two teaching groups in each country.

A comprehensive look at the results is presented in Figure 5 below which shows the average gross earnings for all 37 professions across England, Scotland and Wales including the two teaching groups. Figures for secondary and primary teachers in England are shaded in black (together with their ranking) so that they stand out while teachers in Scotland and Wales are represented by grey bars. All other non-teaching jobs are colour-coded by country with jobs in Wales shown in red, those in Scotland in blue and occupations in England in green.

Figure 5: Average gross earnings of teachers and selection of professional groups in the UK 2021



Source: ASHE

*Figures based on 37 occupational groups in Wales, England and Scotland.

One of the first trends apparent from the chart is that very few of the non-teaching professions in England are located at the bottom end of the pay table. In fact, only four feature in the bottom half of the table with the other eight in the top half. In contrast, all the teaching groups, with the exception of secondary teachers in Scotland, were positioned at mid-level or below.

In terms of England specifically, the secondary school figure was positioned 20th out of 37 while the primary and nursery amount was in 32nd position, placed higher only than primary and nursery teachers and four other non-teaching jobs, all based in the lowest-paying country, Wales.

As in previous years, the focus of this report is to examine the relative competitiveness of earnings in the teaching profession and other non-teaching jobs within England. At the same time, it is difficult to ignore the fact that the graph highlights the many other vocational paths open to English graduates. One might be a career in teaching in one of the other countries in Britain while another could be a career outside the teaching profession, in or outside England. For someone making a career choice based solely on pay, the data in Figure 5 demonstrates that many of the other professions provide realistic opportunities for higher remuneration levels outside of teaching.

1.10. Analysis of quartiles

Much of our analysis is focused on median and average amounts which are useful but these two statistics alone cannot show us the full extent or shape of the earnings distributions for each profession. In contrast, by examining quartile and decile levels of earnings, it is possible to gain an insight into the extent of disparities at the lower and higher ends of the pay distribution. This is particularly important because many in the teaching profession in England argue that their actual pay, while not being particularly competitive at median and average levels, falls further behind when more senior roles at higher salary levels are considered.

This is particularly pertinent given that last year the STRB reported indications of a growing challenge in retaining experienced classroom teachers and those in leadership roles. This year, many of those providing evidence added that they were concerned that many experienced teachers and school leaders who remained in post during the pandemic may take early retirement following two difficult years and the recent pay freeze. This perhaps led the STRB to state in its latest report that it would support a review of the existing leadership pay framework, including the factors determining pay for school leaders, the issue of pay differentials between the teacher and leadership pay ranges, and the leadership roles covered by the pay structure.

Thankfully, where sample sizes permit, the ONS provides various other statistics that allow greater insight into the earnings of teachers and other professionals at the lower and higher ends of their respective earnings distributions. Over the last few years, we have explored the pay differentials found towards the top and bottom ends of the earnings scale by extending our analysis to include

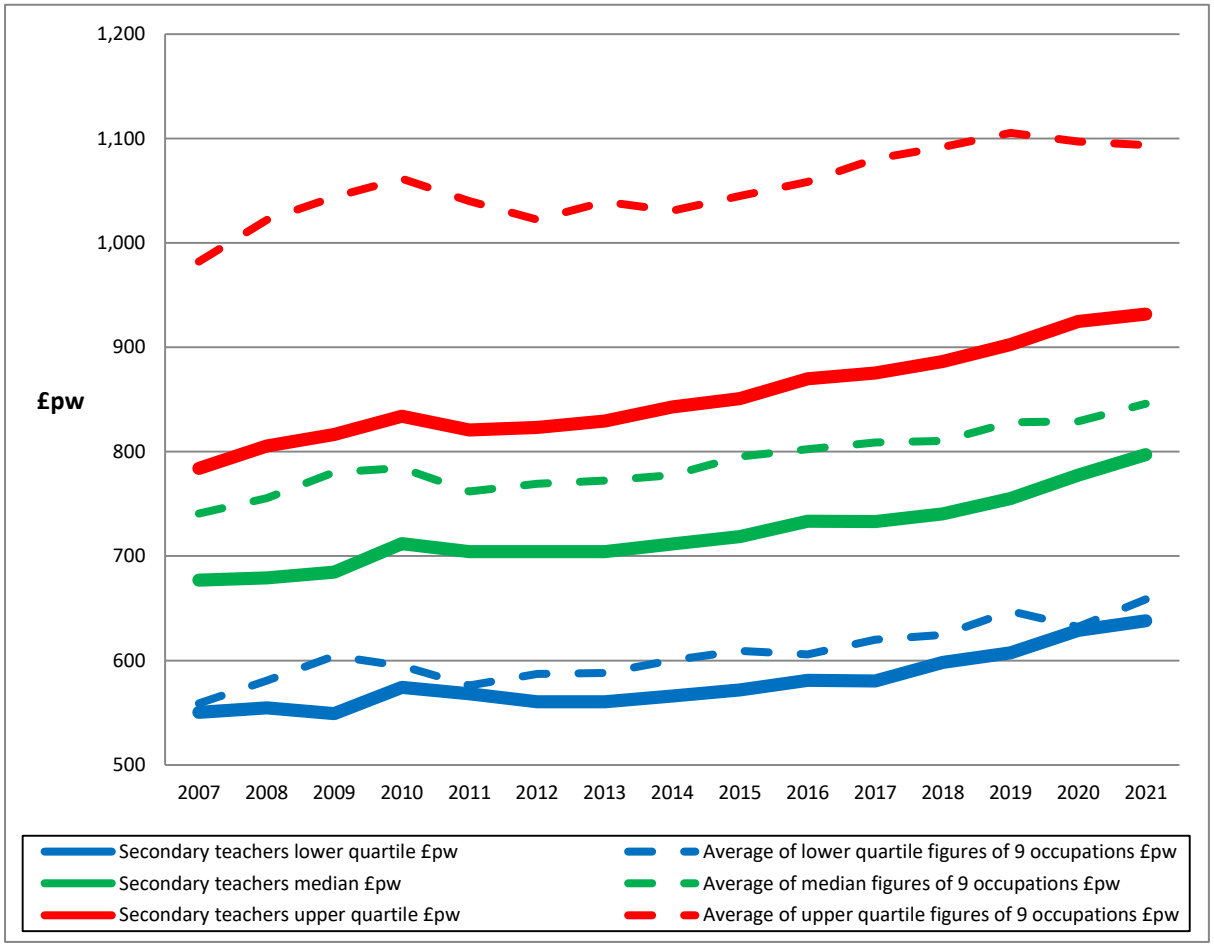
lower and upper quartile as well as decile gross earnings levels. This year, we have done the same, with a summary shown here and a full analysis presented in Chapter 5.

Figure 6 below demonstrates the aggregate picture by plotting the difference between the lower quartile, median and upper quartile gross earnings levels for secondary school teachers from 2007 to 2021 against the combined aggregate equivalent figures for the nine non-teaching comparators for which quartile data was available in every year. The combined figures are calculated by taking the averages of each profession's lower quartile, median and upper quartile which, in the absence of data on the whole distribution for each job, provide a broad indication of the trends towards the top and bottom of the combined earnings distributions over the period.

As we found in previous years, the graph shows that all three figures – lower quartile, median and upper quartile – were greater for the combined non-teaching comparator group than for secondary school teachers throughout the period. More notable, perhaps, is that the gaps between the teacher and combined group figures widen as we travel higher up the distribution.

For example, in 2021 the non-teaching lower quartile figure, at £658.50 per week, was only 3.2% higher than the equivalent secondary teaching figure of £637.90. At the median, the non-teaching combined figure was £846.00 while the equivalent for teaching was £797.30. At the upper quartile, the difference was around £160 per week with the figures standing at £1,093.70 and £931.80 respectively. These represented gaps in favour of the non-teaching professions of 6.1% and 17.4%.

Figure 6: Comparison of lower quartile, median and upper quartiles gross earnings per week for secondary school teachers and nine non-teaching combined comparator group 2007 to 2021



Source: ASHE

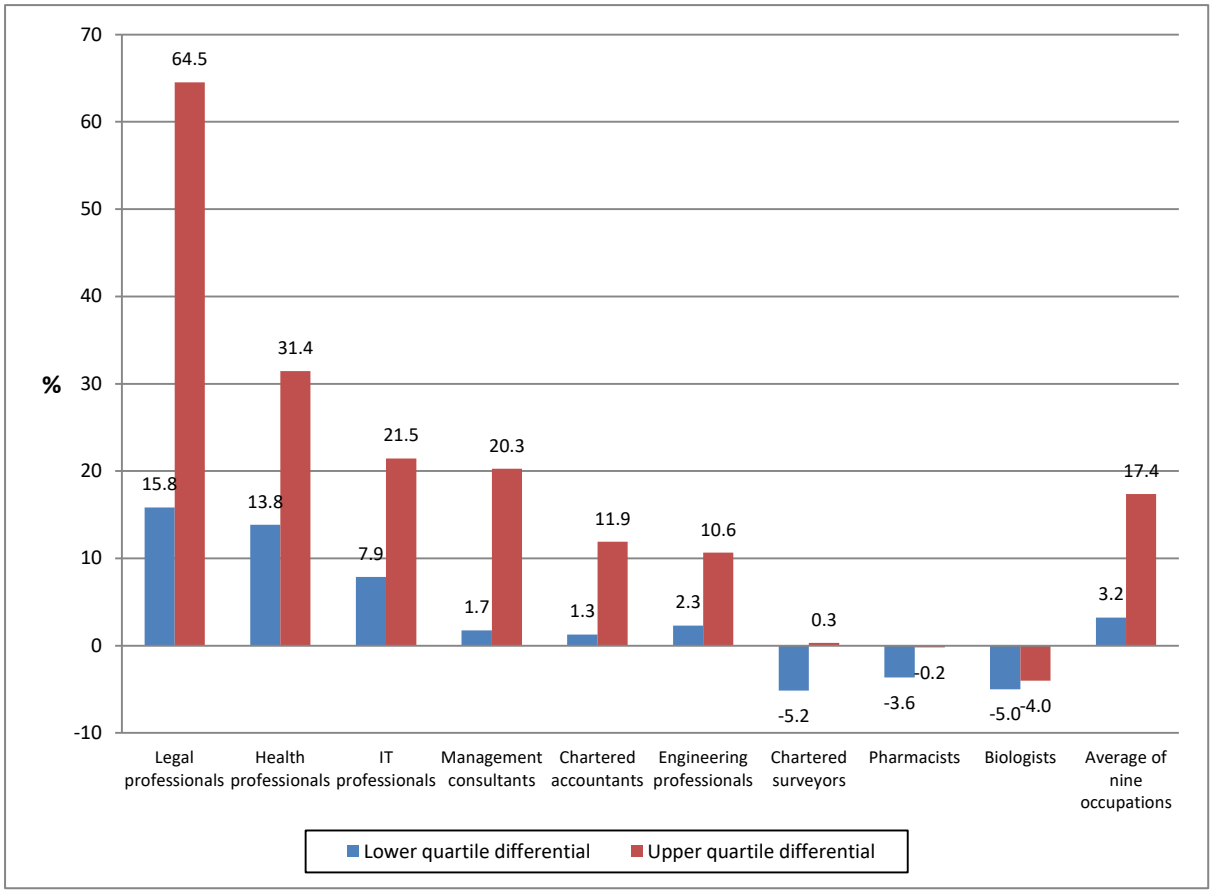
As in some of our previous indexed analyses, using a combined occupational group in this way carries the risk of the figures being overly influenced by those for very high- or very low-paid professions so in Chapter 5 we also present a similar quartile analysis for a number of individual professions. This provides a breakdown of the lower and upper quartiles for the lowest-earning profession for which data is available for the whole period, chartered surveyors, as well as a mid-level one, engineers, and the highest-paid group, legal professionals.

This analysis shows that secondary school teachers' earnings were slightly greater than the amounts received by surveyors at lower quartile and median levels, whereas the two were broadly comparable at upper quartile levels. Once we start to move up the pay rankings, however, teachers' pay levels start to fall behind with lower quartile amounts for engineering professionals leading those of secondary teachers by a small amount. At the median, the gap widens further before the non-teaching group shows a significant lead at the upper quartile position.

Once the earnings of the highest-paid group, legal professionals, are examined the gaps widen significantly with substantial differentials apparent at all three levels that widen further with increasing seniority. For example, at the upper quartile level, in 2021, the gap in upper quartile gross earnings stood at over £600 per week with the legal figure showing at £1,533.20 per week compared to a secondary school amount of £931.80.

A full breakdown of the lower and upper quartile gross earnings figures for all the other non-teaching jobs in 2021 shows secondary teachers' earnings generally trailing behind, especially when upper quartiles were considered as shown below in Figure 7

Figure 7: Comparison of lower and upper quartile gross earnings for nine professions with secondary school teachers 2021



Source: ASHE

More generally, the graph plots the lower and upper quartile differentials for each of the nine non-teaching professions for which data was available against the equivalent secondary teacher figures in 2021. It shows that the secondary school teacher lower quartile figure was smaller than the equivalent figures for six of the comparator professions and higher in the case of three. Where non-

teaching lower quartiles were higher they ranged between 2.3% for engineering professionals and 15.8% for legal professionals. In contrast, the secondary teacher lower quartile was higher than the equivalent statistics for chartered surveyors, pharmacists and biologists with shortfalls for these non-teaching groups ranging from 3.6% to 5.2%.

The graph also demonstrates that the pattern for upper quartile differentials was slightly different, with the teaching group trailing seven of the nine non-teaching professions, in some cases by very large amounts. The two professions showing smaller upper quartile figures than secondary teachers were pharmacists and biologists although the differentials here were no more than 4%. By contrast, when the upper quartile gross earnings figures for the other professions were considered, the differentials were mostly larger, stretching from just 0.3% for chartered surveyors up to 64.5% for legal professionals. In between these two extremes, the leads ranged from 10.6% (engineers) to health professionals (31.4%). It is therefore clear that gross earnings for teachers at the upper end of the earnings distribution not only trail those for the best-paid professions but also those for most of the other professions too, in most cases by significant amounts. Shortfalls are less marked at lower quartile levels, but teachers still only find themselves no higher than mid-table position in 2021.

1.11 Decile and further analysis

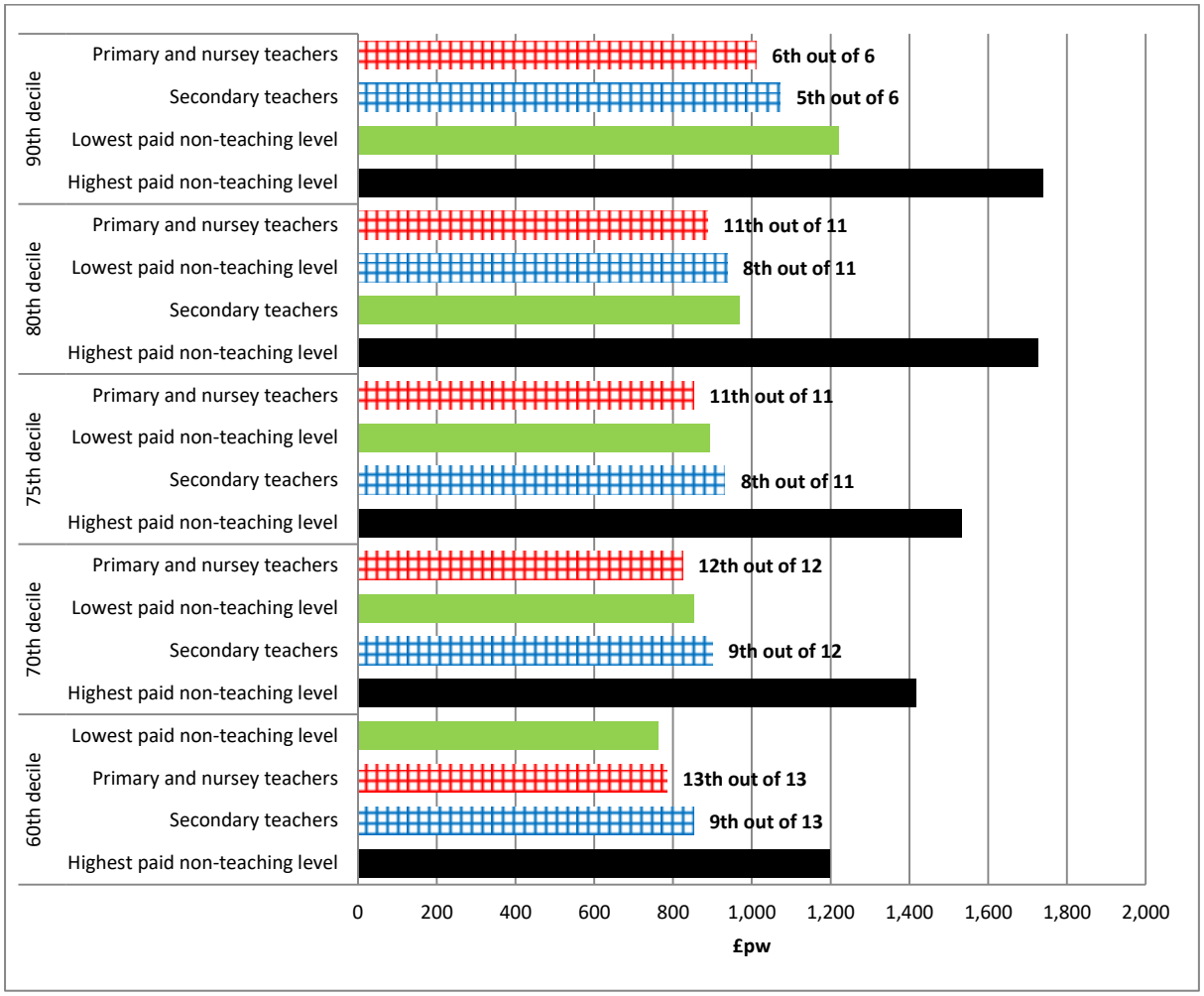
The ASHE survey also includes statistics showing the earnings at different points of the distribution for each professional group. For example, as well as medians, averages and quartiles, it shows earnings for individuals placed at 10% intervals or deciles throughout the whole earnings range. As a result, it is possible to extend the analysis further by examining some of these specific points.

As with the quartile analysis, the full findings are outlined in Chapter 5 but the results are summarised in Figure 8 below. What the table shows are the relative positions of primary and secondary school teachers for all the statistical points above the median in 10 percentage point intervals. This demonstrates that both teaching groups fall predominantly at or near the bottom of the comparator table in each of these intervals. Moreover, a closer look at the top 20% of earners in each profession illustrates that the two teaching groups are the lowest-earning throughout.

These findings have important implications because in recent years, most of the focus of the STRB and its subsequent pay recommendations have been aimed at the lower end of the teachers' pay range and, in particular, new joiners. This emphasis on the lower-paid levels helps explain the smaller differentials at lower quartile levels but with less attention having been paid to the earnings

of higher-paid teaching positions, differentials at upper quartile levels as shown above are significant in most cases. With indications of a growing challenge in retaining experienced classroom teachers and those in leadership roles perhaps more attention also needs to be paid to teachers' pay at higher levels to prevent the situation shown in the analysis above worsening.

Figure 8 Position of both teaching groups when measured by gross earnings at higher pay levels in 2021



Source: ASHE

1.12. Key findings

School teachers' earnings

- Using data from the ONS' annual ASHE survey, earnings for teachers in England compare unfavourably with those for other graduate occupations especially when comparisons are made according to gross (rather than merely basic) earnings.
- While gaps between the earnings of other graduate professions are significant at average and median levels, the differentials are even wider at upper quartile and decile levels.
- At lower positions on the pay ranges, when lower decile figures were examined, secondary and primary and nursery teachers were better placed featuring in third and fifth position when ranked against nine other non-teaching professions.
- When measured by median basic earnings, in 2021, primary school teachers were ranked tenth out of thirteen comparable graduate professions while secondary teachers were positioned eighth.
- In terms of average basic earnings, the relative positions worsened for primary and nursery teachers falling to thirteenth while secondary teachers remained in eighth position.
- Using a different measure of pay, gross earnings, which includes additional pay over and above basic salary, illustrated that teachers were lower down the rankings positioned ninth and twelfth based on median values in 2021.
- Teachers were also more poorly placed when averages were used in 2021, with secondary teachers positioned in eighth place while primary and nursery teachers' average gross earnings were lowest in thirteenth position.
- Average gross earnings differentials for many of the non-teaching groups were substantial with some as large as 56.3% higher than those of secondary teachers and over 65% above the equivalent primary and nursery school figures.
- An analysis of English secondary and primary teacher pay versus the average gross earnings for the full range of 31 non-teaching and teaching professionals in England, Scotland and Wales covered by this research showed that neither of the English teaching groups featured in the top half of the ranking.
- Out of 37 professional occupations, English primary and nursery teachers were placed 32nd while secondary teachers were positioned at 20th.
- Our findings echo one of the findings from the 2021 STRB report, which found that teachers' median earnings from 2019/20 were below those of the other professional occupations both in London and the rest of England across all age groups with the exception of those over 60.

- This research also showed that across all age categories, the relative earnings of teachers have deteriorated over the period from 2012/13, particularly for the Rest of England.
- Much of the STRB research focuses on median earnings levels but our examination of reward levels higher up the earnings distribution for more experienced staff illustrates that teachers fall further back in relative terms when upper quartile and higher level comparisons are made with those in other professions.
- An analysis of comparable figures at the upper end of the pay range at the 70th, 80th and 90th percentiles showed that the primary and nursery teaching group was placed bottom when compared with non-teaching gross earnings levels in each case
- Data was available for 11 occupations at 70th and 80th percentile levels and for these comparisons secondary school gross earnings were placed in ninth and eighth positions respectively.
- Against the 90th percentile levels, six occupations had data and secondary teachers were placed in fifth place, only ahead of their primary and nursery school counterparts.

Teacher retention

- The STRB's 2021 stated that teacher retention remains a pressing concern, with the overall leaving rate standing at 9.2%.
- Rates were highest for teachers in the early years of their careers with some 27% leaving within the first three years of joining.
- The STRB also noted many consultees' fears of a post-COVID-19 pandemic exodus from the profession, in particular of experienced teachers and school leaders, which will have serious implications for future succession planning.

Teacher recruitment

- Recruitment, by contrast, appears to have improved a little with numbers enrolling on Initial Teacher Training (ITT) increasing by 23% in 2020/21 compared to the previous year.
- Despite this, the STRB suggested that improved recruitment numbers may be relatively short-lived as the wider economy recovers after the pandemic.
- In addition, several key subjects continued to recruit substantially below the required number of trainees needed.
- Between 2006 and 2021, the number of primary and nursery teachers increased by just over 13.4% while secondary teacher headcount fell by 3.4%.

Pupil numbers

- Between 2007 and 2021 there are over a half a million more primary and nursery school pupils and over 150,000 more children attending secondary schools.

- In the latest year, the pattern was different, however, with over 50,000 fewer children in primary schools when compared to the previous year while there were over 84,000 more pupils attending secondary schools.
- Looking to the future, the STRB forecasts that the secondary school population is expected to peak in 2024 before gradually dropping until 2030. The nursery and primary school population peaked earlier in 2019 with numbers declining since then and are expected to continue to so over the coming decade.

Pupil-teacher ratios

- The teacher-pupil ratio in primary and nursery schools has increased over the last decade whereas the equivalent statistic in secondary schools remained relatively unchanged over the same period.
- In secondary schools, the number of pupils per teacher in England stood at 16.6 in 2021 while the corresponding proportion in primary and nursery schools was 20.6.
- Put into a wider perspective, corresponding figures based on the latest EU data covering 26 countries stood at 11.9 and 13.5 respectively.

2. Earnings for English school teachers in context

In past years, when we have reflected on the wider context surrounding the teaching profession, we have focused on traditional factors such as recruitment and retention, pupil numbers, supply and demand and pay elsewhere and in other professions. Last year, we mentioned the added complication of the pandemic with the teaching profession significantly affected by the associated disruption which the STRB says has had a profound impact on the operation of schools with teachers and school leaders facing unprecedented challenges. This year, another new factor has emerged with historically high inflation levels that are likely to impact the future trajectory of pay levels in the economy as a whole, including those of teachers. For this reason, as well as examining the areas we always investigate, we take a closer look at the most recent inflation trends and how forecasters predict they are likely to move in the coming months.

A primary source for much of this information (apart from that on inflation) is the School Teachers Review Body (STRB) which, each year, is tasked with looking at all the evidence available before making its pay recommendations to Government. In support of its most recent recommendation, the latest STRB report presented substantial evidence covering pay, recruitment and retention as well as many other factors that affect the teaching profession. As we have reported in previous years, most of the findings presented in the latest July 2021 report concern issues that have persisted for many years.

2.1. Latest pay award and inflation environment

In 2021/22, salaries were frozen for most teachers in England. An exception was made for around 6,000 mostly unqualified teachers with full-time equivalent basic earnings of less than £24,000 (nationally, with higher limits for London and fringe areas) who received a consolidated award of £250. While the policy was short-lived and has since been rescinded, it will mean that the Government's commitment to ensure that the entry-level salary will be £30,000 by 2022/23 as outlined last year will now be harder to achieve.

2.2. STRB summary findings

The latest STRB report was quite different from previous reports because the Government, in its remit letter, was not seeking a recommendation for pay uplifts in 2021/22 for the majority of teachers. This left the STRB with little or no scope for detailed recommendations on pay but it did not prevent it from reflecting on some of the wider issues facing the teaching profession as well as stating that it "firmly believes that a pay pause of more than one year risks a severe negative impact

on the competitive position of the teaching profession." It added that if this did occur, it could jeopardise efforts to attract and retain the high-quality graduates necessary to deliver improved pupil outcomes.

In terms of pay levels, the STRB found that teachers' minimum starting pay has increased by nearly 12% over the past three years. This has meant, the body says, that the gap with other graduate professions' starting salaries has been closed although it added that significant negative gaps remain in several regions. Last year, the Government set a target of £30,000 by 2022/23 for the starting rate in England but it is clear that, following the 2021 pay pause, progress towards this goal will be slower.

Focusing more broadly on the main pay range, the STRB said that, between 2010/11 and 2019/20, teachers' levels had largely maintained their positions relative to the distribution of earnings for those in professional occupations. In contrast, over the same period, it found that the relative position of the upper pay range had deteriorated slightly. Focusing on leadership roles more specifically, the STRB said that it would support a review of the existing leadership pay framework, including the factors determining pay for school leaders, the issue of pay differentials between the teacher and leadership pay ranges, and the leadership roles covered by the pay structure.

This year, the STRB presented data showing the estimated earnings of teachers and those working in other non-teaching professional occupations by broad age bands. Data included all teachers, including leaders and, to maintain reasonable sample sizes, covered two areas, London and the rest of England. For each age group, percentage differentials between estimated teachers' median earnings and those of the comparator group were shown. The results, based on 2019/20 figures, demonstrated that, with the exception of those for over-60's, teachers' median earnings were below those for other professional occupations in each age band, both in London and the rest of England.

Moreover, across all age categories, the relative earnings of teachers have deteriorated over the period from 2012/13, particularly for the rest of England. Teachers in the youngest age group (21-30) compared least favourably against other professional occupations, particularly in London, whilst those in the oldest age group (over 60) compared most favourably. The research also found that the gaps between teachers' earnings and those of the comparator group are greatest in London.

With regards to recruitment, following on from missed teacher recruitment targets for many years, the STRB reported that in 2020/21, overall recruitment to Initial Teacher Training (ITT) increased by 23% on the previous year. It added that this should help to address some pressures on teacher supply with significant over-recruitment of both primary trainees and trainees for some secondary subjects. Despite this, as in previous years, several key subjects continued to recruit substantially below the required number of trainees. These included chemistry, design and technology, mathematics, modern foreign languages and physics.

In respect of retention, based on the latest figures available, the overall leaving rate across the profession improved slightly from 9.6% in 2018 to 9.2% in 2019. The STRB said that the latest data showed a slight improvement in the retention rate of teachers in their initial years of service, following several years of marked increases in the leaving rates among these teachers. But the STRB also reported that the number of resignations across the profession remains high, and particularly so among those early in their careers. For those within three years of joining, for example, based on 2019 data, some 27% leave the profession with the STRB concluding that teacher retention remains a pressing concern.

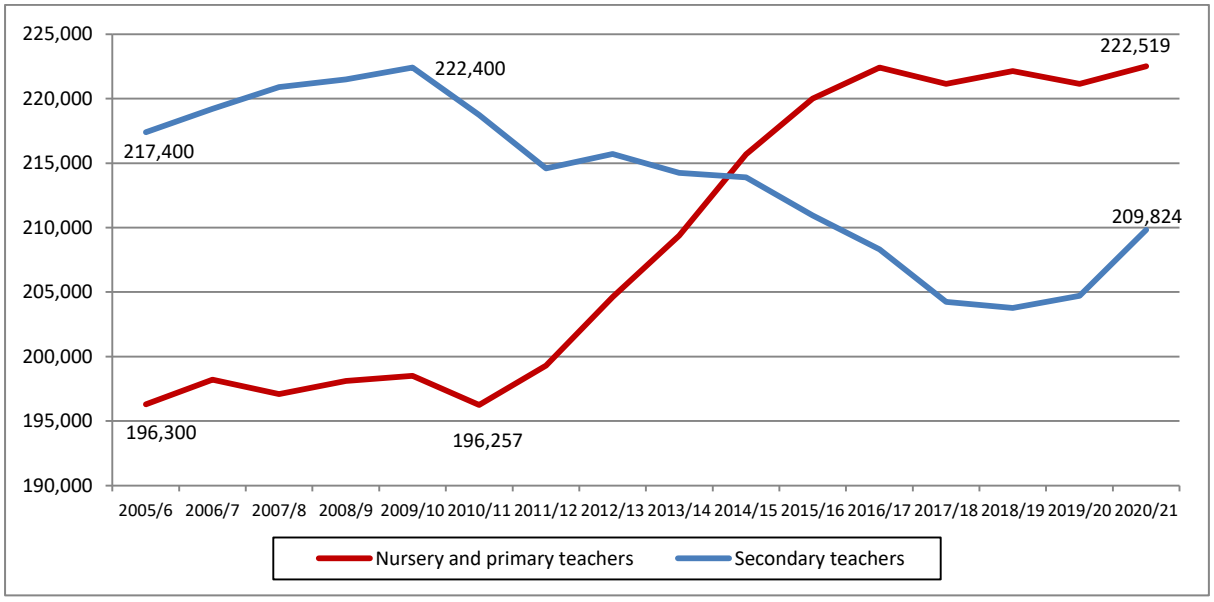
In summary, the STRB reflected on the experience of the 2008 recession which suggested that improved recruitment numbers may be relatively short-lived as the wider economy recovers. It added that the profession's ability to recruit new teachers is inextricably linked to the wider graduate labour market and how competitive teaching as a career is in relation to this wider market, where the speed of recovery remains uncertain.

2.3. Teacher numbers

Figure 9 below presents the latest available information on teachers' numbers based on ONS data. It shows that teacher numbers have fluctuated over the last decade or so with an overall upward trend for primary and nursery teachers and a downward one for secondary school professionals. More specifically, it shows the numbers of full-time equivalent teachers in England between 2005 and 2021, demonstrating that the supply of nursery and primary teachers was steady between 2005 and 2010 before a large expansion of around 26,000 teachers up to 2016/17. Since then, numbers have levelled out at just over 220,000. Overall, the increase over the whole period between 2006 and 2021 illustrates that the number of primary and nursery teachers rose by 13.4%.

The pattern for secondary teacher was almost the complete opposite with a slight rise in numbers between 2005 and 2010 and an overall fall over the next decade. In total, across the whole period the number of full-time equivalent secondary school teachers in England fell from 217,400 in 2006 to 209,824 in 2021, a 3.5% decrease.

Figure 9: Number of full-time equivalent teachers in England 2005 to 2021

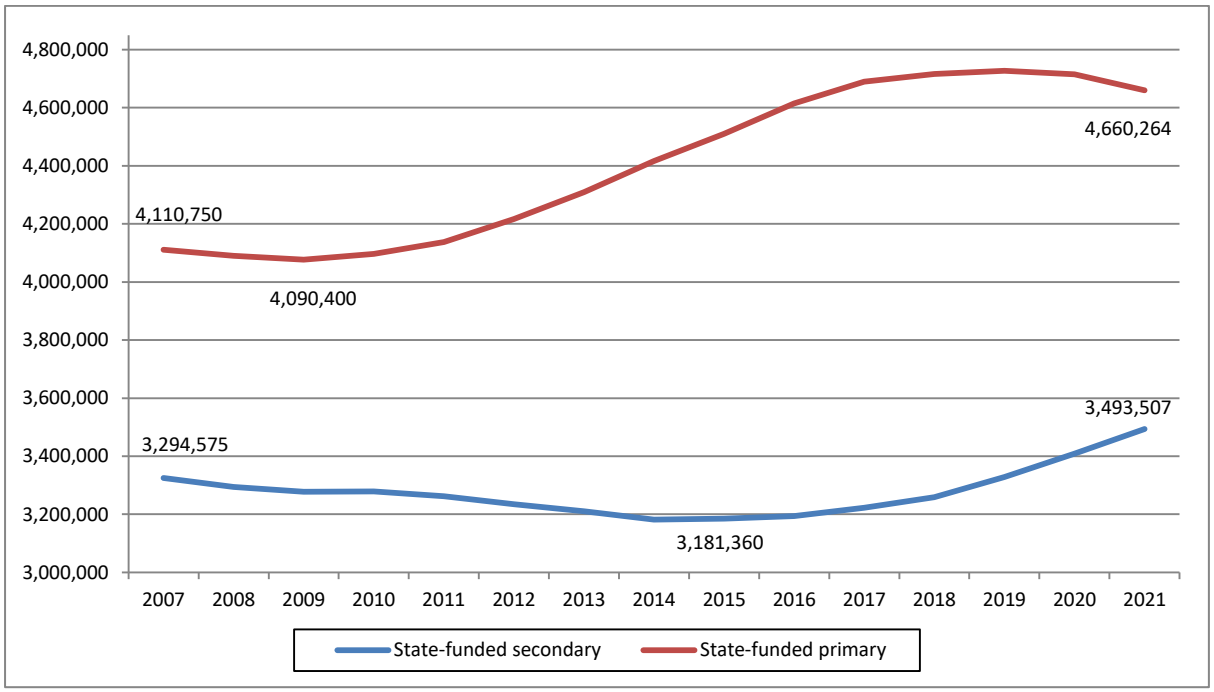


Source: School workforce in England: June 2021, Office for National Statistics

2.4. Pupil numbers

The increase in primary and nursery school teachers presented in Figure 8 above mirrors the trend in pupil numbers in those schools for most of the period as shown in Figure 9 below. In contrast to the trend for secondary teachers, the graph demonstrates that secondary school pupil numbers have been on an upward trend since 2015, while the number of corresponding teachers has followed an overall downward path, although the number increased between 2019 and 2021. Looking to the future, the STRB forecasts that the secondary school population is expected to peak in 2024 before gradually dropping until 2030. The nursery and primary school population peaked earlier in 2019 with numbers declining since then and are expected to continue to so over the coming decade due to a lower number of births since 2013.

Figure 10: Number of pupils in England 2007 to 2021



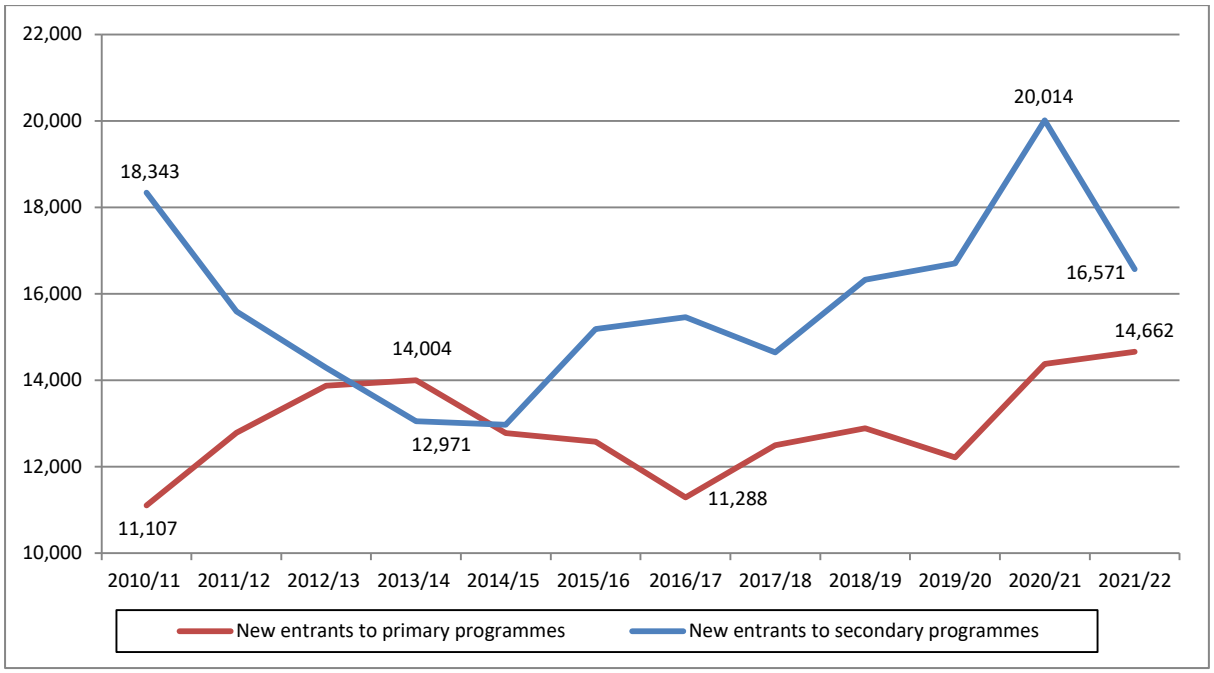
Source: Schools, pupils and their characteristics: January 2021, Office for National Statistics

2.5. Teaching entrants

As previous STRB reports have outlined, teacher training has also been a challenging area. Figure 10 below displays information on the number of new teachers entering the profession in the last decade via postgraduate routes. It shows that the numbers of new entrants to primary programmes increased during the first few years of the decade before falling slightly, rebounding and then following an overall upward trend in the last few years. In contrast, the numbers of those training to be secondary education teachers fell sharply between 2010/11 and 2013/14 – by nearly 30% – but

this was followed by a reversal with a rise in 2020/21 during the pandemic followed by a sharp fall in the latest year although this is based on provisional figures.

*Figure 11: Postgraduate initial teacher training entrants in England 2010 to 2022**



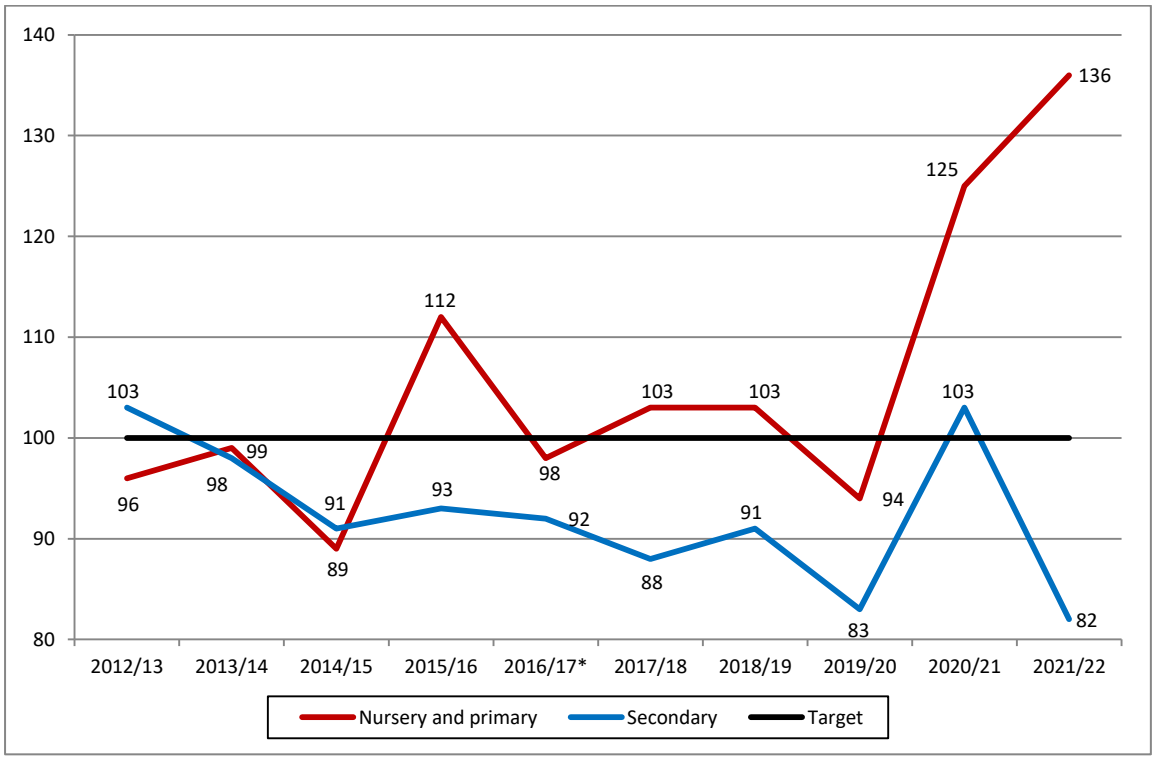
*Provisional including forecast registrations in 2021/22

Source: Initial teacher training: trainee number census - 2010 to 2022, Department for Education and National College for Teaching and Leadership

Statistics focusing on the numbers of students entering teacher training courses only tell part of the story because we do not know how this relates to the numbers actually required. Figure 11 below shows the extent to which Department of Education targets have been achieved over the last few years. Historically, many of these targets have been missed, especially when we examine the record in secondary schools. Since 2013/14, for instance, the target for secondary teachers has only been achieved once with the shortfall standing at around 10% in many of the years. For nursery and primary teachers, the picture is different with the targets being met more often, most notably in the last two years. In 2020/21, the target was exceeded by 25% while the situation improved further in the latest period when it was surpassed by 36%.

Although these last two years represent an improvement, the STRB acknowledged that the experience of previous recessions suggests that this could be a short-term gain. It also recognised that significant gaps remain in key subjects, despite the improvement in recruitment to initial teacher training, and said that supply remained challenging, particularly in secondary schools where pupil numbers were projected to grow by 15% between 2018 and 2025.

Figure 12: Percentage of English recruitment target levels met 2012 to 2021



Source: Department for Education (2021) Initial teacher training: trainee number census 2021 to 2022 (plus previous editions)

2.6. Data on the number of pupils per teacher

Examining changes in the numbers of pupils and teachers in isolation is only of limited use because we need to understand the pattern of both in order to calculate a more important statistic – the pupil per teacher ratio. This ratio is important because it is widely considered a good indicator of educational quality.

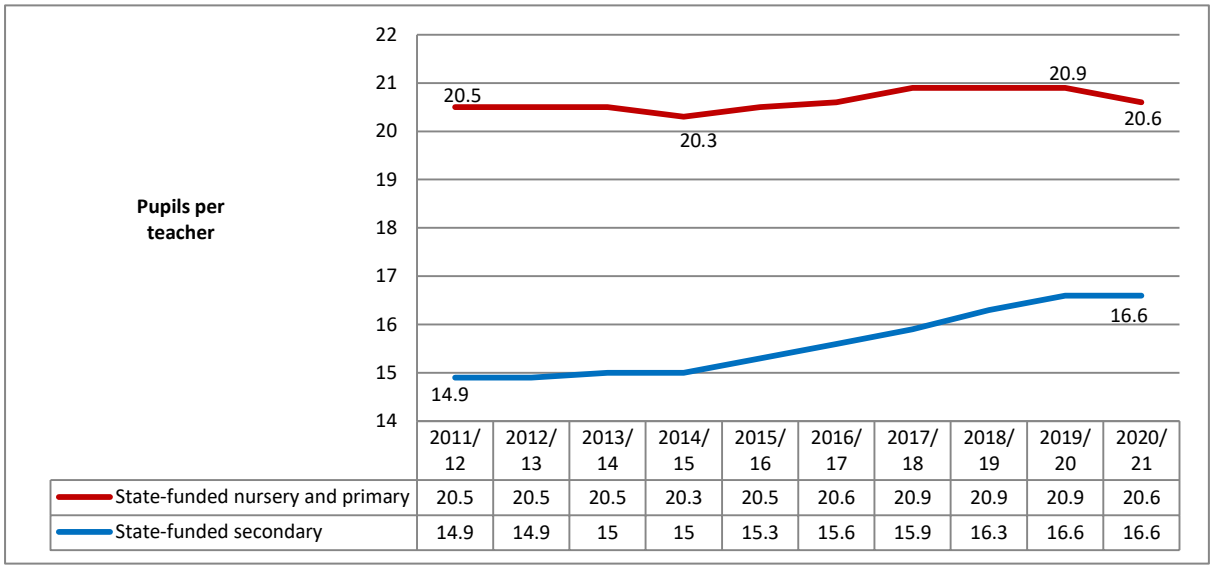
From the graphs above it is clear that pupil numbers have increased in recent years, particularly in secondary schools, whereas teacher headcount is dropping in secondary schools and has risen in primary and nursery schools. The cumulative effect of this is illustrated in Figure 13 below, showing that the number of pupils per teacher is currently rising in primary and nursery schools whereas it has levelled out in the last two years in secondary schools. The graph tracks the pattern of change in the proportion of pupils per teacher between 2011 and 2021.

It demonstrates that the ratio in secondary schools started the period at 14.9 pupils per teacher before following a slight upward trend and finishing at 16.6 in 2020/21, the latest year for which

data is available. By contrast, the pattern in nursery and primary schools was slightly different with little variation over the period. In 2011/12 for example, the ratio stood at 20.5 teachers per pupil before dropping to 20.3 in 2014 and increasing slightly to 20.5 in 2020/21.

To place the current figures for England into a wider perspective, the latest EU figures for 2018 show that the average pupil to teacher ratio across all the 26 EU countries measured stood at 11.9 in secondary schools, substantially lower than the 16.6 found in England. For primary schools, the average across the EU was 13.5 in 2019 while the highest was 19.4 in Romania. By contrast, the latest English figure was significantly larger than both, at 20.6.

Figure 13: Pupils per teacher in England 2011 to 2021



	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
State-funded nursery and primary	20.5	20.5	20.5	20.3	20.5	20.6	20.9	20.9	20.9	20.6
State-funded secondary	14.9	14.9	15	15	15.3	15.6	15.9	16.3	16.6	16.6

Source: Schools workforce in England, June 2021

A key indicator of how these ratios may change in the future can be gained by examining Department of Education projections. In July 2020, for example, the overall population in state-funded nursery and primary schools is projected to be 359,000 lower in 2026 than in 2020. In state-funded secondary schools, pupil numbers will peak in 2024 with 224,000 more children than in 2020 but by 2030, the forecast is for numbers to be down again to only 70,000 higher than in 2020. As a result, it looks like demand for teachers in secondary schools is set to rise while the opposite looks likely in primary schools.

3. School teachers' pay awards compared with the wider economy

In order to fully understand the current pay landscape facing school teachers in England it is useful to reflect on the pattern of teaching pay awards since 2007 as well as comparing them with increases across the economy as a whole over the same period. What the analysis shows is that the teaching profession in England has tended to receive lower pay awards than those for other groups, apart from during the depths of the recession in 2009 and 2010 and in the most recent two years.

In 2009 and 2010, teachers received pay awards under a previously negotiated long-term deal so their increases were 2.3%, ahead of the median pay award for the whole economy as measured by IDR that stood at 1.8% (2009) and 2% (2010). In 2019 and 2020, teachers were awarded relatively better pay awards following the prolonged period of pay restraint during the austerity years. The two headline figures of 2.75% and 3.1% compare favourably to whole economy medians of 2.5% and 2% respectively.

Between these two periods, the median whole economy pay award was 2% in each of 2011, 2012 and 2013, and 2.5% in 2014, while the figure for 2015 was 2.2%. By contrast, teachers received no general salary increase in either 2011 or 2012, and 1% between 2013 and 2014, while in 2015, the headline increase was again 1% with a 2% increase to the maximum of the pay range.

More recently, in 2016, 2017 and 2018, the median whole economy figures stood at 1.78%, 2% and 2.5% respectively. Over the same period, pay increases for teachers were applied to pay ranges rather than across the board, and appraisal-related pay was introduced, so not all teachers were guaranteed to receive a rise. Statutory range minima and maxima were increased by 1% in 2016, 2% in 2017 and 3.5% in 2018.

In 2017 and 2018, however, the uplifts to the upper pay range were lower than the increases for the main range. For instance, pay points on the upper pay range were increased by 1% in 2017 and 2% in 2018. By contrast, the main range saw rises of 2% and 3.5% respectively. Moreover, in 2018, the increase to the leadership pay range was even lower at 1.5%. As a result, just 43% of teachers received the 3.5% headline rise in that year.

In 2019 and 2020 awards were higher than those in the previous few years with the earlier rise a straightforward across-the-board increase of 2.75% although the starting rate for newly-qualified teachers was uplifted by 5%.

In contrast, the 2020 rise represented a paybill increase of 3.1% but included a range of other measures. Most notable was the 5.5% uplift to the starting rate for new teachers, representing the first step in the Government's commitment to ensure that the entry-level salary will be £30,000 by 2022/23. Other recommended points on the main pay range were uplifted by amounts between 2.75% and 4.95% with the highest rises applied to lower levels. In addition, all points on the upper pay range were increased by 2.75%.

As we mentioned in Chapter 1, the 2021/22 pay review was impacted by the short-lived pay freeze policy meaning that salaries were paused for most teachers in England, with the exception of some lower-paid teachers (those on less than £24,000 nationally) who received a consolidated rise of £250.

The STRB stated that while it recognised the exceptional pressures placed on the economy and on public sector finances by the COVID-19 pandemic, it was firmly of the view that a pay pause for teachers of more than one year risked a severe negative impact on the competitive position of the teaching profession. This, in turn, it said, is likely to jeopardise efforts to attract and retain the high-quality graduates necessary to deliver improved pupil outcomes. As a result, it requested that this year it be allowed to fully exercise its role in making recommendations on pay uplifts for all teachers and school leaders based on the evidence, including conditions in the wider economy.

Distribution of full-time equivalent qualified teachers across pay ranges

Last year, the STRB presented 2018 data showing the distribution of teachers across the pay ranges based on an Office for Manpower Economics analysis of unpublished Department of Education data, illustrating that the majority of teachers in all four pay areas are paid on the upper or leadership pay ranges.

Table 4a: Distribution of full-time equivalent qualified teachers across pay ranges, 2018

Pay range	Rest of England	London Fringe	Outer London	Inner London
Main pay range	39%	44%	47%	48%
Upper pay range	45%	40%	38%	35%
Leadership pay range	16%	16%	15%	17%

Source: STRB 2020

Table 4b: English school teachers' pay awards compared with those in the wider economy, 2007 to 2021

	School teachers England		Pay settlements – whole economy (WE)			Variation teachers' rise & median (WE)
	% general award		**Lower quartile %**	**Median %**	**Upper quartile %**	**% point difference**
2007	Salary increase of 2.5%	Q3	3.0	3.5	4.1	-1.0
2008	General salary increase of 2.45%	Q3	3.0	3.7	4.0	-1.25
2009	General salary increase of 2.3%	Q3	0.0	1.8	2.5	+0.5
2010	General salary increase of 2.3%	Q3	0.3	2.0	2.4	+0.3
2011	No general salary increase	Q3	0.0	2.0	3.0	-2.0
2012	No general salary increase	Q3	1.0	2.0	3.0	-2.0
2013	General salary increase of 1%	Q3	1.0	2.0	2.5	-1.0
2014	1% increase in range minima, maxima and reference points	Q3	2.0	2.5	2.8	-1.5
2015	1% uplift to the minima of all pay ranges and allowances, 2% uplift to the maxima of the main range	Q3	1.8	2.2	2.5	-1.2
2016	1% increase to the statutory minima and maxima of all pay ranges and allowances in the national pay framework from September 2016, including allowances. Schools have discretion over how to apply the increase unless teacher is on the minimum pay-point	Q3	1.0	1.78	2.5	-0.78
2017	2% uplift to the minimum and maximum of the main pay range; a 1% uplift to the minima and maxima of the upper pay range, the unqualified teacher pay range and the leading practitioner pay range. Schools have discretion over how to apply the increase unless teacher is on the minimum pay-point but must be within the overall 1% public sector pay cap	Q3	1.7	2.0	2.74	-1.0

	School teachers England		Pay settlements – whole economy (WE)			Variation teachers' rise & median (WE)
	% general award		Lower quartile %	Median %	Upper quartile %	% point difference
2018	3.5% to the minimum and maximum of the unqualified pay range and main pay range; 2% to the minimum and maximum of the upper pay range, leading practitioner pay range and all allowances; 1.5% to the min and max of the leadership pay ranges	Q3	2.0	2.5	3.0	-0.5
2019	2.75% uplift to all allowance and pay ranges	Q3	2.0	2.5	3.0	+0.25
2020	3.1% increase to pay bill: 2.75% increase with 5.5% on min of main pay range (resulting in pay bill rise of 3.1%)	Q3	0.0	2.0	2.7	+1.1
2021	Pay freeze for most, excluding circa 6,000 staff (mainly unqualified teachers) whose full-time equivalent basic earnings are less than £24,000 (nationally, with higher limits for London and fringe) who received a consolidated award of £250	Q3	1.7*	2.0*	2.8*	-2.0*

*Provisional and subject to revision.
Source: IDR

3.1. Measuring pay awards

General salary increases for school teachers approved by government ministers from 2007 onwards are detailed in Table 4b above. Increases exclude other elements of earnings which might have affected overall pay bills. In most of the 15 years covered, all teachers received the headline salary rise and were also entitled to incremental pay progression based on time in post and experience. Since 2014, most schools have continued to apply the awarded increase to all pay points but not all teachers have received progression in addition to the basic rise.

The table also shows the lower quartile, median and upper quartile figures for pay settlements generally. These cover the three-month period ending September as an appropriate point for comparison with the school teachers' pay review. The percentage figures used in the table measure the headline increases in basic pay levels, excluding bonuses or lump sum payments. For settlements and awards where the percentage rise varies for different employees (for example, increases based on individual performance), the figure used is the average increase where this is known, the increase received by the largest number of employees, or the pay bill increase. The cost

of other improvements, such as any increase in holiday entitlement or in the value of allowances, for example, is excluded.

4. Salaries in England compared with those in Wales and Scotland

The table below shows how current salaries for teachers in England, as set by the STRB, compare with those in Wales as set by the IWPRB. As can be seen, salaries for England are mostly a little behind those for Wales, apart from at the bottom and top of the main scale. The lead at the bottom of the main scale is marginal. That at the top is greater, though it should be noted that when it comes to pay benchmarking, only variances approaching or above plus or minus 10% are generally regarded as significant. Comparisons between salaries on the respective upper pay scales, and the ranges for leading practitioners and leadership roles, all show the same (comparatively small) gap in favour of Wales.

Table 5: Comparison of teacher salaries, England versus Wales

Effective from 1 September 2021	England £pa	Wales £pa	£pa variance	% variance
M1	25,714	-	-	-
M2	27,600	27,491	+109	+0.4
M3	29,664	29,699	-35	-0.1
M4	31,778	31,987	-209	-0.7
M5	34,100	34,506	-406	-1.2
M6	39,961	37,974	+1,987	+5.2
U1	38,690	39,368	-678	-1.7
U2	40,124	40,827	-703	-1.7
U3	41,604	42,333	-729	-1.7
Leading practitioner min	42,402	43,145	-743	-1.7
Leading practitioner max	64,461	65,590	-1,129	-1.7
Leadership min	42,195	42,934	-739	-1.7
Leadership max	117,197	119,248	-2,051	-1.7

Note: the % variances shown are the difference expressed as a percentage of the relevant salary in Wales, since in this case the latter is the comparator.

4.1 England compared to Scotland

Pay for teachers in England and Scotland is structured differently at the start of teachers' careers and also after five or six years subsequent to qualification. Looking at the start of teachers' careers first, in England, unqualified teachers are paid on a six-point scale, currently ranging from £18,419 to £28,735. In Scotland by contrast, prior to full registration with the General Teaching Council, teachers are placed on point 0 of the main grade scale. This is the point for 'probationers' and is currently worth £27,498, some £1,237 less than the highest point of the unqualified teachers' scale in England and thus representing a positive variance (for England) of 4.5%. (The differing

approaches on pay also point towards a different approach to teacher training in the two countries, but that is not our focus here.)

Once teachers are qualified in both countries, they are paid on a six-point scale in England and a five-point scale in Scotland. The table below compares salaries on the main scale in England with those on the main grade scale in Scotland. It shows that salaries in England are significantly behind those in Scotland almost the entire way up the respective main scales, albeit with a taper, though the gap only narrows significantly once the top of the main scale is reached. This is due entirely to the extra point in England. (Note too that the comparison is based on current salaries in both countries which, while in England are effective from 1 September 2021, in Scotland are effective from 1 April 2020, since agreement has not yet been reached on a pay rise for 2021. Therefore, the gaps could widen further if/when an agreement for 2021 has been reached.)

However, in England, teachers who have reached the top of the main scale can then move to the upper pay scale. The main criteria for movement ('crossing the threshold') are that teachers' achievements and contribution to their school are substantial and sustained, and that they are 'highly competent' in all elements of the Teachers' Standards as set out in the School Teachers' Pay and Conditions Document. The upper pay scale contains three points, ranging from £38,690 to £41,604. These extra points mean that the highest salary for 'ordinary' classroom teachers in England is very slightly higher than that for the highest salary for teachers in Scotland on the main grade scale (see table below).

After this, in England, further professional development can result in teachers gaining 'leading practitioner' status. Pay here is structured according to a range running from £42,402 to £64,461. Leading practitioner accreditation is awarded to teachers who wish to focus on modelling excellent practice and raising the standard of teaching across the schools in which they work.

Meanwhile in Scotland, 'chartered teacher' status offers experienced teachers the chance to earn more by engaging in a programme of professional development to pursue an accredited professional qualification (the aforementioned status). Salaries for teachers who have achieved this are paid on a six-point scale, starting at £42,696 and ending at £50,772.

4.2 England compared to Wales

If we draw a rough equivalence between 'leading practitioner' and 'chartered teacher' status, we might highlight how initial salaries are very similar (with England just 0.7% behind the equivalent level in Scotland), but progression results in significantly greater salary headroom for teachers at this level in England. However, we must caution that this is not necessarily a like-for-like comparison, and 'leading practitioner' status may entail responsibilities, such as for recruitment and retention, that are missing from 'chartered teacher' roles.

Table 6:Comparison of teacher salaries, England versus Scotland

	England £pa	Scotland £pa*	£pa variance	% variance
M1	25,714	32,994	-7,280	-22.0
M2	27,600	34,863	-7,263	-21.0
M3	29,664	36,891	-7,227	-20.0
M4	31,778	39,231	-7,453	-19.0
M5	34,100	41,412	-7,312	-18.0
M6	39,961	(41,412)	(-1,451)	(-3.5)
U1	38,690	(41,412)	(-2,722)	(-6.6)
U2	40,124	(41,412)	(-1,288)	(-3.1)
U3	41,604	(41,412)	(+192)	(+0.5)

*The salaries shown for Scotland are those for points 1 to 5 inclusive (lowest to highest) on the main grade scale. We have excluded the point for probationers as this is more directly comparable to unqualified teachers in England (see main text). Salaries in Scotland are effective from 1 April 2020, pending resolution of the 2021 pay review, which is still under negotiation.

Note: the % variances shown are the difference expressed as a percentage of the relevant salary in Scotland, since in this case the latter is the comparator.

5. ASHE earnings analysis

In this chapter we draw on official data from ONS' Annual Survey of Hours and Earnings (ASHE) comparing the earnings of school teachers in England to those received by a basket of other comparator graduate occupations. Covering the years 2007 to 2021, the analysis focuses on three years in particular – 2007, 2014 and 2021.

Our analysis focuses on just three years in particular because these represent key points in terms of pay policy over the period. A starting point of 2007 was chosen because this is the year just before the economic crisis while 2014 represents the midpoint and a phase characterised by a period of pay freezes and restraint. The latest year, 2021, is of obvious interest because it is the point for which the most recent data is available.

As we have outlined in our previous reports, when considering the findings throughout this section, some caveats need to be borne in mind. Firstly, the samples for each year are not based on matched data while some jobs in England have sample sizes that are relatively limited; in particular, chemical and physical scientists. One other point to bear in mind is that in some years the ONS redefined certain occupational categories, which affects comparisons between years.

In 2010, for example, changes meant that a new 3-digit 'health professionals' subgroup was created which excluded general medical practitioners (GPs). Prior to this the 2-digit major group, also called 'health professionals', included both GPs and other health groups. As a result, changing job definitions and unmatched samples mean that cross-year comparisons need to be treated with an appropriate degree of caution.

For a full explanation of the factors to bear in mind when interpreting the data see Appendix 9. The box below provides an indication of the reliability of the figures for each of the chosen job groups in 2020. The ONS sets four levels of data reliability for all its data, as follows:

- Precise;
- Reasonably precise;
- Estimates acceptable;
- Unreliable or no data.

As the table below illustrates, all the average basic and gross pay figures for England are judged to be 'precise' with the exception of those relating to one scientific group, chemical scientists, where the figures are judged to be 'reasonably precise'. While not shown in the table below, the median

figures in 2021 had a slightly different pattern with four professions with associated data deemed 'reasonably precise'. Taking median gross earnings, for example, legal professionals, biologists, physical scientists as well as chemical scientists fell into this category. When measured by median basic pay, legal professionals and physical scientists had data that was again considered 'reasonably precise' while the chemical scientists' figure was characterised as only 'acceptable'.

The reason that all the scientific statistics are not considered 'precise' is because the sample sizes on which they are based are not as substantial as those for the other professions. In addition, sample requirements for averages and medians differ, meaning that some of the median figures do not meet the sample size thresholds to be judged as 'precise'. Despite this, given that the ONS regards all the figures to be sufficiently accurate to be reported, we have included them in our analysis.

Table 7: Assessment of reliability of English earnings data 2021

Job group	2021 average basic pay figure £pw	Level of precision	2021 average gross earnings figure £pw	Level of precision
Secondary education teaching professionals	800.4	Precise	803.8	Precise
Primary and nursery education teaching professionals	750.0	Precise	752.3	Precise
Engineering professionals	840.7	Precise	874.2	Precise
Information technology and telecommunications professionals	936.5	Precise	955.4	Precise
Health professionals	966.7	Precise	1,040.8	Precise
Legal professionals	1,241.8	Precise	1,256.6	Precise
Chemical scientists	758.5	Reasonably precise	773.3	Reasonably precise
Biological scientists and biochemists	787.1	Precise	803.7	Precise
Physical scientists	814.0	Precise	844.3	Precise
Pharmacists	768.9	Precise	800.6	Precise
Chartered and certified accountants	873.8	Precise	884.5	Precise
Management consultants and business analysts	895.9	Precise	921.0	Precise
Chartered surveyors	776.1	Precise	800.8	Precise

Source: ASHE

5.1. Overview

Data from ASHE provides information regarding the amounts, distribution and make-up of earnings and hours worked by employees in all industries and occupations. In addition, the annual ASHE datasets enable earnings for occupations to be analysed on the basis of four-digit occupational

codes, where relevant, and by region and/or country, which permits the ONS to produce figures for England only.

For the purposes of our analysis, we have used weekly earnings figures from ASHE for 11 non-teaching graduate occupations as listed in Table 9 below, on the basis that these occupations (i.e. Standard Occupational Classification major group '2') are reasonable comparators with school teaching. In addition, all are 'professional' roles, with employers competing for potential staff from a single pool of graduates.

These occupations have been identified and used as suitable earnings comparators in previous research reports for the NASUWT with the exception of the information technology group which was added for the first time last year. It should be noted that ASHE does not provide sample counts so the 'number of jobs' column below is actually an estimate based on information taken from another ONS study – the Labour Force Survey – and should be considered indicative only.

In the appendices, we include tables showing full median and average indexed earnings from ASHE, accompanied by graphs that make the overall trends clearer. In addition, similar information is shown for the median and average basic weekly and gross earnings on which the indices are based for all the occupations covered and all the years under review.

Table 8: Comparator graduate occupations in ASHE and SOC codes

ASHE main occupational groups	Occupational groups used in analysis	SOC codes	No. of jobs in England*
Science, research, engineering and technology professionals	Chemical scientists	2111	11,000
	Biological scientists and biochemists	2112	35,000
	Physical scientists	2113	11,000
	Engineering professionals	212	372,000
	Information technology and telecommunications	213	747,000
Health professionals	Health professionals	221	292,000
	Pharmacists	2213	39,000
Business, media and public service professionals	Legal professionals	241	125,000
	Chartered and certified accountants	2421	65,000
	Management consultants and business analysts	2423	146,000
Architects, town planners and surveying professionals	Chartered surveyors	2434	59,000
Teaching and educational professionals	Secondary education teaching professionals	2314	411,000
	Primary and nursery education teaching professionals	2315	316,000

*Full-time jobs, estimates shown for 2021.

Source: ASHE

5.2. Basic earnings of comparator graduate professions relative to school teachers

In the next section, we outline the variations in the differentials between the median and average earnings for both groups of teachers and a group of comparator graduate occupations over time.

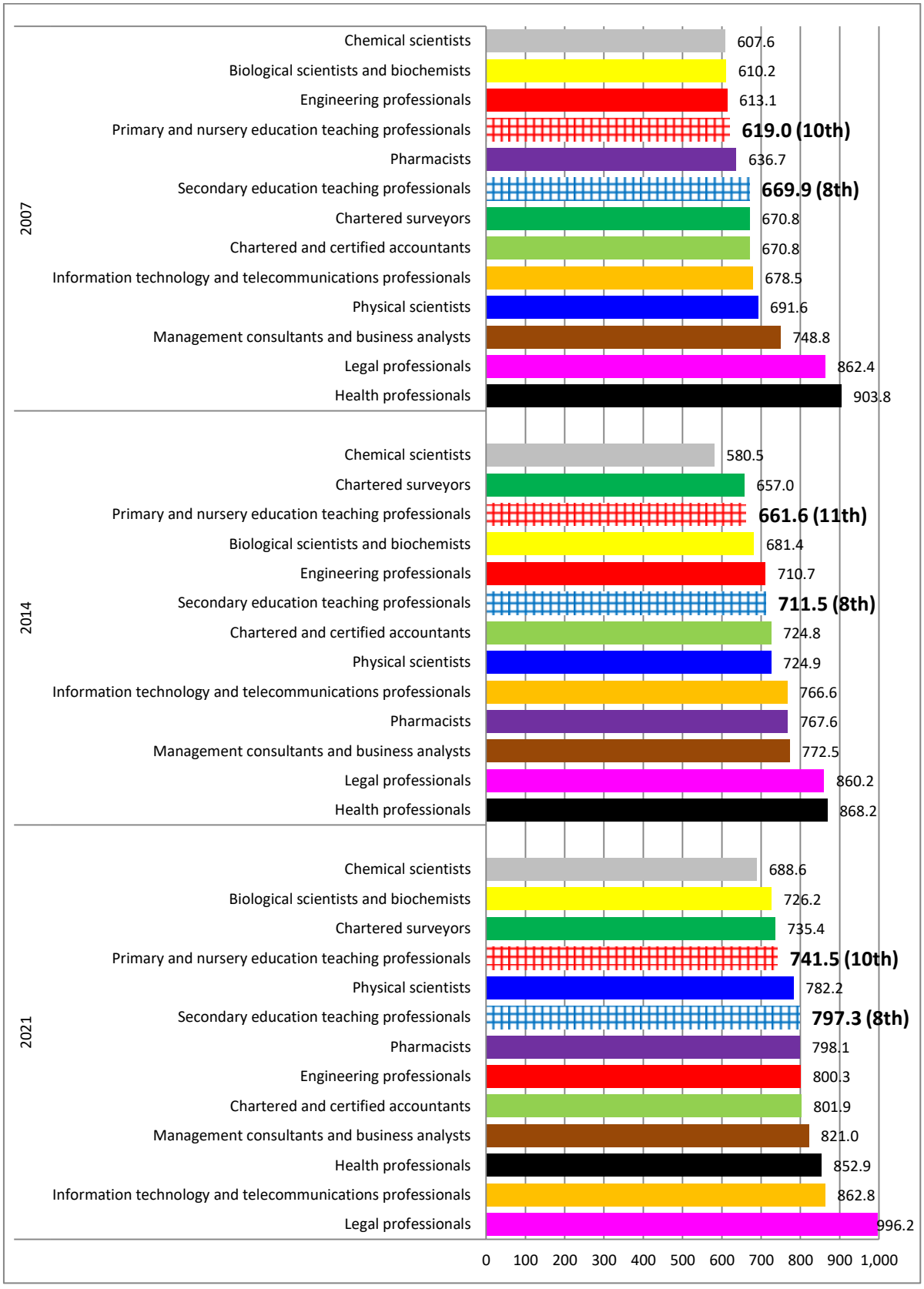
For the purpose of our analysis, the years 2007, 2014 and 2021 have been selected for detailed examination. This allows comparisons of earnings differentials to be made in each of these three years as well as indicating how differentials have changed over the full 15-year period.

Initially, this section provides an examination of the overall findings for all the jobs covered. This is then followed by a calculation of the combined median and average differentials between earnings for the 11 comparator graduate occupations and those for the two teaching groups. Then, a more detailed analysis of indexed median and average basic earnings for each of the occupational groups, relative to those for secondary and primary and nursery education school teachers in each of the same three years, is presented.

Teachers' earnings are predominantly made up of basic salary but for other professions additional elements can account for a significant proportion of earnings, such as NHS 'clinical excellence awards' in the case of some health professionals.

For this reason, the section concludes with a look at the median and average gross earnings of the selected graduate occupations compared to the corresponding figures for teachers.

Figure 14: Comparison of median basic earnings of all comparator graduate professions in England including school teachers: 2007, 2014 and 2021



Source: ASHE

Figures 14 and 15 provide details of the median and average rankings across the three years for all the professions in England, including both teaching groups. As in previous years we have examined, the figures illustrate that secondary teachers are generally slightly higher-paid than their colleagues who teach younger children. The two graph bars for the teaching professions are shaded with a crossed pattern and labelled with their ranking positions so they stand out from the other non-teaching occupations.

As Figure 14 illustrates, in terms of median basic earnings, the secondary and primary teaching professions in England were positioned eighth and tenth respectively out of a total of 13 in the rankings for 2021. The graph also shows that secondary teachers held this position in each of the three years whereas the ranking of primary and nursery teachers was tenth in 2007 and 2021 and eleventh in 2014. The full picture for all the three years is presented in full in Table 9 below.

Table 9: Ranking of median basic earnings levels of teachers relative to 11 non-teaching professions in England 2007, 2014 and 2021

Group	2007 rank	2014 rank	2021 rank
Secondary education teachers	8	8	8
Primary and nursery education teachers	10	11	10

Source: ASHE

One limitation of using median statistics is that they only represent typical values and are not strongly affected by the highest and lowest figures found in a particular sample. For remuneration data, outliers are important because they provide a more complete picture of the whole range of earnings found in different occupations. This is particularly relevant for teachers where concerns have been expressed about pay at more experienced and senior levels.

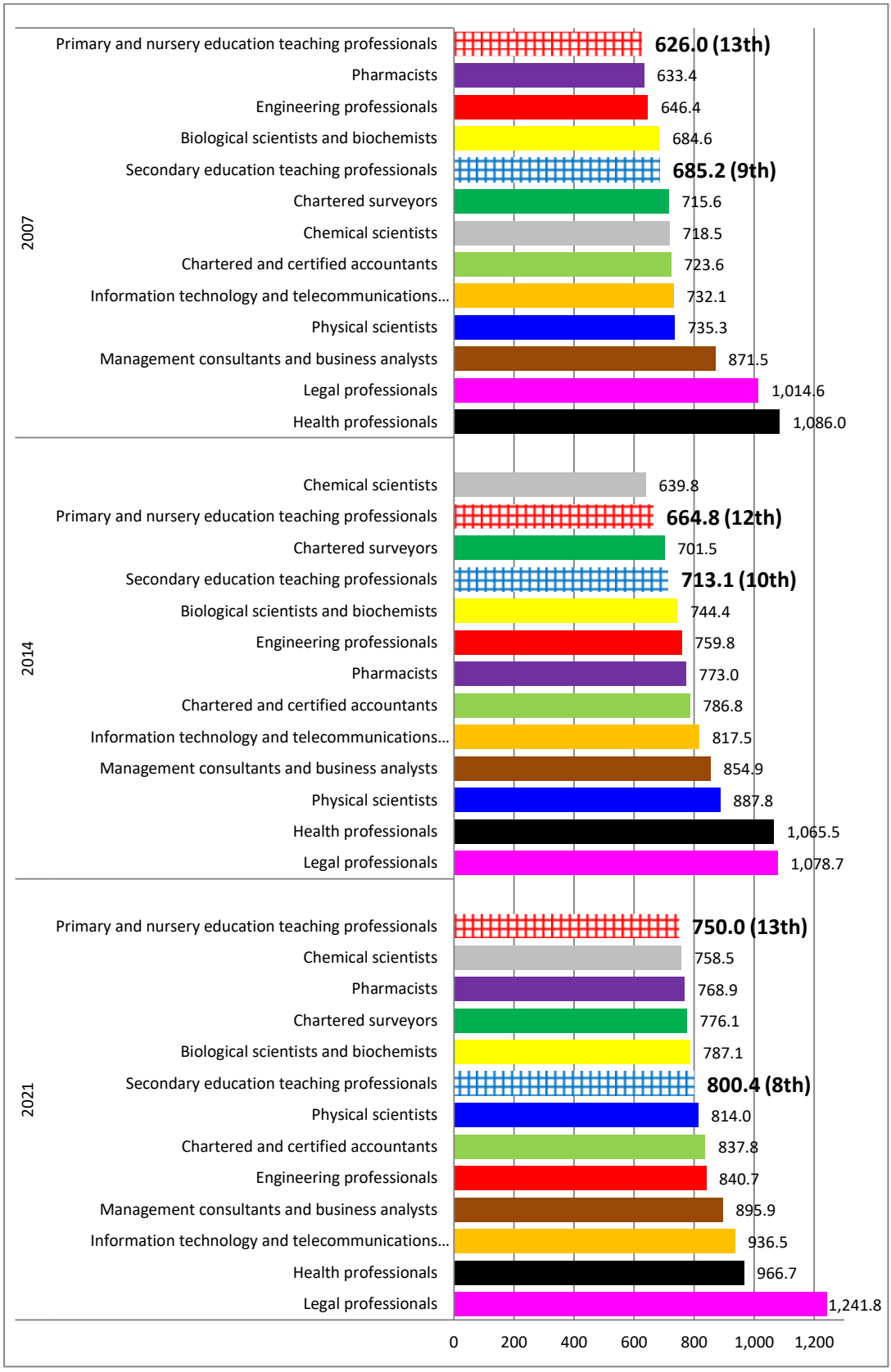
By contrast, the method by which average figures are calculated means that they take greater account of the whole distribution of earnings, including both the highest and the lowest amounts. To gain a fuller picture, therefore, Figure 15 below provides comparative details based on average basic earnings for the professional groups examined. It is clear that the overall distribution in Figure 14 is broader in all three years. For example, whereas Figure 13 showed that the highest median salary level for a non-teaching job in 2021 is around 34% higher than the figure for primary and nursery teachers, the highest equivalent average figure shown in Figure 14 is over 65% greater.

Another consequence of using average instead of median figures is that the ranking of both teaching groups, in almost all cases, falls even further down the pay ranking. For example, the

primary and nursery teacher rankings were lower in every year when measured by averages as opposed to medians. In 2021, for example, the average ranking stood at thirteenth whereas when measured by median basic earnings the position was tenth. The secondary school teacher position was unchanged in 2021 with both measures of pay placing this group in eighth position. By contrast, the positions in both 2007 and 2014 were lower when measured by averages instead of medians.

As in previous years, the reason for the drop in rankings is because almost all the average figures for non-teaching professions were significantly higher than the corresponding medians whereas the average levels for both teaching groups in England were only slightly above the corresponding median levels. For instance, in 2021 primary and nursery teachers' median weekly basic earnings stood at £741.50 which was very close to the average of £750. Meanwhile, figures for secondary teachers were £797.30 at the median, only marginally below the average of £800.40.

Figure 15: Comparison of average basic earnings of all comparator graduate professions including school teachers in England: 2007, 2014 and 2021



Source: ASHE

Unlike both the teaching groups, differences between the median and average basic pay figures for the non-teaching professions were, on the whole, more substantial. Examining the highest-paid profession, legal professionals, for example, the average basic earnings amount was 24.7% higher than the corresponding median. For nine of the other ten non-teaching groups, averages were between 4.1% and 13.3% higher than the equivalent median amounts. The only exception was pharmacists where the median was actually higher than the corresponding average. For instance, in 2021, pharmacists' median basic earnings stood at £798.10 per week which was 3.8% higher than the average of £768.90.

Table 10: Ranking of average basic earnings levels of teachers relative to 11 non-teaching professions 2007 to 2021

Group	2007 rank	2014 rank	2021 rank
Secondary education teachers	9	10	8
Primary and nursery education teachers	13	12	13

Source: ASHE

Because average basic pay levels in most of the non-teaching professions were much higher than the corresponding medians this implies:

- there are a greater proportion of higher-paid staff in the non-teaching sectors;
- the pay levels of more experienced/senior staff in non-teaching professions are significantly higher than median amounts while the pay levels of less senior and therefore relatively lower-paid individuals are only marginally lower than median values;
- or both are true.

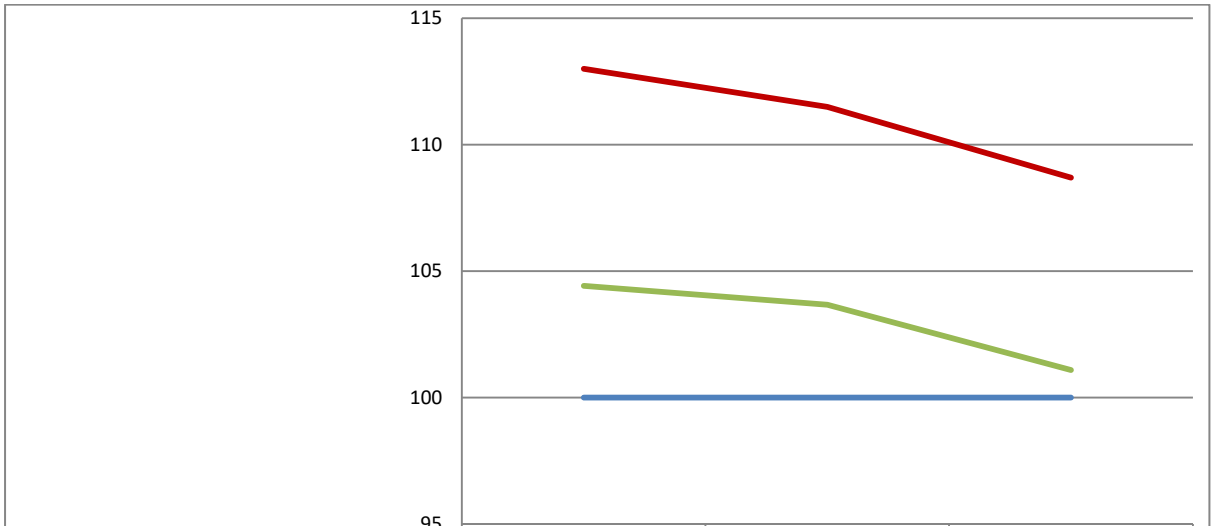
Returning to teachers, because the median earnings statistics are very similar to the average figures, the statements above are not necessarily true for this profession. Where averages and medians are very similar it usually means that the pay distribution is relatively symmetrical, with similar proportions of higher- and lower-paid staff.

Whatever the actual distribution, as we have found in previous years, in terms of median basic earnings, teachers are relatively lower-paid compared to most of the other professions and when measured by average amounts they fall near to the bottom of the pay league.

5.3. Basic earnings of combined comparator group of professions relative to school teachers

An alternative way of looking at the pay differentials between teachers and other graduate professions is to combine the basic earnings data for the non-teaching professions into an un-weighted aggregate amount. Using this combined figure makes it possible to make further comparisons with earnings for the two teaching groups over the period.

Figure 16 Indexed median basic earnings of all-comparator graduate professions relative to school teachers in England: 2007, 2014 and 2021



	2007	2014	2021
School teachers	100.0	100.0	100.0
Average position of other professions versus secondary school teachers	104.4	103.7	101.1
Average position of other professions versus primary and nursery school teachers	113.0	111.5	108.7

Source: ASHE

Figure 16 above shows the position relative to teachers of the combined median basic earnings for the selected graduate professions for which data was available. It uses school teachers' median basic earnings in England as the base for each year (=100) and shows that both teaching groups in England earned less than the combined group throughout the period. In 2021, for example, the differential with primary and nursery school teachers was 8.7% while for their secondary school counterparts it was much smaller at just 1.1%. The figure also illustrates that the differentials narrowed over the period.

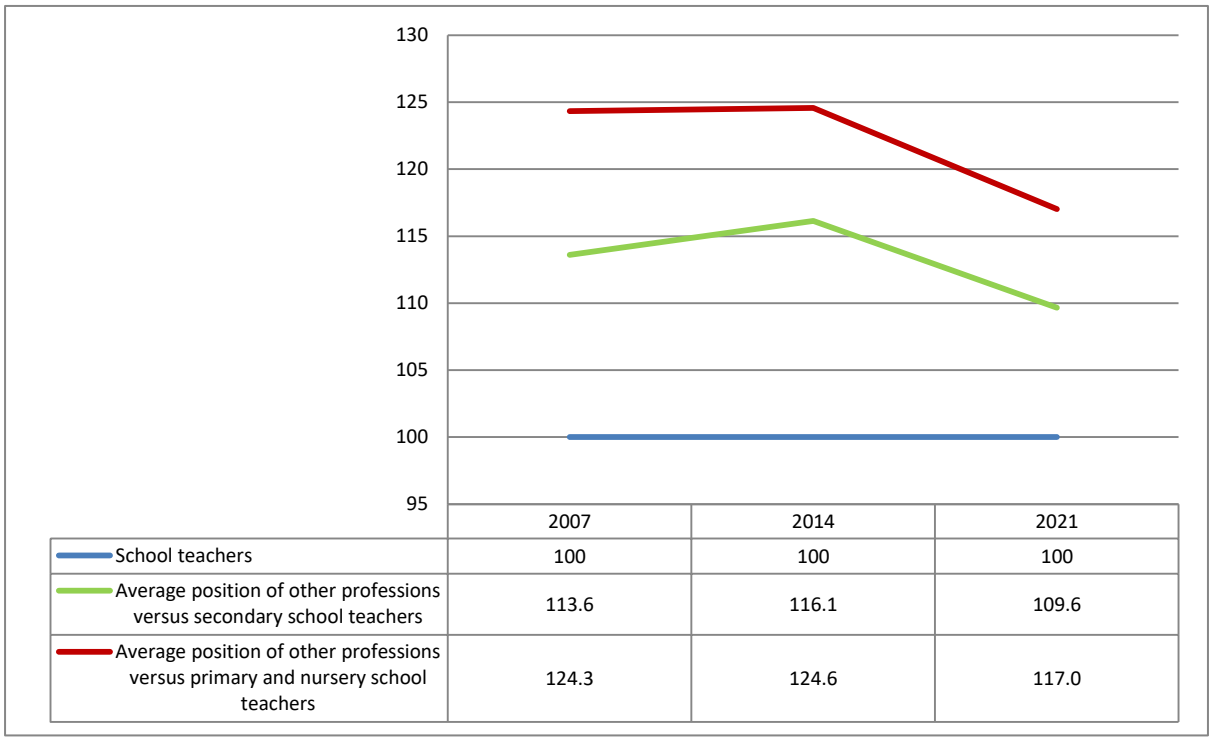
Figure 17 below repeats the analysis using average basic earnings figures and illustrates that there were larger gaps between both teaching groups and the all-comparator group of graduate

professions in England in all three years. For instance, the 2021 differentials between the combined figure and earnings for nursery and primary school teachers stood at 17% while the gap was 9.6% when contrasted with the secondary school teacher average basic earnings figure.

In both cases, the graphs show that whether measured by median or average basic earnings, the pay gap has been significant throughout the period especially for the primary and nursery teaching group. For secondary teachers, the median basic pay differential narrowed significantly in 2021 but when measured by the average basic pay statistic, the narrowing was less pronounced. One caveat to bear in mind, however, is that both graphs are based on unmatched samples for each year and so some caution needs to be exercised when interpreting the results across multiple years.

Even bearing these limitations in mind though, it is clear that the comparisons show that the median and average basic earnings for both teaching groups in England were lower than the all-comparator equivalent throughout the entire period. In addition, while both graphs demonstrate a narrowing of differentials, this may be due to weaker earnings growth in non-teaching professions more broadly as a result of the economic slump that accompanied the coronavirus pandemic and the slowdown that preceded it rather than as a consequence of slightly-better-than-previously pay rises in teaching.

Figure 17: Indexed average basic earnings of all-comparator graduate professions relative to school teachers in England: 2007, 2014 and 2021



	2007	2014	2021
School teachers	100	100	100
Average position of other professions versus secondary school teachers	113.6	116.1	109.6
Average position of other professions versus primary and nursery school teachers	124.3	124.6	117.0

Source: ASHE

5.4. Occupational findings on basic pay in detail

As mentioned earlier, the unweighted aggregate salaries for non-teaching groups shown above are influenced by very high or very low earnings figures for certain professions. Because of this, we have also compared the weekly earnings figures for each of the 11 non-teaching professions with those for the two teaching groups. For ease of comparison, we have also indexed all the earnings amounts and the findings are summarised below. Most are higher than those for teachers, although there are a small number of exceptions.

Science, Research, Engineering and Technology professionals

a) Chemical, biological and physical scientists

Indexed differentials of median basic earnings, 2007, 2014 and 2021

Table 11 below presents the findings in respect of median earnings for some of the occupations within the ASHE science group when compared to secondary education teachers in England. The science occupations are among the lowest-paid of the non-teaching professions based on an analysis of medians. Table 12 reflects this and illustrates that the median basic earnings for secondary school teachers were higher than both the chemical and biological scientist figures in every year. In contrast, the teaching group's figures trailed physical scientists in 2007 and 2013 by a small amount before moving ahead by around 2% in 2021.

Table 11: Comparison with secondary education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	669.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Chemical scientists	607.6	**90.7**	580.5	**81.6**	688.6	**86.4**
Biological scientists and biochemists	610.2	**91.1**	681.4	**95.8**	726.2	**91.1**
Physical scientists	691.6	**103.2**	724.9	**101.9**	782.2	**98.1**

Table 12 below demonstrates a similar analysis comparing the science occupations' median basic earnings with those of primary and nursery school teachers. Here, the pattern was quite similar with primary school teachers' median basic earnings leading the corresponding figures for biological and chemical scientists in most years. The only exception was 2014 when the biological science figure was 3% greater. By contrast, physical scientists had higher median basic earnings then primary and nursery teachers in all the three years.

Table 12: Comparison with primary and nursery education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	619.0	**100.0**	661.6	**100.0**	741.5	**100.0**
Chemical scientists	607.6	**98.2**	580.5	**87.7**	688.6	**92.9**
Biological scientists and biochemists	610.2	**98.6**	681.4	**103.0**	726.2	**97.9**
Physical scientists	691.6	**111.7**	724.9	**109.6**	782.2	**105.5**

Indexed differentials of average basic earnings, 2007, 2014 and 2021

As we have seen in many of our previous reports, differentials between non-teaching and teaching earnings tend to be greater when measured by average as compared to median statistics. As a result, while the chemical scientist median figures trail those of secondary teachers in all three years, when measured by averages, the differentials were closer with chemists showing higher earnings in 2007.

Likewise, the biological group's average figure in 2014 was 4.4% higher than the equivalent secondary school figure, whereas the median figure was lower. For physical scientists, in 2021 average basic earnings were 1.7% greater than the equivalent secondary teacher amount, but the median figure was lower, worth only 98.1% of the corresponding teaching amount.

Table 13: Comparison with secondary education teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	685.2	**100.0**	713.1	**100.0**	800.4	**100.0**
Chemical scientists	718.5	**104.9**	639.8	**89.7**	758.5	**94.8**
Biological scientists and biochemists	684.6	**99.9**	744.4	**104.4**	787.1	**98.3**
Physical scientists	735.3	**107.3**	887.8	**124.5**	814.0	**101.7**

Table 15 below exhibits a similar pattern but because primary and nursery teachers' basic earnings are lower than those of secondary teachers all the science groups' figures were greater in every year except one. This was 2014 when chemical science average basic earnings were worth 96.2% of the teaching figure. By contrast, primary and nursery teachers showed leads of between 1.1% and 33.5% across the three years. In 2021, the teaching group had leads of 1.1%, 4.9% and 8.5% respectively over the chemical, biological and physical scientist groups respectively.

Table 14: Comparison with primary and nursery education teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	626.0	**100.0**	664.8	**100.0**	750.0	**100.0**
Chemical scientists	718.5	**114.8**	639.8	**96.2**	758.5	**101.1**
Biological scientists and biochemists	684.6	**109.4**	744.4	**112.0**	787.1	**104.9**
Physical scientists	735.3	**117.5**	887.8	**133.5**	814.0	**108.5**

b) Engineering professionals

Indexed differentials of median basic earnings, 2007, 2014 and 2021

Median basic earnings for engineering professionals started the period in 2007 behind those of secondary education teachers. The gap narrowed by 2014 with the two figures almost on a par. By 2021, the engineering amount shifted slightly ahead with a lead of 0.4% over secondary teachers.

Table15: Comparison with secondary education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	669.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Engineering professionals	613.1	**91.5**	710.7	**99.9**	800.3	**100.4**

A comparison with the median basic earnings of primary and nursery education teachers portrays a similar pattern although the engineers' median moved ahead by 7.4% in 2014. In 2007, the engineering figure was 99% of the primary and nursery teachers' figure while the differential rose to 7.9% at the end of the period in 2021.

Table 16: Comparison with primary and nursery education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	619.0	**100.0**	661.6	**100.0**	741.5	**100.0**
Engineering professionals	613.1	**99.0**	710.7	**107.4**	800.3	**107.9**

Indexed differentials of average basic earnings, 2007, 2014 and 2021

An analysis of average basic earnings for engineers demonstrates a similar pattern to the median findings with engineers' earnings starting the period behind before moving ahead in 2014. In 2007, the engineering figure trailed the secondary teacher equivalent by 5.7% before moving 6.5% ahead in 2014. By 2021, the differential had narrowed slightly, although the engineering amount was still 5% higher than the secondary teacher equivalent.

Table 17: Comparison with secondary teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	685.2	**100.0**	713.1	**100.0**	800.4	**100.0**
Engineering professionals	646.4	**94.3**	759.8	**106.5**	840.7	**105.0**

Table 18 below illustrates the position in relation to primary and nursery education teachers and demonstrates that engineering earnings were greater than those of primary teachers throughout the period. In 2014 and 2021, for example, the engineering figures were over 10% greater than the corresponding primary and nursery teacher amount, greater than the differential in 2007 which was 3.3%.

Table 18: Comparison with primary and nursery education teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	626.0	**100.0**	664.8	**100.0**	750.0	**100.0**
Engineering professionals	646.4	**103.3**	759.8	**114.3**	840.7	**112.1**

c) Information technology and telecommunications professionals

Indexed differentials of median basic earnings, 2007, 2014 and 2021

Table 19 below illustrates that median basic earnings for IT professionals were higher than the corresponding figures for the secondary teacher group throughout the period with the differential widening in each year. Differentials were 1.3% in 2007, stretching to 7.7% in 2013 before finishing the period 8.2% ahead in 2021.

Table 2019: Comparison with secondary teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	669.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Information technology and telecommunications professionals	678.5	**101.3**	766.6	**107.7**	862.8	**108.2**

When compared to the median basic earnings of primary and nursery teachers, differentials were even greater, reflecting the lower earnings of those that teach younger children. In 2007, the differential was 9.6% in favour of the information technology group before increasing to 15.9% in 2014 and finishing at 16.4% in 2021.

Table 20: Comparison with primary and nursery education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	619.0	**100.0**	661.6	**100.0**	741.5	**100.0**
Information technology and telecommunications professionals	678.5	**109.6**	766.6	**115.9**	862.8	**116.4**

Indexed differentials of average basic earnings, 2007, 2014 and 2021

As with most of the other professions, the differentials for IT professionals were greater when comparisons were made using average figures. As Table 22 below demonstrates, the gap between the information technology group's figures and those for secondary teachers varied between 6.8% in 2007 and 17% in 2021, both in favour of the non-teaching group.

Table 21: Comparison with secondary teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	685.2	**100.0**	713.1	**100.0**	800.4	**100.0**
Information technology and telecommunications professionals	732.1	**106.8**	817.5	**114.6**	936.5	**117.0**

A comparison of information technologists' average basic earnings with those of primary and nursery figures resulted in larger differentials, starting the period 16.9% ahead before increasing to 23% in 2014 while finishing the period in 2021 with a lead of 24.9%.

Table 22: Comparison with primary and nursery education teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	626.0	**100.0**	664.8	**100.0**	750.0	**100.0**
Information technology and telecommunications professionals	732.1	**116.9**	817.5	**123.0**	936.5	**124.9**

Health Professionals

Health professionals and pharmacists

Indexed differentials of median basic earnings, 2007, 2014 and 2021

The health professional group is commonly found at the higher end of the pay distribution and this is reflected in the scale of the differentials with teachers as illustrated in Table 24 below. It shows

significant median basic earnings leads over secondary education teachers in the three years shown. In 2007, 2014 and 2021, the differentials were 34.9%, 22% and 7% respectively.

By contrast, pharmacists earned more at the median in 2014 and marginally so in 2021, although they started the period behind secondary teachers' earnings. As the table shows however, the differentials were narrower than for health professionals, lagging by 5% in 2007 while moving ahead to 107.9% and 100.1% of the equivalent secondary school teacher figures in 2014 and 2021.

Table 23: Comparison with secondary education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	669.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Health professionals	903.9	**134.9**	868.2	**122.0**	852.9	**107.0**
Pharmacists	636.7	**95.0**	767.6	**107.9**	798.1	**100.1**

The median basic earnings leads for health professionals and pharmacists were both greater when compared with earnings for primary and nursery teachers as shown in Table 24. In 2021, they finished the period with positive differentials of 15% for health professionals and 7.6% for pharmacists.

Table 24: Comparison with primary and nursery education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	619.0	**100.0**	661.6	**100.0**	741.5	**100.0**
Health professionals	903.9	**146.0**	868.2	**131.2**	852.9	**115.0**
Pharmacists	636.7	**102.9**	767.6	**116.0**	798.1	**107.6**

Indexed differentials of average basic earnings, 2007, 2014 and 2021

Examining average basic earnings as shown in Tables 26 and 27 below, the lead of health professionals over secondary teachers narrowed over the three years but still ranged between 20.8% and 58.5% over the period. For pharmacists, the differential was smaller with this group's average basic earnings trailing those of secondary teachers by 7.6% in 2007 but leading them by 8.4% in 2014 before finishing around 4% lower in 2021.

Table 25: Comparison with secondary education teachers based on average basic earnings

	2007	2014	2021

Description	£pw	Index	£pw	Index	£pw	Index
Secondary education teaching professionals	685.2	**100.0**	713.1	**100.0**	800.4	**100.0**
Health professionals	1,086.0	**158.5**	1,065.5	**149.4**	966.7	**120.8**
Pharmacists	633.4	**92.4**	773.0	**108.4**	768.9	**96.1**

The pattern for health professionals was similar when primary and nursery teachers' average basic earnings were examined although differentials were larger as shown in the table below. In addition, pharmacists' earnings were ahead throughout the period although only marginally in 2007. In 2021, the health professionals' lead was 28.9% while that for pharmacists was 2.5%.

Table 26: Comparison with primary and nursery education teachers based on average basic earnings

	2007		2014		2021	
	£pw	Index	£pw	Index	£pw	Index
Primary and nursery education teaching professionals	626.0	**100.0**	664.8	**100.0**	750.0	**100.0**
Health professionals	1,086.0	**173.5**	1,065.5	**160.3**	966.7	**128.9**
Pharmacists	633.4	**101.2**	773.0	**116.3**	768.9	**102.5**

Business, research, media and public service professionals

Legal professionals

Indexed differentials of median basic earnings, 2007, 2014 and 2021

Legal professionals are one of the other relatively well-paid professions in the non-teaching comparator group and Table 28 shows how their median basic earnings compared to those of secondary education teachers across the period. Throughout the period, legal median basic earnings were comfortably ahead. For example, the legal professionals' figures were 28.7% ahead in 2007, 20.9% in 2014 before rising once more, to 24.9%, in the latest year.

Table 27: Comparison with secondary education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	669.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Legal professionals	862.4	**128.7**	860.2	**120.9**	996.2	**124.9**

A comparison with primary and nursery education teachers' median basic earnings illustrates a similar pattern with larger differentials reflecting the fact that this teaching group is lower-paid than their secondary school counterparts. In the final year, legal professionals' median basic earnings were 34.3% greater than the primary and nursery teacher amount.

Table 28: Comparison with primary and nursery education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	619.0	**100.0**	661.6	**100.0**	741.5	**100.0**
Legal professionals	862.4	**139.3**	860.2	**130.0**	996.2	**134.3**

Indexed differentials of average basic earnings, 2007, 2014 and 2021

When average differentials were examined, the gaps were more substantial. Table 29 demonstrates that legal professionals had an average earnings lead over secondary school teachers of 48.1% in 2007, 51.3% in 2014 and 55.1% in 2021.

Table 29: Comparison with secondary education teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	685.2	**100.0**	713.1	**100.0**	800.4	**100.0**
Legal professionals	1,014.6	**148.1**	1,078.7	**151.3**	1,241.8	**155.1**

The gaps with primary and nursery education teachers were also even greater in all three years, finishing the period at over 65.6% in 2021.

Table 30: Comparison with primary and nursery education teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	626.0	**100.0**	664.8	**100.0**	750.0	**100.0**
Legal professionals	1,014.6	**162.1**	1,078.7	**162.3**	1,241.8	**165.6**

b) Chartered accountants and management consultants

Indexed differentials of median basic earnings, 2007, 2014 and 2021

Business, research and administrative professionals are another relatively well-paid profession but when measured by median basic earnings the findings only partially reflect this. This is demonstrated by Tables 32 and 33 which show that teachers' earnings are lagging behind in almost every case but nowhere near the same extent as for health and legal professionals.

Management consultants' median basic earnings were between 3% and 11.8% ahead of those of secondary school teachers across the period. For accountants, the differentials were narrower, showing at 0.1% and 8.6% in 2007 and 2014 respectively before leading the teaching group marginally in 2021 by just 0.6%.

Table 31: Comparison with secondary education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	669.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Chartered and certified accountants	670.8	**100.1**	724.8	**101.9**	801.9	**100.6**
Management consultants and business analysts	748.8	**111.8**	772.5	**108.6**	821.0	**103.0**

The pattern was similar when compared to the earnings of primary and nursery school teachers although in every case the differentials were larger. In 2021, for example, chartered accountants had a lead of 8.1% while the equivalent gap for management consultants was 10.7%.

Table 32: Comparison with primary and nursery education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	619.0	**100.0**	661.6	**100.0**	741.5	**100.0**
Chartered and certified accountants	670.8	**108.4**	724.8	**109.6**	801.9	**108.1**
Management consultants and business analysts	748.8	**121.0**	772.5	**116.8**	821.0	**110.7**

Indexed differentials of average basic earnings, 2007, 2014 and 2021

An analysis of average earnings showed greater leads for management consultants with figures at the end of the period that were 11.9% ahead of secondary school teachers and 19.5% greater than those for primary teachers. The corresponding differentials for accountants were 4.7% and 11.7% respectively.

Table 33: Comparison with secondary education teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	685.2	**100.0**	713.1	**100.0**	800.4	**100.0**
Chartered and certified accountants	723.6	**105.6**	786.8	**110.3**	873.8	**109.2**
Management consultants and business analysts	871.5	**127.2**	854.9	**119.9**	895.9	**111.9**

Table 34: Comparison with primary and nursery education teachers based on average basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	626.0	**100.0**	664.8	**100.0**	750.0	**100.0**
Chartered and certified accountants	723.6	**115.6**	786.8	**118.4**	873.8	**116.5**
Management consultants and business analysts	871.5	**139.2**	854.9	**128.6**	895.9	**119.5**

Architects, Town Planners and Surveyors

Chartered surveyors

Indexed differentials of median basic earnings, 2007, 2014 and 2021

In previous years, chartered surveyors have been a group whose earnings have often lagged behind those of teachers and this time the pattern is similar. For instance, the median basic earnings figure for chartered surveyors was worth just 92.2% of the corresponding secondary education teacher figure in 2021.

Table 35: Comparison with secondary education teachers based on median basic earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**

Secondary education teaching professionals	669.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Chartered surveyors	670.8	**100.1**	657.0	**92.3**	735.4	**92.2**

In contrast, when compared to primary and nursery teachers, the differential was narrower with the chartered surveyors' median basic earnings worth 99.2% of the equivalent figure for primary school teachers in 2021.

Table 36: Comparison with primary and nursery education teachers based on median basic earnings

	2007		**2014**		**2021**	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	619.0	**100.0**	661.6	**100.0**	741.5	**100.0**
Chartered surveyors	670.8	**108.4**	657.0	**99.3**	735.4	**99.2**

Indexed differentials of average basic earnings, 2007, 2014 and 2021

When measured by average basic earnings, the picture changes somewhat with the figures from the two groups positioned a little closer. In fact, chartered surveyors' basic earnings were actually greater than those of secondary teachers in 2007 before dropping off to near parity in 2014 and finishing the period around 3% lower.

Table 37: Comparison with secondary education teachers based on average basic earnings

	2007		2014		2021	
Description	£pw	Index	£pw	Index	£pw	Index
Secondary education teaching professionals	685.2	**100.0**	713.1	**100.0**	800.4	**100.0**
Chartered surveyors	715.6	**104.4**	701.5	**98.4**	776.1	**97.0**

In contrast, chartered surveyors' average earnings were ahead of those for primary school teachers in all three years although the differential narrowed across the period. In 2007, they were ahead by 14.3% while the gap narrowed to 5.5% in 2014 and further to 3.5% in 2021.

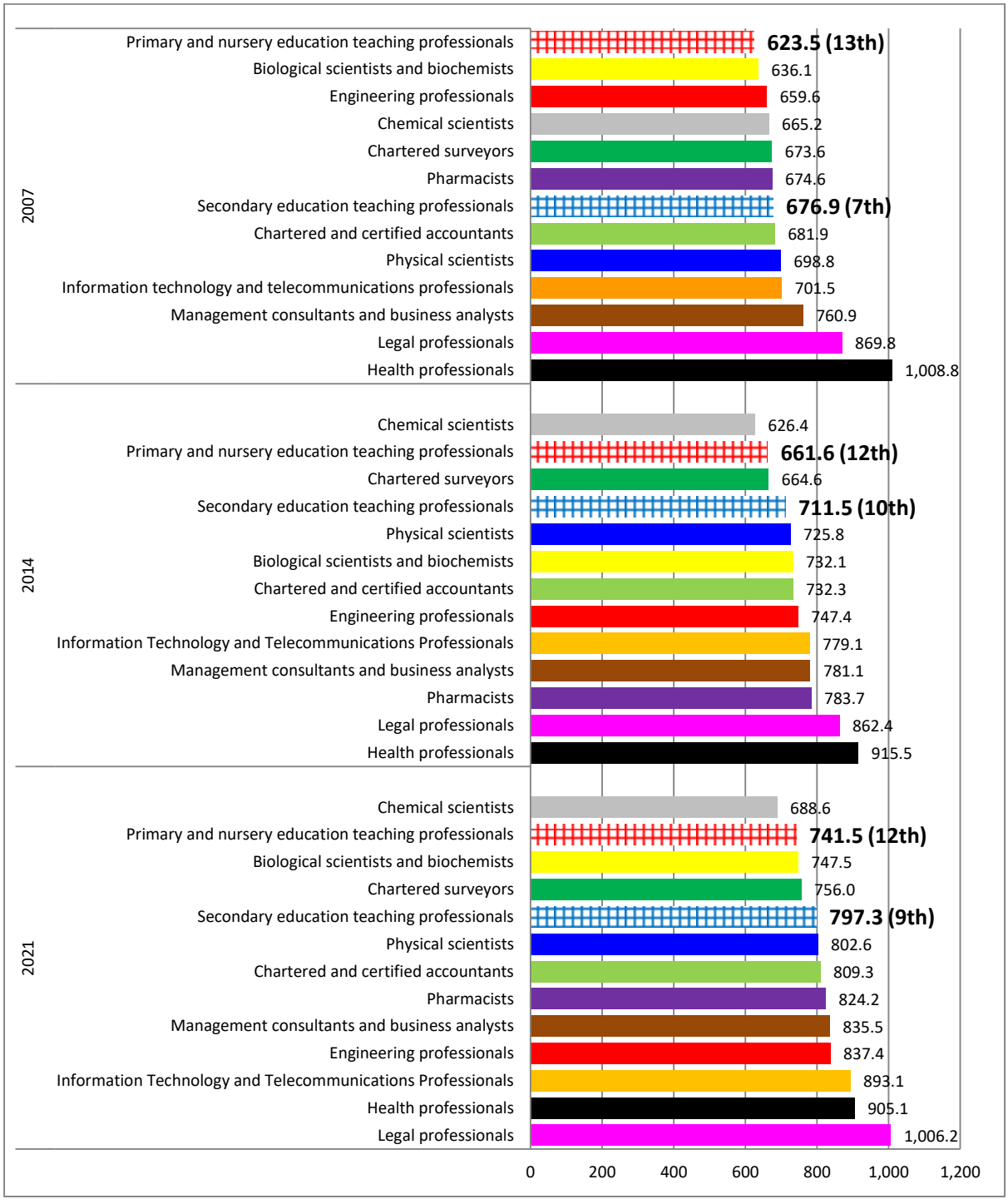
Table 38: Comparison with primary and nursery education teachers based on average basic earnings

	2007		2014		2021	
Description	£pw	Index	£pw	Index	£pw	Index
Primary and nursery education teaching professionals	626.0	**100.0**	664.8	**100.0**	750.0	**100.0**
Chartered surveyors	715.6	**114.3**	701.5	**105.5**	776.1	**103.5**

5.5. Gross earnings of comparator graduate professions relative to school teachers

As we noted earlier, incentive pay and other amounts additional to basic pay, such as extra allowances or bonuses, do not play an important part in teachers' earnings. In contrast, those employed in other sectors often receive significant amounts from these other sources of remuneration. For this reason, in order to provide a more accurate picture of overall pay relativities across the 13 professions it is important to examine gross as well as basic earnings.

Figure 18: Comparison of median gross earnings of all comparator graduate professions including school teachers in England: 2007, 2014 and 2021



Source: ASHE

Figures 18 and 19 present this data and illustrate that because gross earnings incorporate additional elements of remuneration, the ranking order has changed somewhat compared to the corresponding charts using basic earnings. Despite this, the two teaching groups remain near the bottom of the earnings rankings in both comparisons.

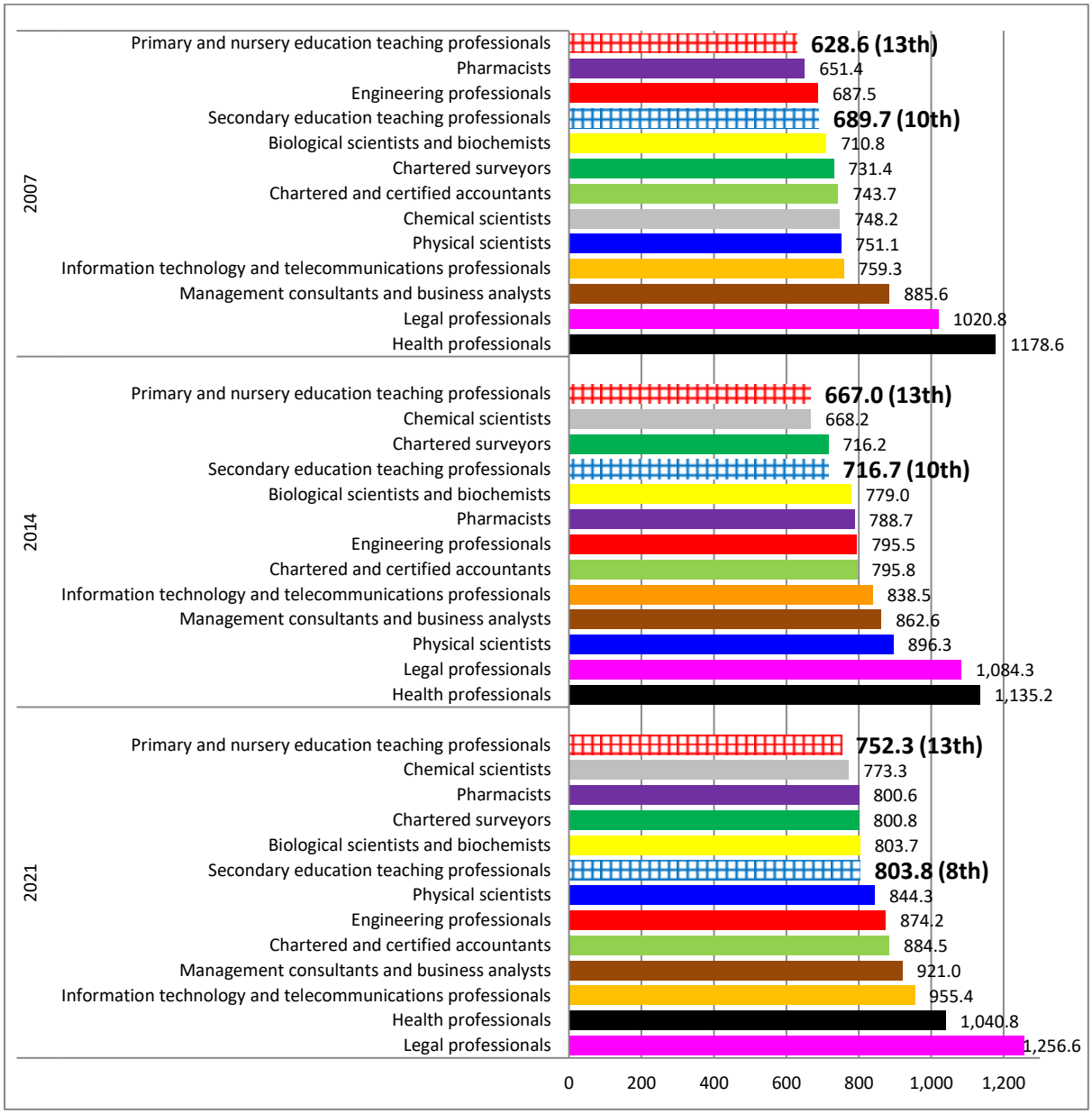
Figure 18 above shows that in 2021, secondary teachers were ranked ninth out of the 13 professions in terms of median gross earnings while primary teachers were placed twelfth ahead of just one group, chemical scientists. Across the whole period, secondary teachers' ranking fell from seventh position in 2007 to tenth in 2014 before finishing the period in ninth as mentioned. Primary and nursery school teachers started the period in the bottom position before rising slightly to twelfth and maintaining this in 2014 before rising slightly to twelfth place in both the latter years.

Table 39: Ranking of median gross earnings levels of teachers relative to 11 non-teaching professions in England 2007 to 2021

Group	2007 rank	2014 rank	2021 rank
Secondary education teachers	7	10	9
Primary and nursery education teachers	13	12	12

Source: ASHE

Figure 19: Comparison of average gross earnings of all comparator graduate professions including school teachers in England: 2007, 2014 and 2021



Source: ASHE

Figure 19 above presents corresponding information but this time it is based on average gross earnings and shows that earnings for both teaching groups on this measure were generally lower in the rankings than when measured by the median figures. Unlike the comparison for median gross earnings, however, there was less variation across the three years with both teaching groups at or near the bottom positions in almost all years. In addition, the slightly poorer ranking positions exhibited by teachers' gross earnings levels compared to basic earnings reflect the fact that remuneration additional to basic salary is less significant for teachers than for almost all the other professions examined.

Table 40: Ranking of average gross earnings levels of teachers relative to 11 non-teaching professions in England 2007 to 2021

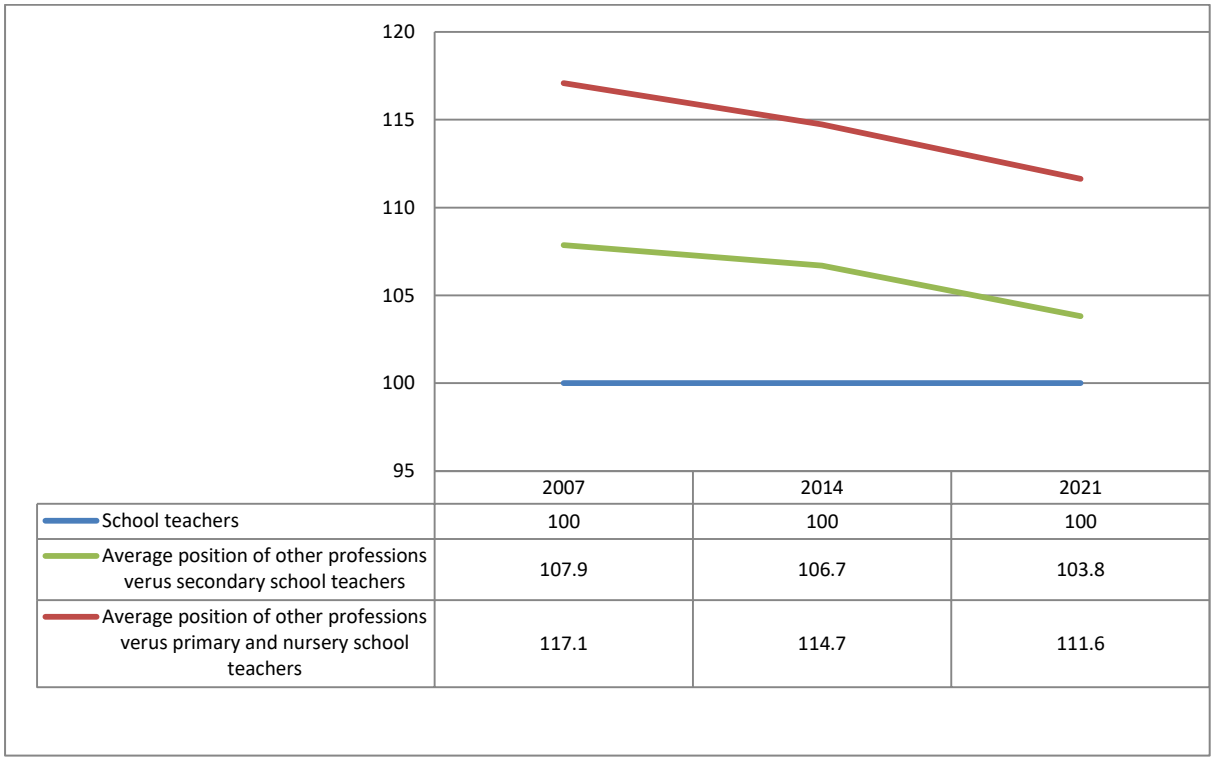
Group	2007 rank	2014 rank	2021 rank
Secondary education teachers	10	10	8
Primary and nursery education teachers	13	13	13

Source: ASHE

5.6. Gross earnings of combined comparator graduate professions relative to school teachers

In the same way that we combined the non-teaching basic pay figures into a single aggregate figure, we have done the same with gross earnings data, making it possible to compare the unweighted aggregate figures for all the non-teaching professions with teachers' gross earnings. This provides another indication of how differentials have varied over the period as illustrated in the following graphs.

Figure 20: Indexed median gross earnings lead of all-comparator graduate professions over school teachers in England: 2007, 2014 and 2021



	2007	2014	2021
School teachers	100	100	100
Average position of other professions verus secondary school teachers	107.9	106.7	103.8
Average position of other professions verus primary and nursery school teachers	117.1	114.7	111.6

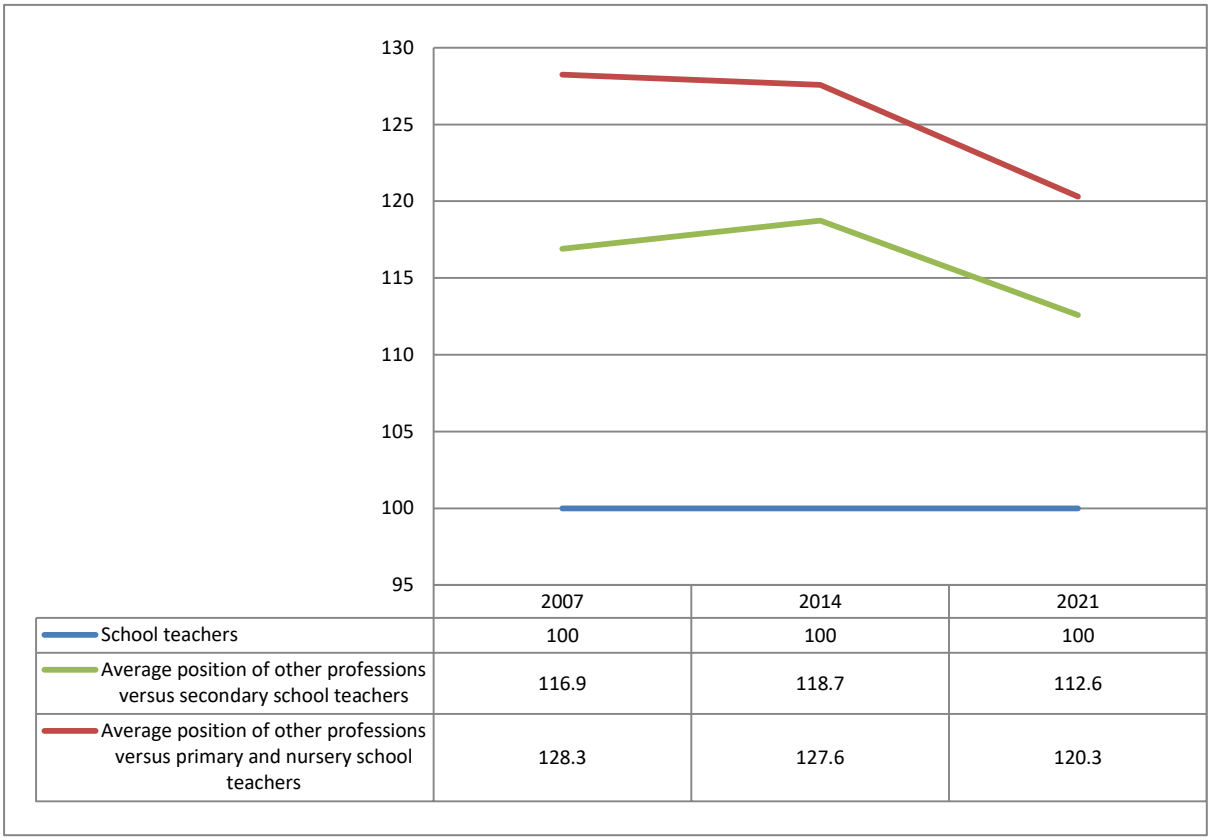
Source: ASHE

In parallel with the pattern exhibited when examining the basic earnings figures shown earlier, both graphs illustrate that teachers' gross earnings were below the combined group figures in all three years. Likewise, the primary and nursery school teacher differential was greater than the corresponding one for secondary teachers throughout the period. The main difference with the basic earnings analysis, however, was that for both teaching groups, the differentials were greater when measured by gross earnings than they were when the differentials related to basic pay.

Figure 20 above, for example, shows that median gross earnings for the 11 selected graduate professions in England were 7.9% ahead of median gross earnings for secondary school teachers and some 17.1% greater than median gross earnings for primary and nursery education teachers in 2007. In 2014, the median gross earnings lead of comparator graduate professionals over secondary school teachers dropped slightly to 6.7 % before falling further to 3.8% in 2021. The pattern was slightly different for primary and nursery school teachers as the gap narrowed throughout the period from a 17.1% differential in 2007 to 14.7% in 2014 and then to 11.6% in 2021.

The differentials relating to average gross earnings were greater than those associated with the median figures, as illustrated Figures 19 above and 20 below. For example, the Figure 21 below shows that the differential between the average gross earnings of the all-comparator group and secondary teachers in England was 16.9% in 2007, rising to 18.7% in 2014 before finishing the period 12.6% ahead. The corresponding figures for primary and nursery school teachers were much higher at 28.3%, 27.6% and 20.3% respectively.

Figure 21: Indexed average gross earnings lead of all-comparator graduate professions over school teachers in England: 2007, 2014 and 2021



	2007	2014	2021
School teachers	100	100	100
Average position of other professions versus secondary school teachers	116.9	118.7	112.6
Average position of other professions versus primary and nursery school teachers	128.3	127.6	120.3

Source: ASHE

As we mentioned when reflecting on the basic earnings analysis shown earlier, such multi-year comparisons need to be treated with a certain degree of caution because they are based on unmatched samples across the three years. In addition, some of the occupational definitions have changed over the period which may also affect the results as mentioned earlier.

Another factor to consider when using a combined non-teaching figure is that the aggregate figure may be influenced by particular professions that are either very high- or low-paid. For example, health and legal professionals were by far the highest-paid throughout the period which is another

caveat that needs to be considered and is why we focus on individual comparisons which are outlined in full below. Despite this, taken together with the other results it is clear that teachers' basic and gross earnings, both at average and median levels, tend to trail the amounts received by the majority of the non-teaching professions.

5.7. Occupational findings on gross pay in detail

To understand these relationships more clearly, below we summarise the main findings from the gross earnings indexation analysis in Tables 42 to 43.

Science, research, engineering and technology professionals

a) Chemical, biological and physical scientists

Indexed differentials of median gross earnings, 2007, 2014 and 2021

For chemical scientists, median gross earnings started the period slightly down on those of secondary teachers, falling further in 2014 before finishing the period with a value that was 86.4% of the teaching equivalent. For biologists, median gross earnings were 6% behind in 2007 while the figures showed a 2.9% advantage in 2014 before falling to 93.8% of the teaching level in 2021.

In contrast, physical scientists started the period with a 3.2% earnings lead and then fell slightly to 2% ahead in 2014. By 2021, the differential was even smaller with the physical scientist figure standing 0.7% higher than the equivalent secondary teaching amount.

Table 41: Comparison with secondary education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	676.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Chemical scientists	665.2	**98.3**	626.4	**88.0**	688.6	**86.4**
Biological scientists and biochemists	636.1	**94.0**	732.1	**102.9**	747.5	**93.8**
Physical scientists	698.8	**103.2**	725.8	**102.0**	802.6	**100.7**

The pattern of median gross earnings with respect to primary and nursery school teachers was similar although the generally lower earnings levels of such teachers meant the gaps were wider. As a result, biological and physical scientists' earnings were higher than those of the teaching group throughout the period finishing with leads of 0.8% and 8.2% respectively. In contrast, the chemical scientists' figure started the period with a 6.7% lead before falling in 2014 and then trailing the teaching figure by around 7.1% in 2021.

Table 42: Comparison with primary and nursery education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	623.5	**100.0**	661.6	**100.0**	741.5	**100.0**
Chemical scientists	665.2	**106.7**	626.4	**94.7**	688.6	**92.9**
Biological scientists and biochemists	636.1	**102.0**	732.1	**110.7**	747.5	**100.8**
Physical scientists	698.8	**112.1**	725.8	**109.7**	802.6	**108.2**

Indexed differentials of average gross earnings, 2007, 2014 and 2021

Comparisons of secondary school teachers' average gross earnings with those for all three scientific groups illustrates that scientists have higher earnings generally, with the exception of chemical scientists in 2014 and 2021 when this group's average gross earnings were worth 93.2% and 96.2% of the secondary school equivalent. The equivalent positions for biologists and physical scientists in 2021 were near parity and a lead of 5% respectively.

Table 43: Comparison with secondary education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	689.7	**100.0**	716.7	**100.0**	803.8	**100.0**

Chemical scientists	748.2	**108.5**	668.2	**93.2**	773.3	**96.2**
Biological scientists and biochemists	710.8	**103.1**	779.0	**108.7**	803.7	**100.0**
Physical scientists	751.1	**108.9**	896.3	**125.1**	844.3	**105.0**

A comparison with teachers in primary and nursery schools shows that the science professions earned more in every one of the years although the difference was only marginal for chemists in 2014 and 2021. In 2021, for instance, the chemical and biological scientists' leads were 2.8% and 6.8% respectively while for physical scientists it was even higher at 12.2%.

Table 44: Comparison with primary and nursery education teachers based on average gross earnings

	2007		**2014**		**2021**	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	628.6	**100.0**	667.0	**100.0**	752.3	**100.0**
Chemical scientists	748.2	**119.0**	668.2	**100.2**	773.3	**102.8**
Biological scientists and biochemists	710.8	**113.1**	779.0	**116.8**	803.7	**106.8**
Physical scientists	751.1	**119.5**	896.3	**134.4**	844.3	**112.2**

b) Engineering professionals

Indexed differentials of median gross earnings, 2007, 2014 and 2021

Table 46 below demonstrates that median gross earnings for engineering professionals were behind those for secondary education teachers in 2007 by 3.6% whereas the corresponding figure for 2014 represented a 5% lead. By 2021, this differential was maintained with the engineering figure standing at £837.40 per week..

Table 45: Comparison with secondary education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	676.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Engineering professionals	659.6	**97.4**	747.4	**105.0**	837.4	**105.0**

A comparison of the median gross earnings of engineering professionals with those for primary school teachers is presented in Table 47 showing a similar pattern emerged although engineers were paid more in all three years. The engineering figures started the period with a lead of 5.8% before rising to 13% in 2014 and then falling back very slightly to 12.9% in 2021.

Table 46: Comparison with primary and nursery education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	623.5	**100.0**	661.6	**100.0**	741.5	**100.0**
Engineering professionals	659.6	**105.8**	747.4	**113.0**	837.4	**112.9**

Indexed differentials of average gross earnings, 2007, 2014 and 2021

An examination of the average gross earnings in each of the three years under review is illustrated in Tables 48 and 49 below. These demonstrate that the figures for engineering professionals were ahead of those for both secondary and primary school teachers in almost all three years. The engineering average gross earnings figure finished the period 8.8% and 16.2% ahead of the corresponding figures for secondary and primary school teachers.

Table 47: Comparison with secondary education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**

Secondary education teaching professionals	689.7	**100.0**	716.7	**100.0**	803.8	**100.0**
Engineering professionals	687.5	**99.7**	795.5	**111.0**	874.2	**108.8**

Table 48: Comparison with primary and nursery education teachers based on average gross earnings

	2007		**2014**		**2021**	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	628.6	**100.0**	667.0	**100.0**	752.3	**100.0**
Engineering professionals	687.5	**109.4**	795.5	**119.3**	874.2	**116.2**

c) Information technology and telecommunications

Indexed differentials of median gross earnings, 2007, 2014 and 2021

Median gross earnings for information technology specialists were higher than the secondary school equivalents in all three years as shown in Table 49 below. In fact, the gap widened from 3.6% in 2007 to 9.5% in 2014 before finishing at 12% in 2021.

Table 49: Comparison with secondary education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	676.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Information technology and telecommunications professionals	701.5	**103.6**	779.1	**109.5**	893.1	**112.0**

A similar pattern was evident when the median gross earnings of information technologists were compared to those of primary and nursery teachers although differentials were larger. For instance, the IT group figure was 12.5% higher in 2007, rising to a gap of 17.8% before finishing the period in 2021 with a 20.4% differential as illustrated in Table 51 below.

Table 50: Comparison with primary and nursery education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	623.5	**100.0**	661.6	**100.0**	741.5	**100.0**
Information technology and telecommunications professionals	701.5	**112.5**	779.1	**117.8**	893.1	**120.4**

Indexed differentials of average gross earnings, 2007, 2014 and 2021

An analysis of average gross earnings illustrates that information technology professionals were even further ahead as shown in the following two tables. In Table 51, for example, information technology earnings started the period 10.1% ahead of the secondary school teacher group. By 2014, the level was 17% higher before finishing with a wider gap of 18.9% in 2021.

Table 51: Comparison with secondary education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	689.7	**100.0**	716.7	**100.0**	803.8	**100.0**
Information technology and telecommunications professionals	759.3	**110.1**	838.5	**117.0**	955.4	**118.9**

Differentials were even wider when a similar comparison with primary teachers was made. For example, information technologists started the period in 2007 with a 20.8% lead before increasing to 25.7% in 2014. In 2021, the gap was widest with a difference of 27% in favour of the IT group.

Table 52: Comparison with primary and nursery education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	628.6	**100.0**	667.0	**100.0**	752.3	**100.0**
Information technology and telecommunications professionals	759.3	**120.8**	838.5	**125.7**	955.4	**127.0**

Health professionals

Health professionals and pharmacists

Indexed differentials of median gross earnings, 2007, 2014 and 2021

Tables 53 and 54 demonstrate that the median gross earnings leads of health professionals and pharmacists over secondary and primary and nursery education teachers were greater than those shown by the comparisons based on median basic earnings. As before, differentials relating to the pharmacist group were smaller than those for the health professionals with the respective figures in 2021 standing at 3.5% and 13.5% higher than that for secondary teachers.

Table 53: Comparison with secondary education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	676.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Health professionals	1,008.8	**149.0**	915.5	**128.7**	905.1	**113.5**
Pharmacists	674.6	**99.7**	783.7	**110.1**	824.2	**103.4**

As with many of the other professions, differentials compared with the primary and nursery teaching group were even larger than those relating to the secondary group. Across the whole period, for example, they ranged from 8.2% in favour of pharmacists in 2007 up to 61.8% for health professionals in the same year. Gaps continued to be large over the next two periods with the final position in 2021 showing a median gross earnings lead of 11.2% in favour of pharmacists and 22.1% for health professionals.

Table 54: Comparison with primary and nursery education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	623.5	**100.0**	661.6	**100.0**	741.5	**100.0**
Health professionals	1,008.8	**161.8**	915.5	**138.4**	905.1	**122.1**
Pharmacists	674.6	**108.2**	783.7	**118.5**	824.2	**111.2**

Indexed differentials of average gross earnings, 2007, 2014 and 2021

When figures for the two health groups and both types of teachers were analysed based on average gross earnings a different pattern was exhibited. For instance, while the health professional group's average gross earnings finished 29.5% ahead of secondary teachers, the corresponding figure for pharmacists was almost the same as the teaching group's amount. The pharmacist group figure was unusual as it was the only non-teaching profession where the average was lower than the corresponding median.

Table 55: Comparison with secondary education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	689.7	**100.0**	716.7	**100.0**	803.8	**100.0**
Health professionals	1,178.6	**170.9**	1,135.2	**158.4**	1,040.8	**129.5**
Pharmacists	651.4	**94.4**	788.7	**110.0**	800.6	**99.6**

Unlike the previous table based on comparisons with secondary teachers, differentials between the two health groups and primary and nursery teachers showed that the teaching group averages were lower throughout the period. For example, the pharmacists' figure was 3.6% ahead in 2007 while the differential increased to 18.2% in 2014 before finishing the period with a gap of 6.4%. The health professionals' amounts were even more substantial, starting the period with a 87.5% lead before narrowing to 70.2% in 2014 and then again in 2021 to 38.3%.

Table 56: Comparison with primary and nursery education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	628.6	**100.0**	667.0	**100.0**	752.3	**100.0**
Health professionals	1,178.6	**187.5**	1,135.2	**170.2**	1,040.8	**138.3**
Pharmacists	651.4	**103.6**	788.7	**118.2**	800.6	**106.4**

Business, research, media and public service professionals

a) Legal professionals

Indexed differentials of median gross earnings, 2007, 2014 and 2021

Legal professionals are another relatively well-paid group with large differentials in every year as Table 58 below shows. For example the median gross earnings of legal professionals in 2021 were 26.2% higher than the secondary education equivalent. The corresponding differential with primary school teachers was 35.7%.

Table 57: Comparison with secondary education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	676.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Legal professionals	869.8	**128.5**	862.4	**121.2**	1,006.2	**126.2**

Table 58: Comparison with primary and nursery education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	623.5	**100.0**	661.6	**100.0**	741.5	**100.0**
Legal professionals	869.8	**139.5**	862.4	**130.4**	1,006.2	**135.7**

Indexed differentials of average gross earnings, 2007, 2014 and 2021

Table 59: Comparison with secondary education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	689.7	**100.0**	716.7	**100.0**	803.8	**100.0**
Legal professionals	1,020.8	**148.0**	1,084.3	**151.3**	1,256.6	**156.3**

Gaps between legal professionals' and secondary school teachers' average gross earnings were even larger in all three years. In 2021, the average gross earnings figure for legal professionals was 56.3% greater than the corresponding amount for secondary teachers and the differential was 67% relative to the equivalent primary school teacher amount – both substantial leads and higher than the equivalent levels in 2007 and 2014.

Table 60: Comparison with primary and nursery education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	628.6	**100.0**	667.0	**100.0**	752.3	**100.0**
Legal professionals	1,020.8	**162.4**	1,084.3	**162.6**	1,256.6	**167.0**

b) Chartered accountant and management consultants

Professions included in the business, research and administrative category are usually considered to be relatively well-paid and this proved to be partially true, at least when compared with the two teaching groups. For example, chartered accountants and management consultants showed median gross earnings that were greater than those of the two teaching groups in most years.

Median gross earnings of chartered accountants started the period in 2007 some 0.7% ahead of those of secondary school teachers while the corresponding figure was 2.9% in 2014 before finishing the period 1.5% ahead in 2021. The equivalent differentials for management consultants were also all positive and stood at 12.4%, 9.8% and 4.8% respectively.

Table 61: Comparison with secondary education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	676.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Chartered and certified accountants	681.9	**100.7**	732.3	**102.9**	809.3	**101.5**
Management consultants and business analysts	760.9	**112.4**	781.1	**109.8**	835.5	**104.8**

Table 62 shows that the pattern was slightly different when comparisons with primary and nursery education teachers were made with the non-teaching figures higher in every case. For example, chartered accountants finished the period with median gross earnings 9.1% higher than those of primary school teachers while the management consultant lead was 12.7%.

Table 62: Comparison with primary and nursery education teachers based on median gross earnings

	2007		2014		2021	
Description	£pw	Index	£pw	Index	£pw	Index
Primary and nursery education teaching professionals	623.5	**100.0**	661.6	**100.0**	741.5	**100.0**
Chartered and certified accountants	681.9	**109.4**	732.3	**110.7**	809.3	**109.1**
Management consultants and business analysts	760.9	**122.0**	781.1	**118.1**	835.5	**112.7**

Indexed differentials of average gross earnings, 2007, 2014 and 2021

An examination of average gross earnings differentials showed these were wider than for the corresponding median comparisons. For example, in 2021, chartered accountants had average gross earnings which were 10% greater than the equivalent secondary school teacher figure while the differential with management consultants was greater at 14.6%.

Table 63: Comparison with secondary education teachers based on average gross earnings

	2007		2014		2021	
Description	£pw	Index	£pw	Index	£pw	Index
Secondary education teaching professionals	689.7	**100.0**	716.7	**100.0**	803.8	**100.0**
Chartered and certified accountants	743.7	**107.8**	795.8	**111.0**	884.5	**110.0**
Management consultants and business analysts	885.6	**128.4**	862.6	**120.4**	921.0	**114.6**

As in the case of the other groups, the differences were wider when compared to primary and nursery school teachers. In fact, average gross earnings of chartered accountants stood at 17.6% ahead and management consultants 22.4% ahead of those for primary teachers in 2021. The gaps were even larger in 2007 and 2014 as the table below also shows.

Table 64: Comparison with primary and nursery education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	628.6	**100.0**	667.0	**100.0**	752.3	**100.0**
Chartered and certified accountants	743.7	**118.3**	795.8	**119.3**	884.5	**117.6**
Management consultants and business analysts	885.6	**140.9**	862.6	**129.3**	921.0	**122.4**

Architects, Town Planners and Surveyors

Chartered surveyors

Indexed differentials of median gross earnings, 2007, 2014 and 2021

Chartered surveyors are one of the lower-paid non-teaching groups in England and this is reflected in Table 66 below. Based on an analysis of median gross earnings, it shows that the figures for chartered surveyors were lower than those for secondary teachers in all three years with the gap growing. In 2007, for example, the differential was 0.5% while this widened to 6.6% in 2014 and further to just over 5% in 2021.

Table 65: Comparison with secondary education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	676.9	**100.0**	711.5	**100.0**	797.3	**100.0**
Chartered surveyors	673.6	**99.5**	664.6	**93.4**	756.0	**94.8**

In contrast, the median gross earnings figures for chartered surveyors started the period 8% ahead of those of primary school teachers and stayed marginally ahead in 2014 but fell slightly with a small lead of 2% in 2021.

Table 66: Comparison with primary and nursery education teachers based on median gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	623.5	**100.0**	661.6	**100.0**	741.5	**100.0**
Chartered surveyors	673.6	**108.0**	664.6	**100.5**	756.0	**102.0**

Average gross earnings exhibited a different picture, exceeding the corresponding amounts for both teaching groups in most years. The secondary teacher analysis showed that the surveying group started the period in 2007 with a 6% lead whereas in 2014 and 2021 there was near parity with the teaching group amounts only marginally ahead as shown in Table 68 below.

Indexed differentials of average gross earnings, 2007, 2014 and 2021

Table 67: Comparison with secondary education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Secondary education teaching professionals	689.7	**100.0**	716.7	**100.0**	803.8	**100.0**
Chartered surveyors	731.4	**106.0**	716.2	**99.9**	800.8	**99.6**

In contrast, chartered surveyors' average gross earnings were higher than those of primary and nursery teachers in every year. For instance, there were leads of 6.4% in 2007 and 2021 and a differential of 7.4% in 2014.

Table 68: Comparison with primary and nursery education teachers based on average gross earnings

	2007		2014		2021	
Description	**£pw**	**Index**	**£pw**	**Index**	**£pw**	**Index**
Primary and nursery education teaching professionals	628.6	**100.0**	667.0	**100.0**	752.3	**100.0**
Chartered surveyors	731.4	**116.4**	716.2	**107.4**	800.8	**106.4**

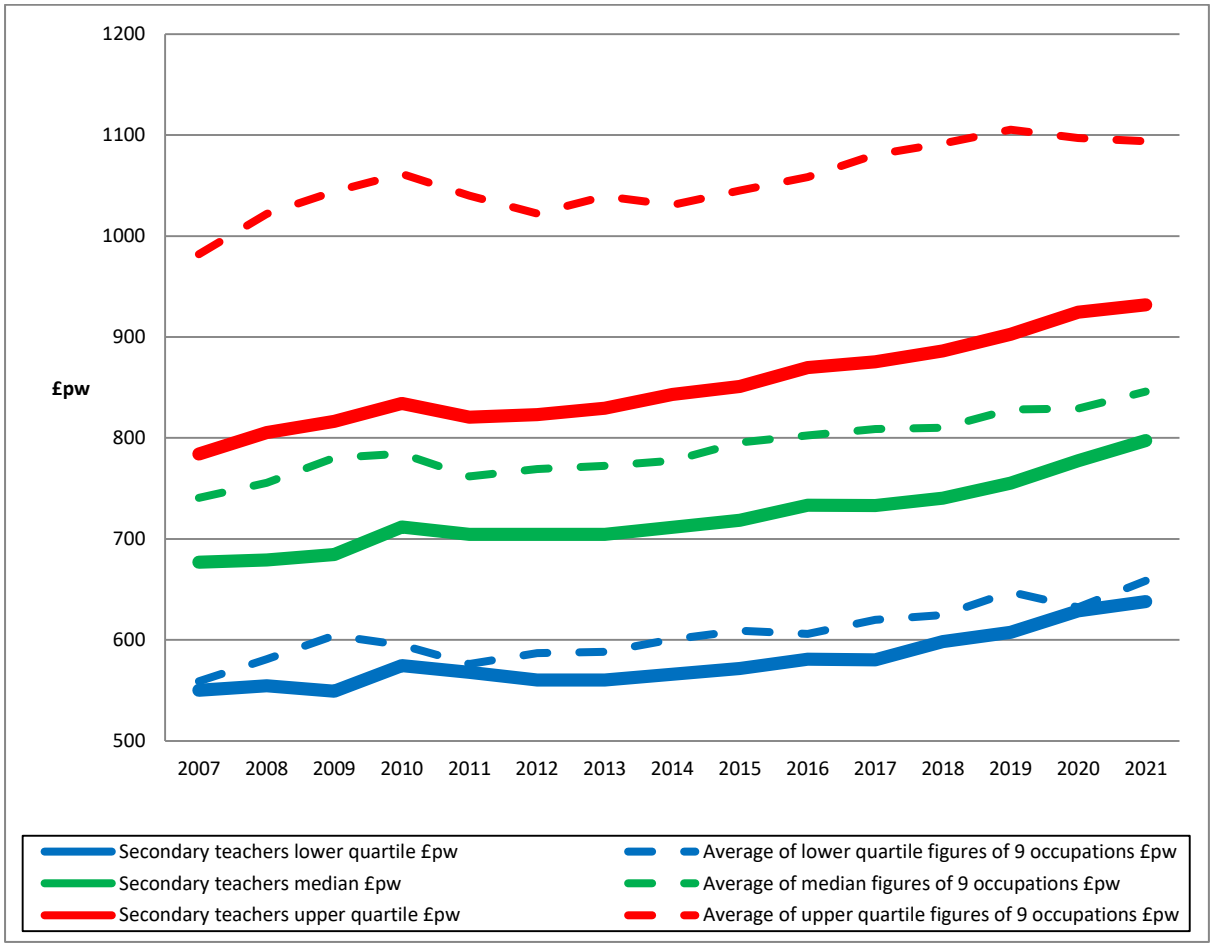
5.8. Analysis of quartiles

This year, the STRB expressed its wish to more closely review the pay arrangements for school teachers taking on additional management and leadership responsibilities as well as the opportunity to review the existing leadership pay framework. For the last few years, we have extended our reports to include some of the pay levels that such reviews would no doubt cover. For example, we analysed both upper as well as lower quartile gross earnings figures and we again replicate this in our latest report. Fortunately, the ONS data offering makes such an analysis possible because, in addition to median and average levels, it includes figures that represent amounts earned at 10% intervals throughout the pay range as well as lower and upper quartile levels.

To gain an even closer understanding of some of these higher rates, in the last two years we extended the research further by also considering some of the higher decile levels that the ONS also discloses. This is particularly important because, like the STRB, many in the teaching profession also recognise that the pay levels of some of these more senior roles require closer inspection.

Some of the main findings based on these figures are summarised in the introduction but the full analyses are presented here. Figure 22 below repeats the aggregate picture by plotting the difference between the lower quartile, median and upper quartile gross earnings for secondary school teachers for every year between 2007 and 2021 against the combined aggregate equivalent figures for the nine non-teaching comparators.

Figure 22: Comparison of lower quartile, median and upper quartile gross earnings per week for secondary school teachers and non-teaching combined comparator group 2007 to 2021



Source: ASHE

Each of the combined figures is calculated by taking the average of the nine individual professions' lower quartile, median and upper quartile figures. In total, data from only nine of the eleven non-teaching professions is used because the ONS did not provide quartile figures in every year for chemical and physical scientists due to sample size limitations.

As the graph shows, all three statistics – lower quartile, median and upper quartile – were greater for the non-teaching combined comparator group (represented by dotted lines) than for secondary school teachers. More notably though, an examination of the magnitude of the differentials shows that for each statistic – lower quartile, median and upper quartile – the differentials widened progressively with the smallest differentials found at lower quartile levels and the largest relating to the upper quartile figures.

By way of example, in 2021 the combined non-teaching lower quartile figure, at £658.50 per week, was 3.2% higher than the equivalent secondary school teaching figure of £637.90. At the median,

the non-teaching combined figure was £846.00 while the equivalent for teaching was £797.30. At the upper quartile, the difference was around £160 per week with the figures standing at £1,093.70 and £931.80 respectively. These represented gaps in favour of the non-teaching professions of 6.1% and 17.4%.

Just as we concluded in previous years, based on these findings, concerns that earnings differences between teachers and other professions are even greater in the higher reaches of the distribution appear to be borne out.

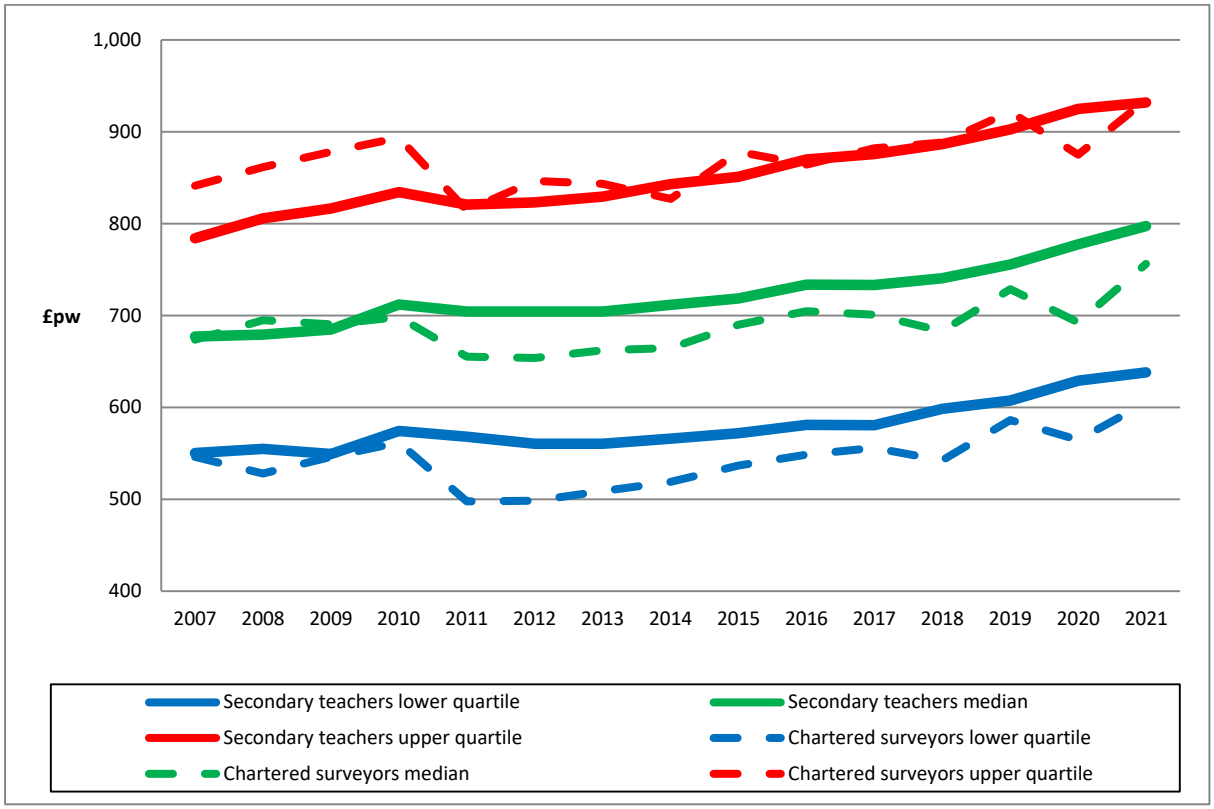
Another point to note about the graph above is that it is based on secondary school teachers, the higher-paid of the two teaching groups. Carrying out the same analysis for primary and nursery teachers produces even greater differentials. For instance, the lower and upper quartile gross earnings of primary and nursery teachers in 2021 stood at £609 and £852.40 per week which compared to equivalent amounts of £637.90 and £931.80 for secondary teachers, differentials of between 4.7% and 9.3%. When compared to the non-teaching figures, the lower and upper quartile primary and nursery amounts were even further behind with deficits of 8.1% and 28.3% respectively.

5.9. Quartile analysis by profession

As in some of the combined analysis we have conducted, we recognise that combining quartile data into one figure may risk the danger of being overly influenced by very high- or low-paying professions. In order to provide balance, therefore, we have produced similar graphs for selected non-teaching groups at the lower, middle and higher ends of the earnings distribution which are presented below.

First among this selection of these more focused graphs is the lowest-paid profession in our comparator group, chartered surveyors. The graph demonstrates two trends with a very noticeable change occurring around the time of the financial crisis. Prior to the crisis, both groups' lower quartile and median gross earnings were generally in line with one another while earnings at upper quartile levels favoured the surveyor group. Just after the financial crisis, however, the gross earnings of chartered surveyors dipped significantly before following a similar trend to the teaching group from 2011 onwards. The effect of this dip was that the lower quartile and median gross pay of surveyors fell behind those of secondary teachers while earnings for both groups at upper quartile levels were generally very similar.

Figure 23: Comparison of lower quartile, median and upper quartiles gross pay per week for secondary school teachers and chartered surveyors 2007 to 2021

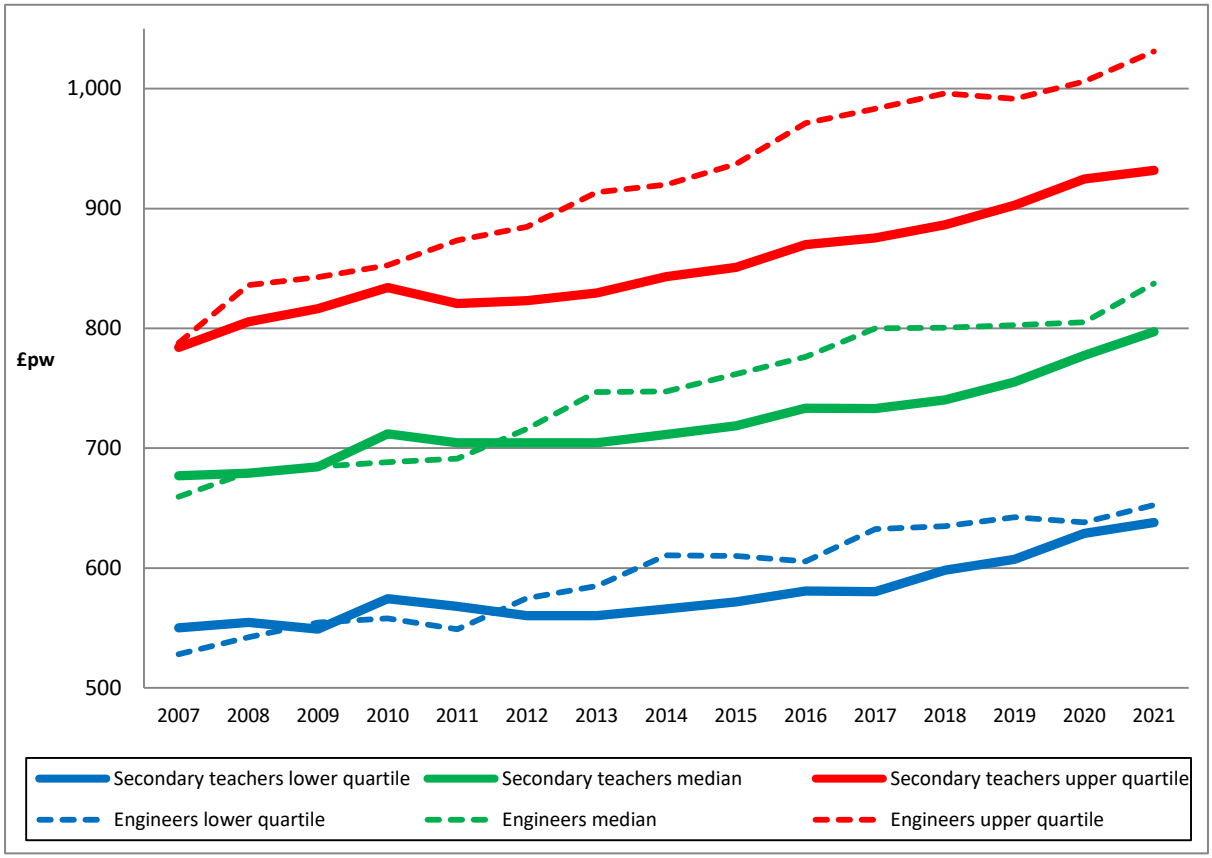


Source: ASHE

The graph above demonstrates the relative position of secondary teachers versus the lowest-paid of the non-teaching professions. Given this, it is interesting to understand how secondary teachers compare based on similar comparisons with some of the higher-paid professions. Figure 24 below, for example shows the same analysis but chartered surveyors are replaced by engineers, a mid-level non-teaching professional group in terms of gross earnings in 2021.

The graph shows that, unlike surveyors, engineers enjoyed relatively higher earnings as measured by lower quartiles, medians and upper quartiles throughout most of the last decade. A further pattern that is apparent is that the gaps between engineers' earnings and those of secondary teachers widened as we move up the earnings distribution. For example, in 2021 the lower quartile differential was 2.3% while the median was 5% and the upper quartile gap was 10.6%, all in favour of the engineering group. In monetary terms, in 2021, the engineering lower quartile, median and upper quartile gross earnings stood at £652.60, £837.40 and £1,031.00 per week respectively. This compared to figures of £637.90, £797.30 and £931.80 for secondary school teachers.

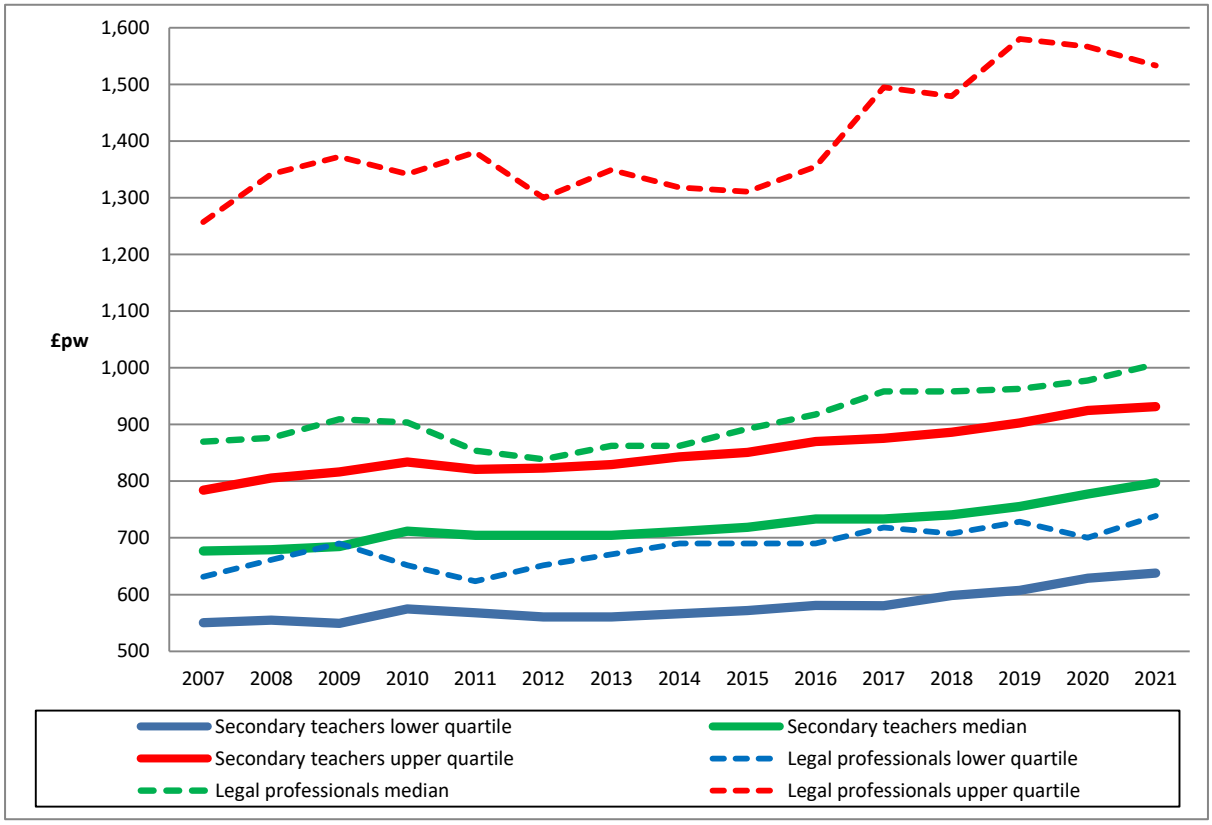
Figure 24: Comparison of lower quartile, median and upper quartiles gross pay per week for secondary school teachers and engineers 2007 to 2021



Source: ASHE

In order to provide a comprehensive picture, Figure 25 below shows the corresponding analysis for legal professionals, the highest-paid group of the comparator occupations. What it demonstrates is that legal professionals' gross earnings were significantly ahead of those for the teaching group throughout the period. For instance, as the graph shows, the differentials were relatively stable throughout the three years. In 2021, the secondary teachers' lower quartiles, medians and upper quartiles trailed the legal equivalents by 15.8%, 26.2% and 64.5% respectively. In terms of monetary amounts, in 2021, the legal group's lower quartile was over £100 per week higher than the secondary teacher equivalent amount. For the median and upper quartile levels the differences grew, standing at £208.90 and £601.40 per week more in favour of lawyers. Another indication of the extent of the pay gap here is the finding that the median legal earnings figures throughout the period were actually higher than the corresponding secondary teacher upper quartile levels.

Figure 25: Comparison of lower quartile, median and upper quartiles gross pay per week for secondary school teachers and legal professionals 2007 to 2021



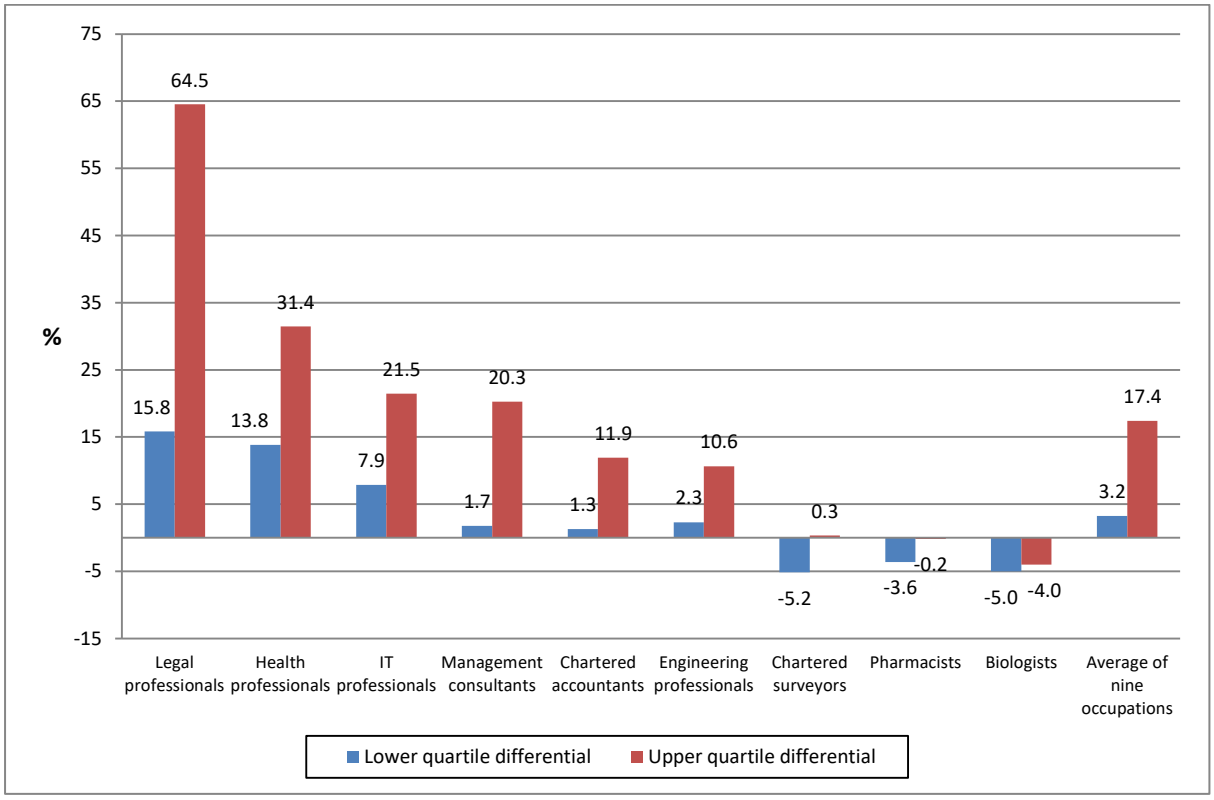
Source: ASHE

An alternative way of reflecting on the scale of the differentials that exist between the lower and upper quartile levels for each of the nine non-teaching professions and the equivalent secondary teacher figures is to compare each level individually. This is presented in Figure 24 which plots the lower and upper quartile differentials for each of the nine non-teaching professions for which data was available against the equivalent secondary teacher figures in 2021.

What the graph shows is that the secondary school teacher lower quartile figure was smaller than the equivalent figures for six of the comparator professions and higher in the case of three. Where non-teaching lower quartiles were higher, differentials ranged between 2.3% for engineering professionals and 15.8% for those in the legal sector. In contrast, the secondary teacher lower quartile was higher than the equivalent statistics for chartered surveyors, pharmacists and biologists with the shortfalls for these non-teaching groups ranging from 3.6% to 5.2%.

The graph also demonstrates that the pattern for upper quartile differentials was slightly different, with the teaching group trailing seven of the nine non-teaching professions, in some cases by very large amounts. By contrast, the only two professions showing smaller upper quartile figures than secondary teachers were pharmacists and biologists although differentials here were no more than 4%. By contrast, when upper quartile gross earnings levels of the non-teaching professions were considered, the differentials were larger, stretching from just 0.3% for chartered surveyors up to 64.5% for legal professionals.

Figure 26: Comparison of lower and upper quartile gross earnings for nine professions with secondary school teachers



Source: ASHE

As mentioned in Chapter 1, it is therefore clear that gross earnings for teachers at the upper end of the earnings distribution not only trail those for the best-paid professions but also those for most of the other professions too, in most cases by significant amounts. Shortfalls are less marked at lower quartile levels, but teachers still only find themselves no higher than mid-table position in 2021.

5.10. Decile and further analysis

The ONS also provides statistics showing the earnings levels at different points on the earnings distribution for each professional group. For example, as well as medians, averages and quartiles, it shows earnings of individuals placed at 10% intervals or deciles throughout the whole earnings range. As a result, it is possible to extend the analysis further by examining some of these specific points for each professional group where data is available.

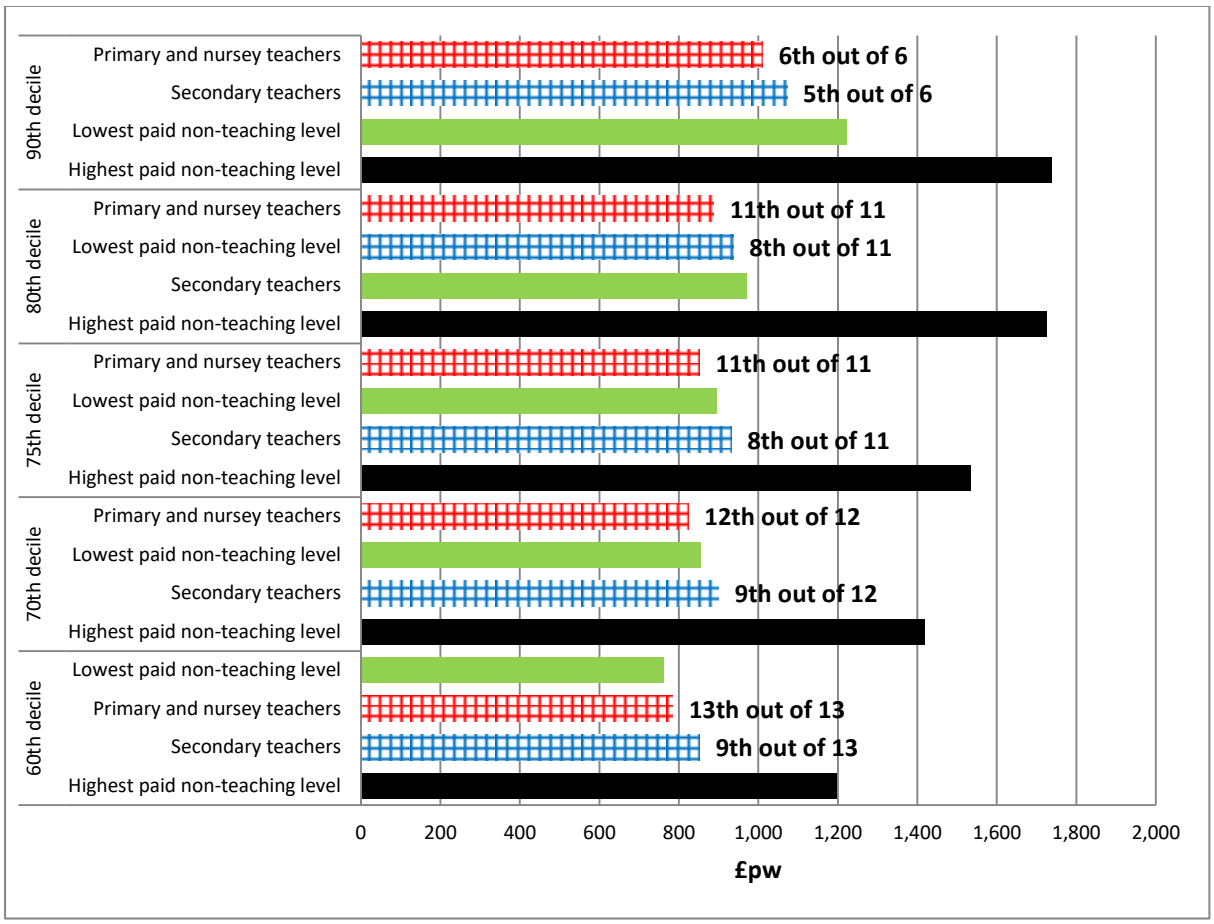
Full results are shown in Figure 27 below, illustrating the relative positions of primary and secondary school teachers for all the statistical points above the median in 10 percentage point intervals. The graph demonstrates that both teaching groups fall predominantly at or near the bottom of the

comparator table in each of these intervals. Moreover, a closer look at the top 20% of earners in each profession illustrates that the two teaching groups are the lowest-paid throughout.

At the very top and bottom of the distribution, the ONS showed lower decile gross earnings figures for eleven professions and upper decile data for six professions. Considering the eleven lower decile gross earnings amounts, the two teaching groups were placed third and fifth in the overall rankings. The secondary teacher lower decile stood at £529 per week while the corresponding primary and nursery amount was £527.40. To gain an idea of the spread of all the lower decile figures, the lowest was for pharmacists and stood at £401.80 while the highest, at £544.80, related to health professionals. Other comparatively low-paying groups included chartered surveyors, accountants and biologists with amounts that corresponded to annual salaries of between £24,000 and £26,000. This may be because these groups include individuals yet to complete their training.

At the other end of the earnings spectrum, a comparison of the upper deciles demonstrates that teachers at this level received the smallest gross earnings. While only six professions had sample sizes large enough to produce figures, the two teaching groups were placed fifth and sixth. In fact, Figure 27 below illustrates, for all the statistical points above the median level, gross earnings of both teaching groups fell predominantly at or near the bottom of the comparator table.

Figure 27: Position of both teaching groups when measured by gross earnings at higher pay levels in 2021



Source: ASHE

As mentioned earlier, these findings have important implications because in recent years, most of the focus of the STRB and its subsequent pay recommendations have been aimed at the lower end of the teachers' pay range and, in particular, new joiners. This emphasis on the lower-paid levels helps explain the smaller differentials at lower quartile levels but with less attention having been paid to the earnings of higher-paid teaching positions, differentials at upper quartile levels as shown above are significant in most cases. With indications of a growing challenge in retaining experienced classroom teachers and those in leadership roles perhaps more attention also needs to be paid to teachers' pay at higher levels to prevent the situation shown in the analysis above worsening.

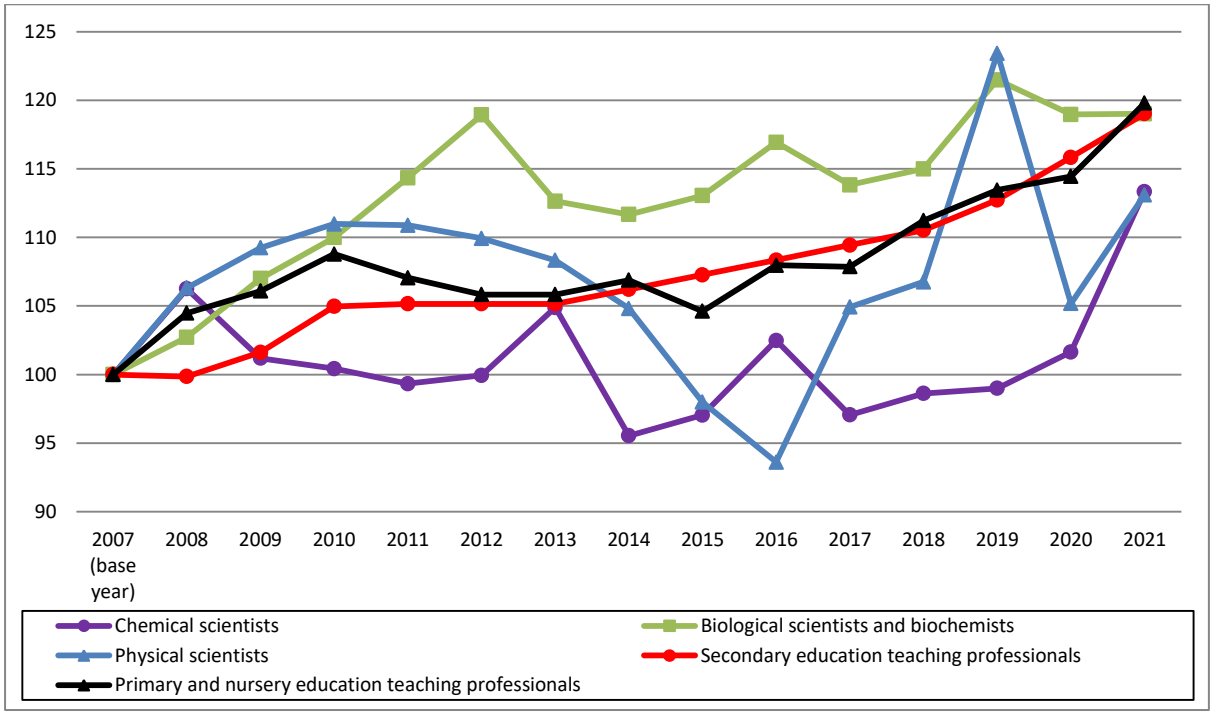
Appendices

Appendix 1: Indexed median basic weekly earnings (ASHE) 2007 to 2021

A Science, research, engineering and technology professionals

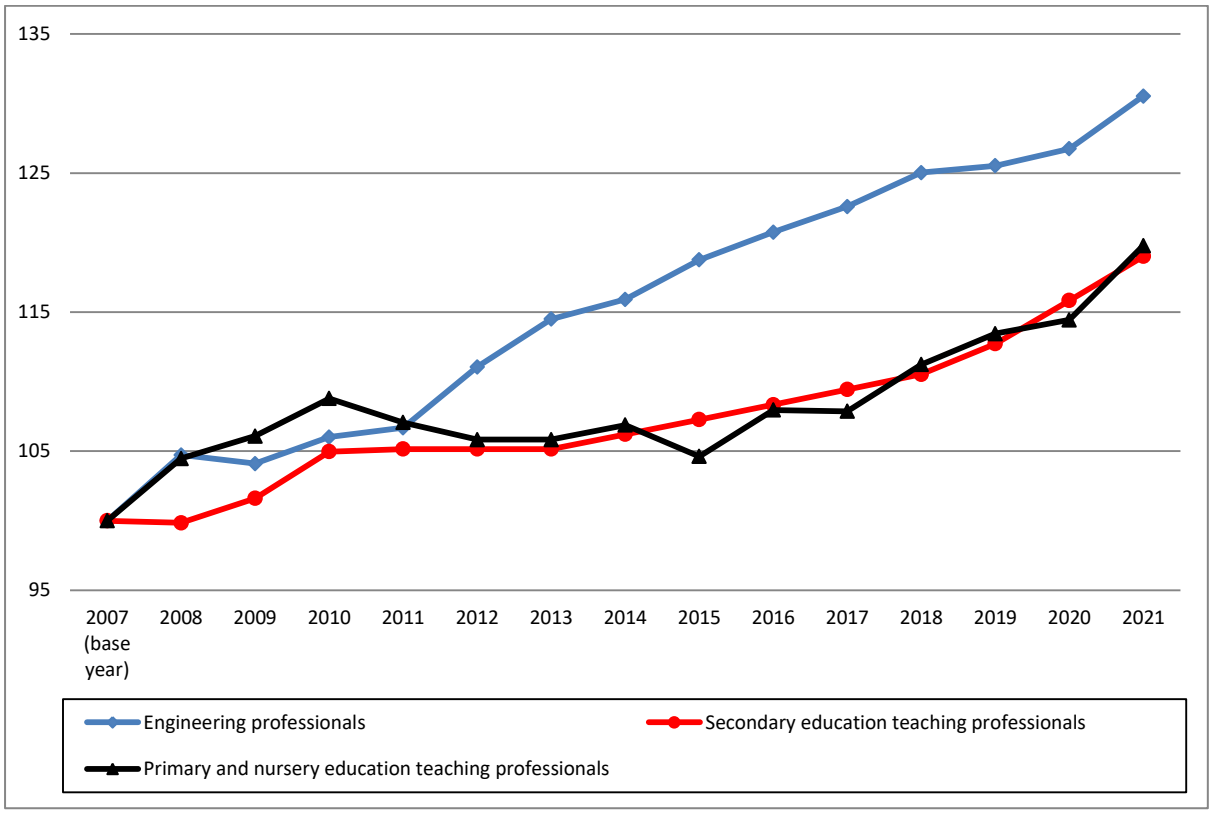
1) Chemical, biological and physical scientists

	Chemical scientists	Biological scientists and biochemists	Physical scientists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0	100.0
2008	106.3	102.7	106.3	99.9	104.5
2009	101.2	107.0	109.2	101.6	106.1
2010	100.4	110.0	111.0	105.0	108.8
2011	99.3	114.3	110.9	105.2	107.1
2012	99.9	118.9	109.9	105.2	105.8
2013	104.9	112.6	108.3	105.2	105.8
2014	95.5	111.7	104.8	106.2	106.9
2015	97.0	113.0	98.0	107.3	104.6
2016	102.5	116.9	93.6	108.3	108.0
2017	97.1	113.8	104.9	109.4	107.9
2018	98.6	115.0	106.8	110.5	111.2
2019	99.0	121.5	123.4	112.7	113.5
2020	101.6	119.0	105.2	115.8	114.4
2021	113.3	119.0	113.1	119.0	119.8



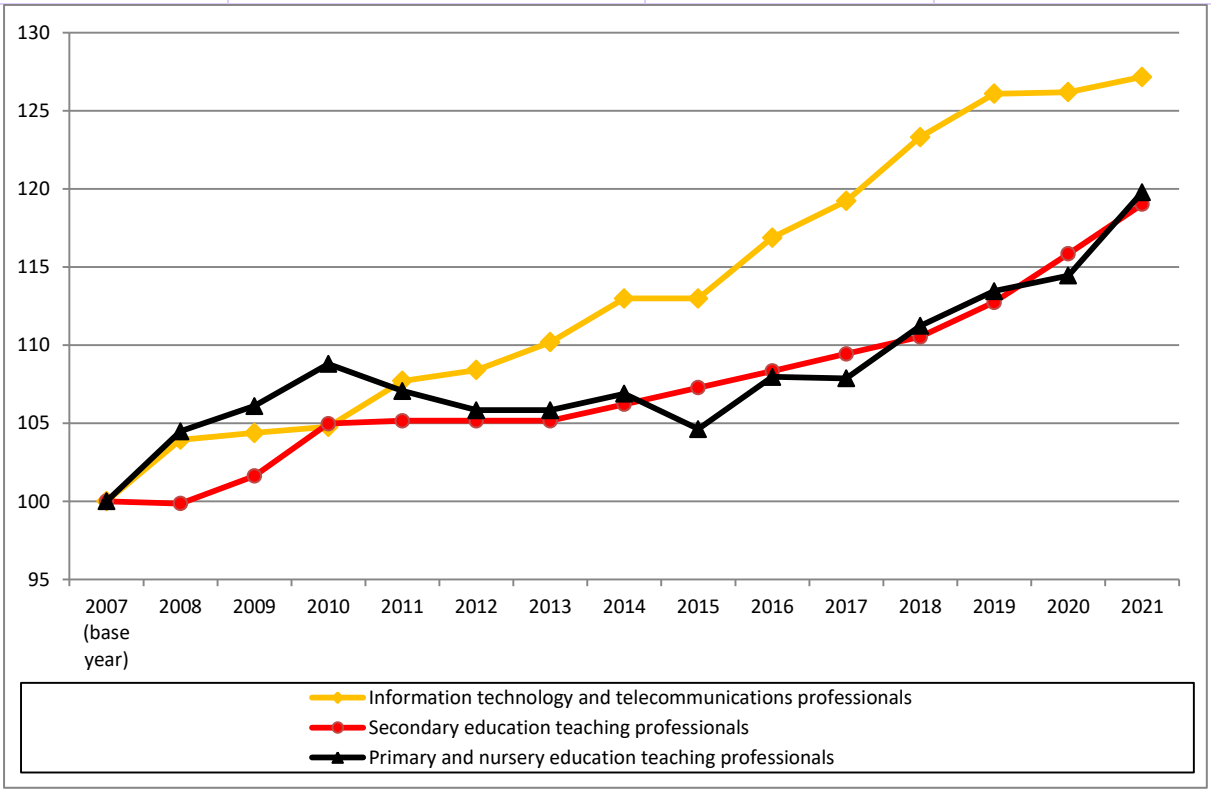
2) Engineering professionals

	Engineering professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	104.7	99.9	104.5
2009	104.1	101.6	106.1
2010	106.0	105.0	108.8
2011	106.7	105.2	107.1
2012	111.1	105.2	105.8
2013	114.5	105.2	105.8
2014	115.9	106.2	106.9
2015	118.8	107.3	104.6
2016	120.7	108.3	108.0
2017	122.6	109.4	107.9
2018	125.0	110.5	111.2
2019	125.5	112.7	113.5
2020	126.7	115.8	114.4
2021	130.5	119.0	119.8



3) Information technology and telecommunications professionals

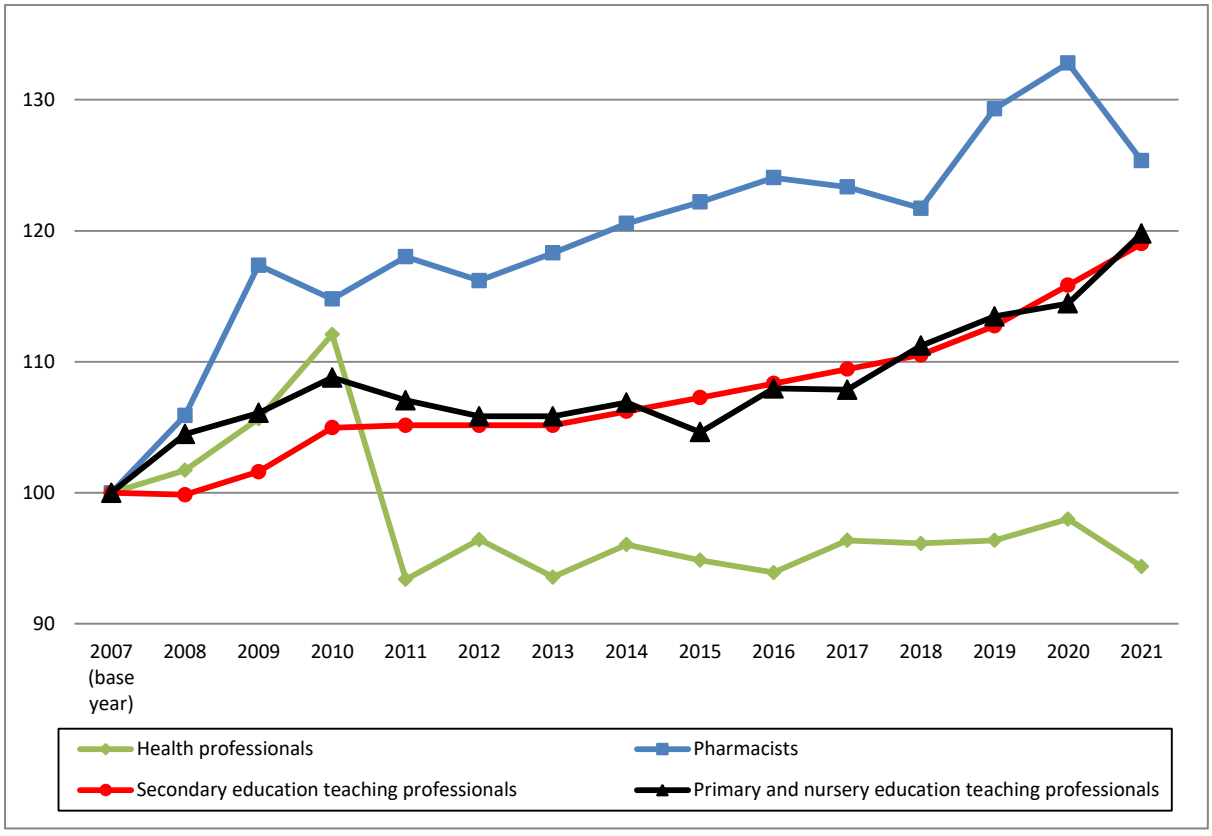
	Information technology and telecommunications professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	103.9	99.9	104.5
2009	104.4	101.6	106.1
2010	104.8	105.0	108.8
2011	107.7	105.2	107.1
2012	108.4	105.2	105.8
2013	110.2	105.2	105.8
2014	113.0	106.2	106.9
2015	113.0	107.3	104.6
2016	116.9	108.3	108.0
2017	119.2	109.4	107.9
2018	123.3	110.5	111.2
2019	126.1	112.7	113.5
2020	126.2	115.8	114.4
2021	127.2	119.0	119.8



B Health professionals

Health professionals and pharmacists

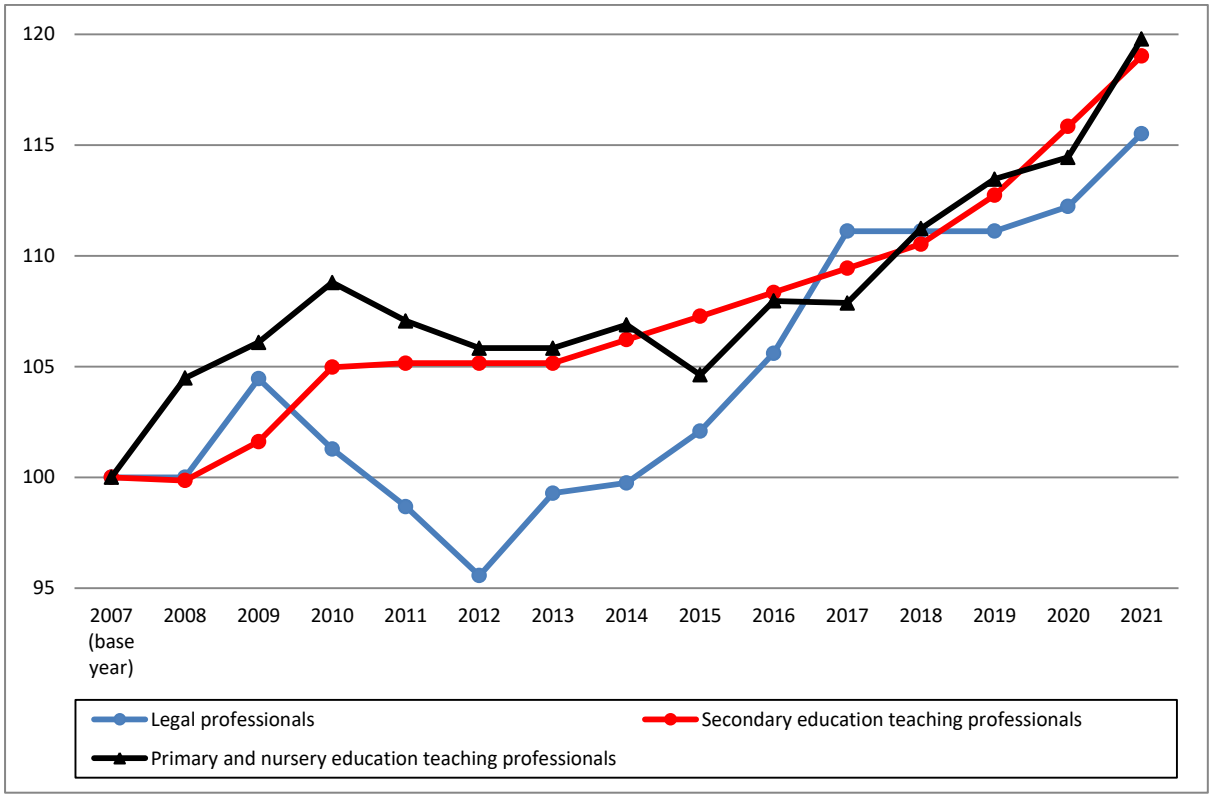
	Health professionals	Pharmacists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0
2008	101.7	105.9	99.9	104.5
2009	105.7	117.4	101.6	106.1
2010	112.1	114.8	105.0	108.8
2011	93.4	118.0	105.2	107.1
2012	96.4	116.2	105.2	105.8
2013	93.6	118.3	105.2	105.8
2014	96.1	120.6	106.2	106.9
2015	94.9	122.2	107.3	104.6
2016	93.9	124.0	108.3	108.0
2017	96.4	123.3	109.4	107.9
2018	96.1	121.7	110.5	111.2
2019	96.4	129.3	112.7	113.5
2020	98.0	132.8	115.8	114.4
2021	94.4	125.3	119.0	119.8



C Business, media and public service professionals

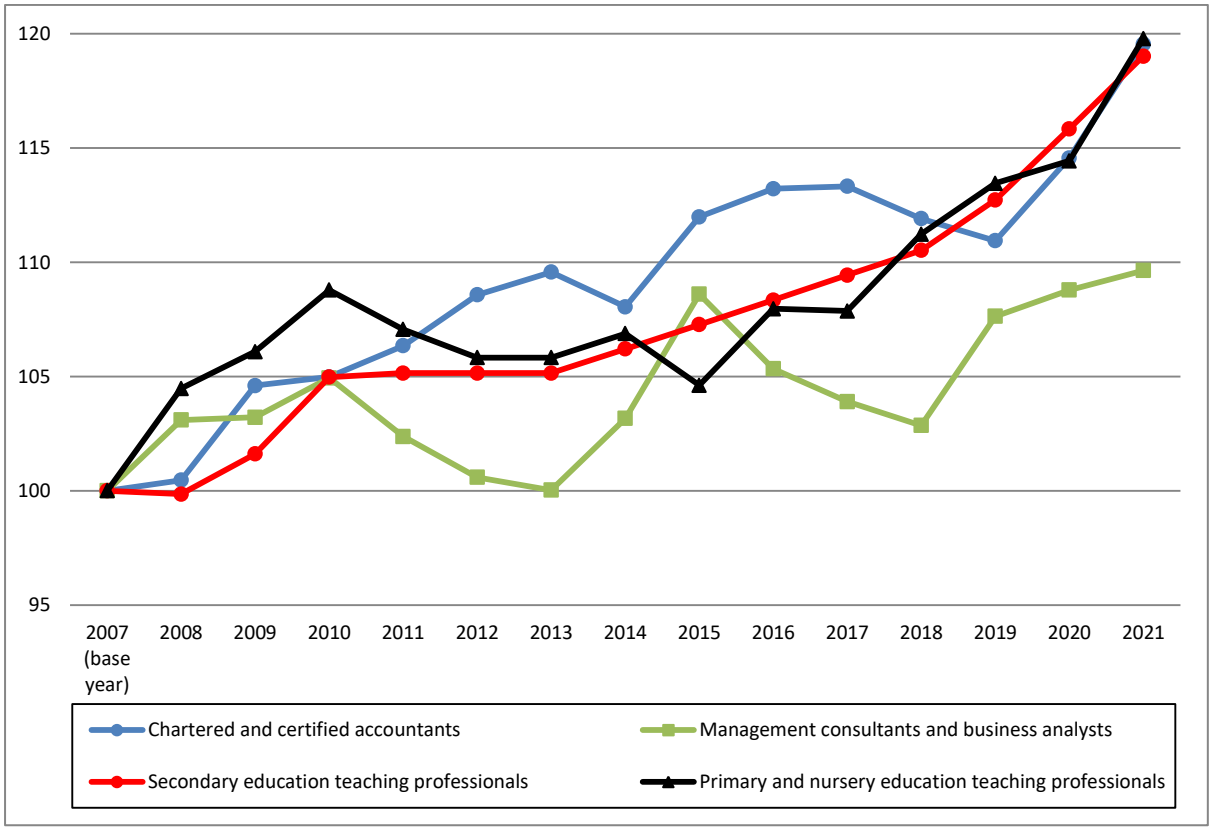
1) Legal professionals

	Legal professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	100.0	99.9	104.5
2009	104.5	101.6	106.1
2010	101.3	105.0	108.8
2011	98.7	105.2	107.1
2012	95.6	105.2	105.8
2013	99.3	105.2	105.8
2014	99.7	106.2	106.9
2015	102.1	107.3	104.6
2016	105.6	108.3	108.0
2017	111.1	109.4	107.9
2018	111.1	110.5	111.2
2019	111.1	112.7	113.5
2020	112.2	115.8	114.4
2021	115.5	119.0	119.8



2) Chartered accountants and management consultants

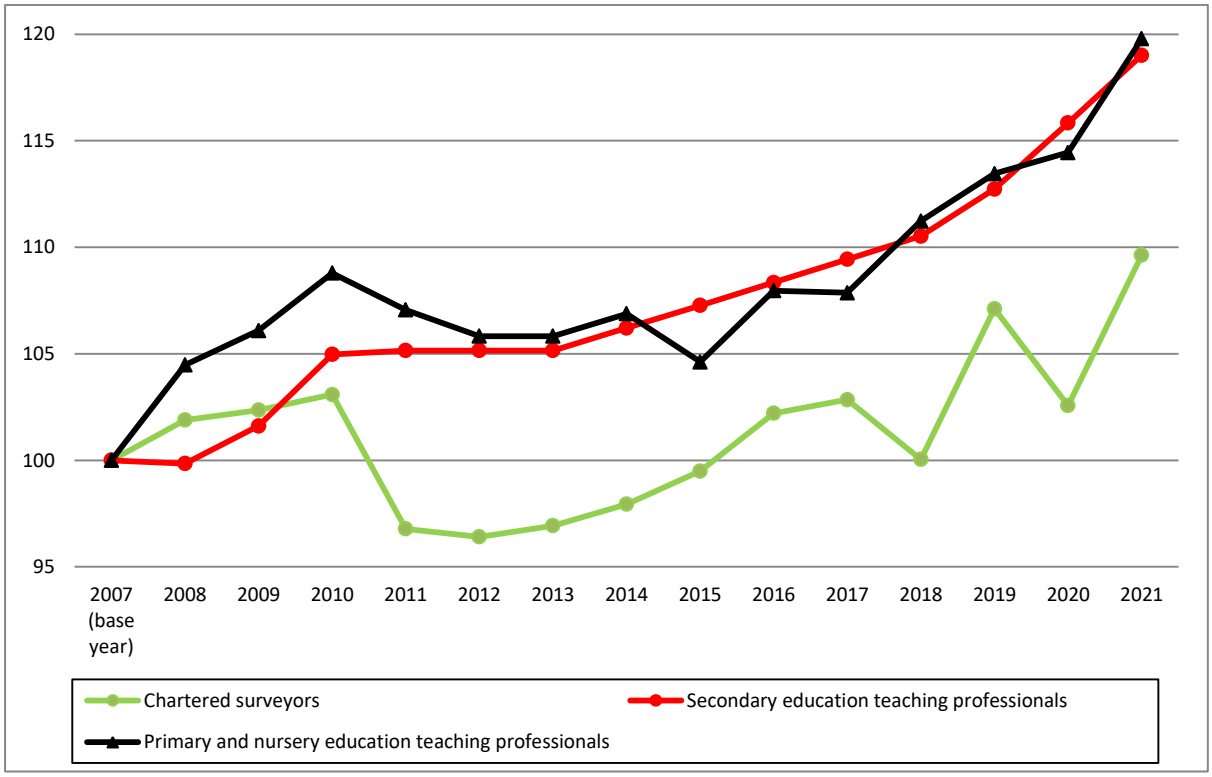
	Chartered and certified accountants	Management consultants and business analysts	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0
2008	100.5	103.1	99.9	104.5
2009	104.6	103.2	101.6	106.1
2010	105.0	104.9	105.0	108.8
2011	106.4	102.4	105.2	107.1
2012	108.6	100.6	105.2	105.8
2013	109.6	100.0	105.2	105.8
2014	108.1	103.2	106.2	106.9
2015	112.0	108.6	107.3	104.6
2016	113.2	105.3	108.3	108.0
2017	113.3	103.9	109.4	107.9
2018	111.9	102.9	110.5	111.2
2019	110.9	107.6	112.7	113.5
2020	114.6	108.8	115.8	114.4
2021	119.5	109.6	119.0	119.8



D Architects, town planners and surveying professionals

Chartered surveyors

	Chartered surveyors	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	101.9	99.9	104.5
2009	102.4	101.6	106.1
2010	103.1	105.0	108.8
2011	96.8	105.2	107.1
2012	96.4	105.2	105.8
2013	96.9	105.2	105.8
2014	97.9	106.2	106.9
2015	99.5	107.3	104.6
2016	102.2	108.3	108.0
2017	102.8	109.4	107.9
2018	100.0	110.5	111.2
2019	107.1	112.7	113.5
2020	102.6	115.8	114.4
2021	109.6	119.0	119.8

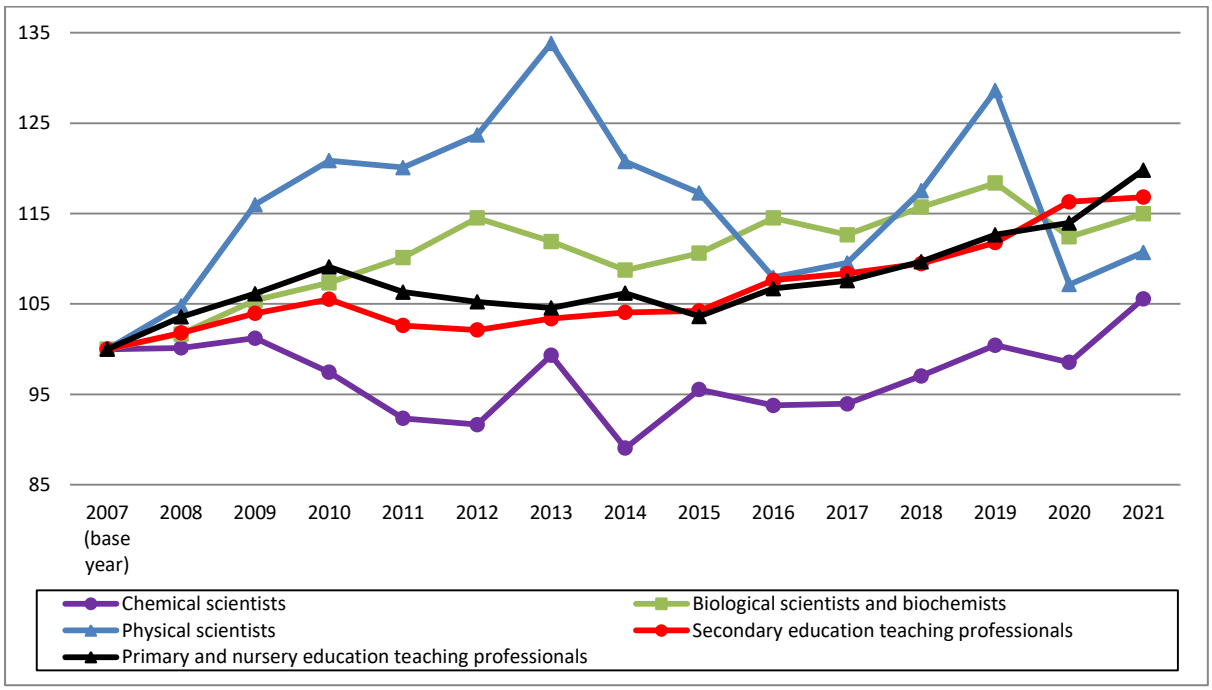


Appendix 2: Indexed average basic weekly earnings (ASHE) 2007 to 2021

A Science, research, engineering and technology professionals

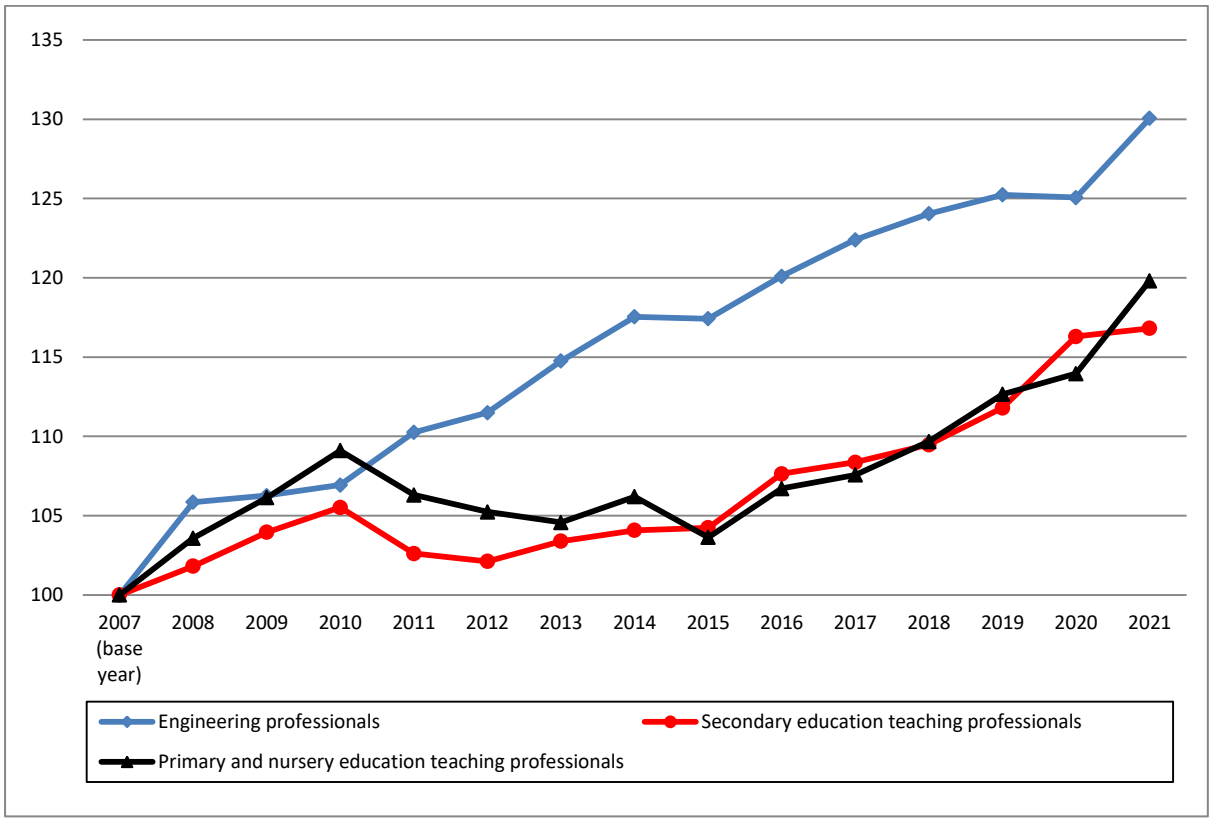
1) Chemical, biological and physical scientists

	Chemical scientists	Biological scientists and biochemists	Physical scientists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0	100.0
2008	100.1	101.7	104.8	101.8	103.6
2009	101.2	105.4	116.0	104.0	106.1
2010	97.4	107.3	120.9	105.5	109.1
2011	92.3	110.1	120.1	102.6	106.3
2012	91.7	114.5	123.7	102.1	105.2
2013	99.3	111.9	133.8	103.4	104.6
2014	89.0	108.7	120.7	104.1	106.2
2015	95.5	110.6	117.3	104.2	103.6
2016	93.8	114.5	107.9	107.6	106.7
2017	94.0	112.6	109.5	108.4	107.6
2018	97.0	115.7	117.5	109.5	109.7
2019	100.4	118.4	128.6	111.8	112.7
2020	98.5	112.4	107.2	116.3	114.0
2021	105.6	115.0	110.7	116.8	119.8



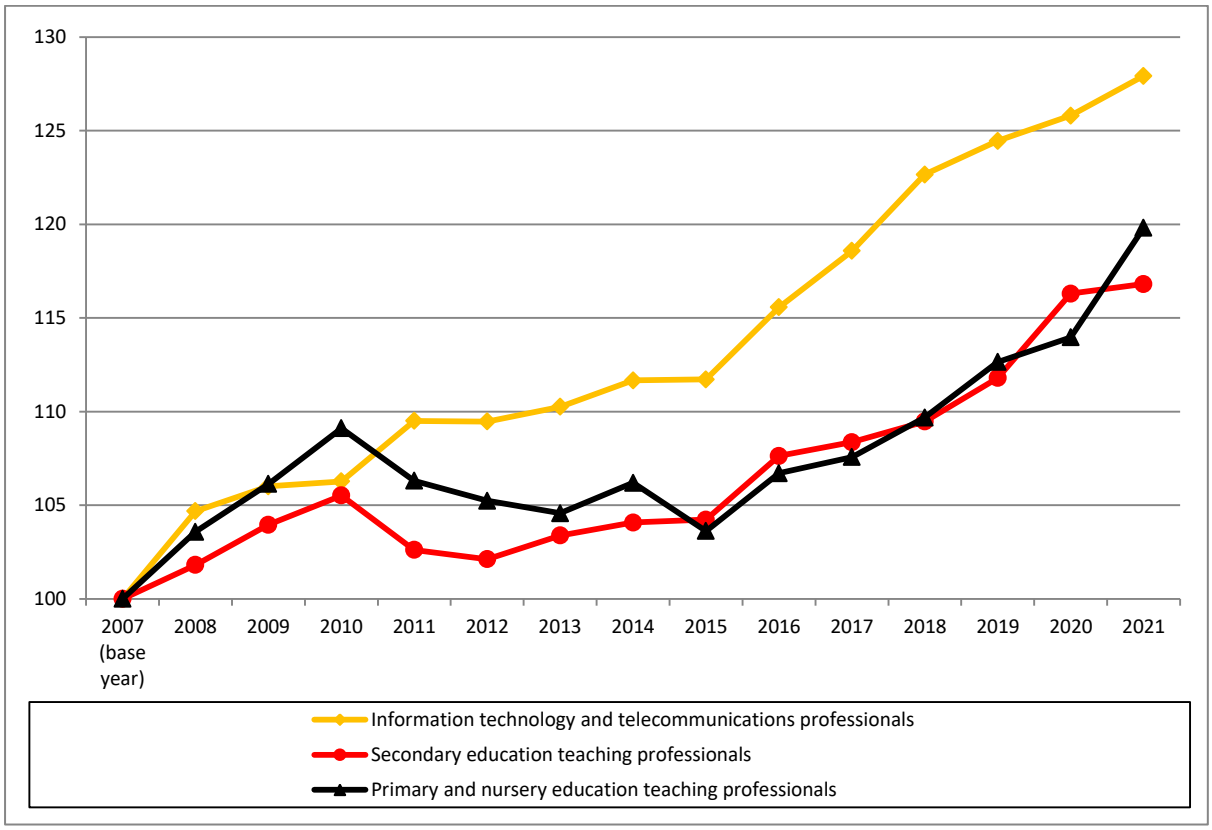
2) Engineering professionals

	Engineering professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	105.8	101.8	103.6
2009	106.3	104.0	106.1
2010	106.9	105.5	109.1
2011	110.3	102.6	106.3
2012	111.5	102.1	105.2
2013	114.8	103.4	104.6
2014	117.5	104.1	106.2
2015	117.4	104.2	103.6
2016	120.1	107.6	106.7
2017	122.4	108.4	107.6
2018	124.0	109.5	109.7
2019	125.2	111.8	112.7
2020	125.1	116.3	114.0
2021	130.1	116.8	119.8



3) Information technology and telecommunications professionals

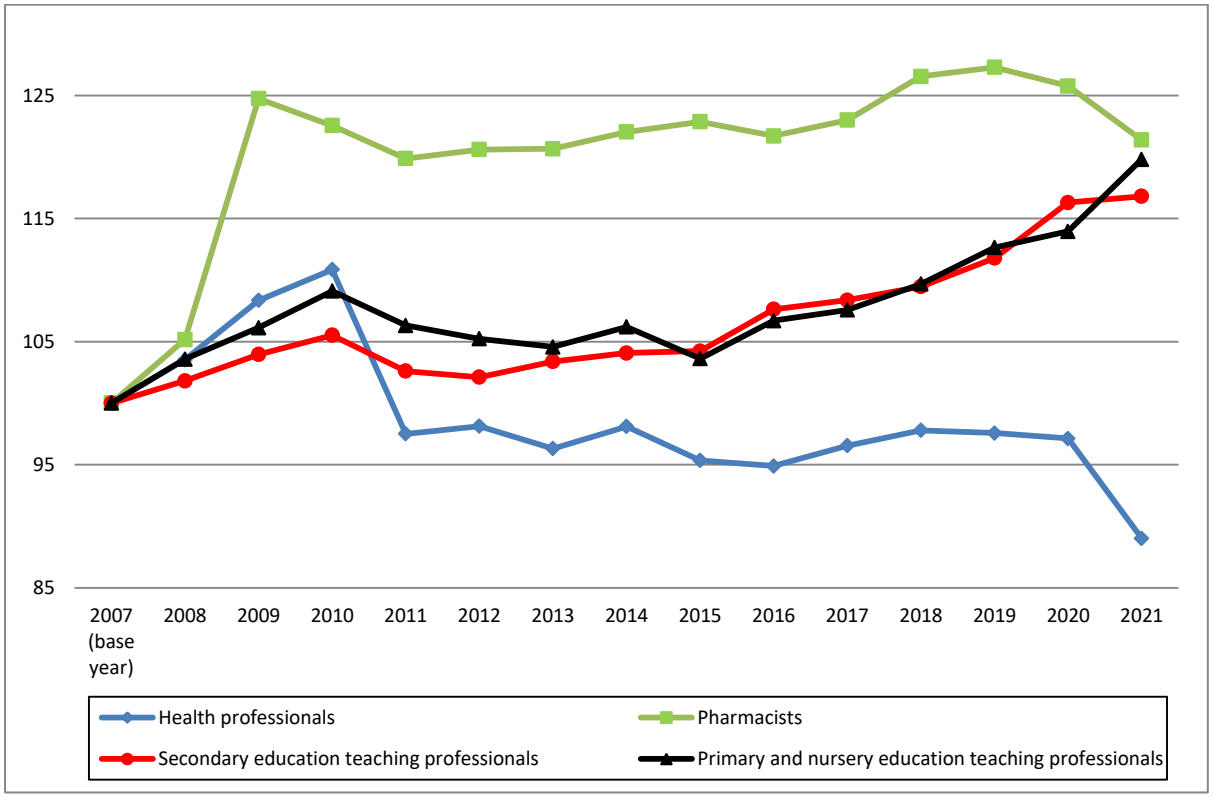
	Information technology and telecommunications professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	104.7	101.8	103.6
2009	106.0	104.0	106.1
2010	106.3	105.5	109.1
2011	109.5	102.6	106.3
2012	109.5	102.1	105.2
2013	110.3	103.4	104.6
2014	111.7	104.1	106.2
2015	111.7	104.2	103.6
2016	115.6	107.6	106.7
2017	118.6	108.4	107.6
2018	122.7	109.5	109.7
2019	124.5	111.8	112.7
2020	125.8	116.3	114.0
2021	127.9	116.8	119.8



B Health professionals

Health professionals and pharmacists

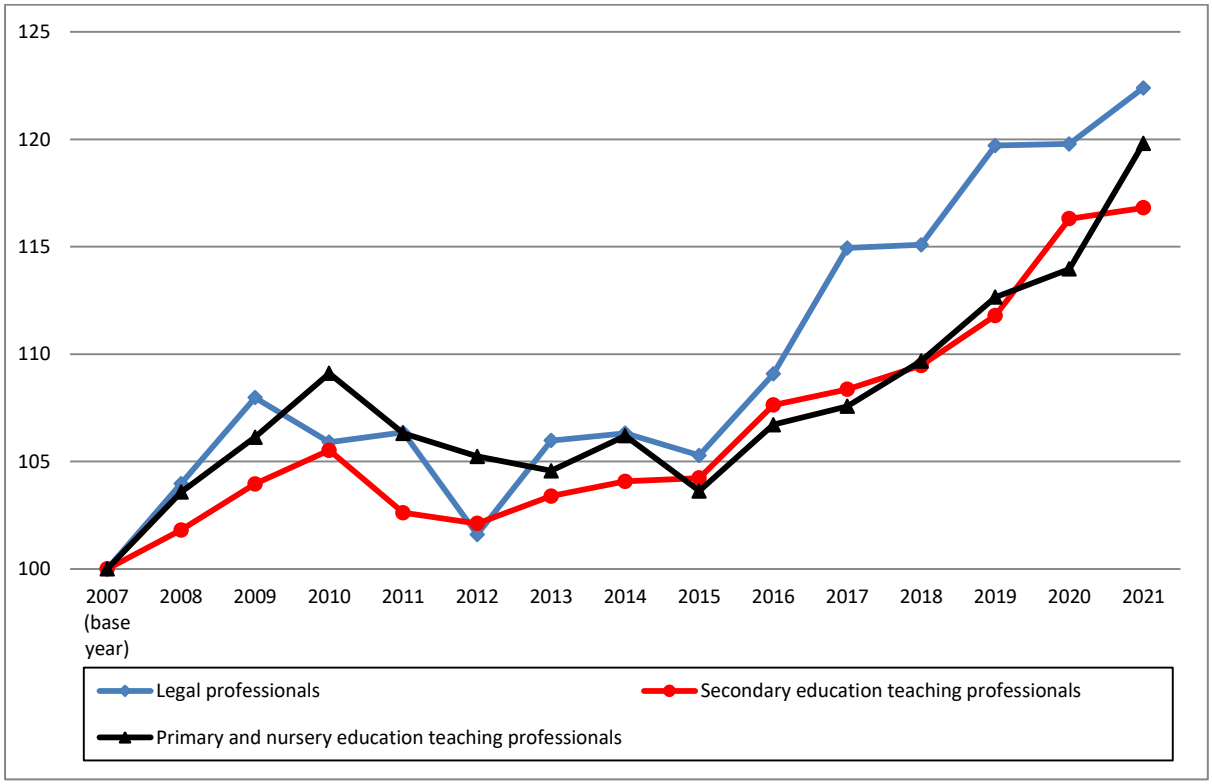
	Health professionals	Pharmacists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0
2008	103.5	105.2	101.8	103.6
2009	108.4	124.7	104.0	106.1
2010	110.8	122.6	105.5	109.1
2011	97.5	119.9	102.6	106.3
2012	98.1	120.6	102.1	105.2
2013	96.3	120.7	103.4	104.6
2014	98.1	122.0	104.1	106.2
2015	95.3	122.9	104.2	103.6
2016	94.9	121.7	107.6	106.7
2017	96.5	123.0	108.4	107.6
2018	97.8	126.6	109.5	109.7
2019	97.6	127.3	111.8	112.7
2020	97.1	125.8	116.3	114.0
2021	89.0	121.4	116.8	119.8



C Business, research and administrative professionals

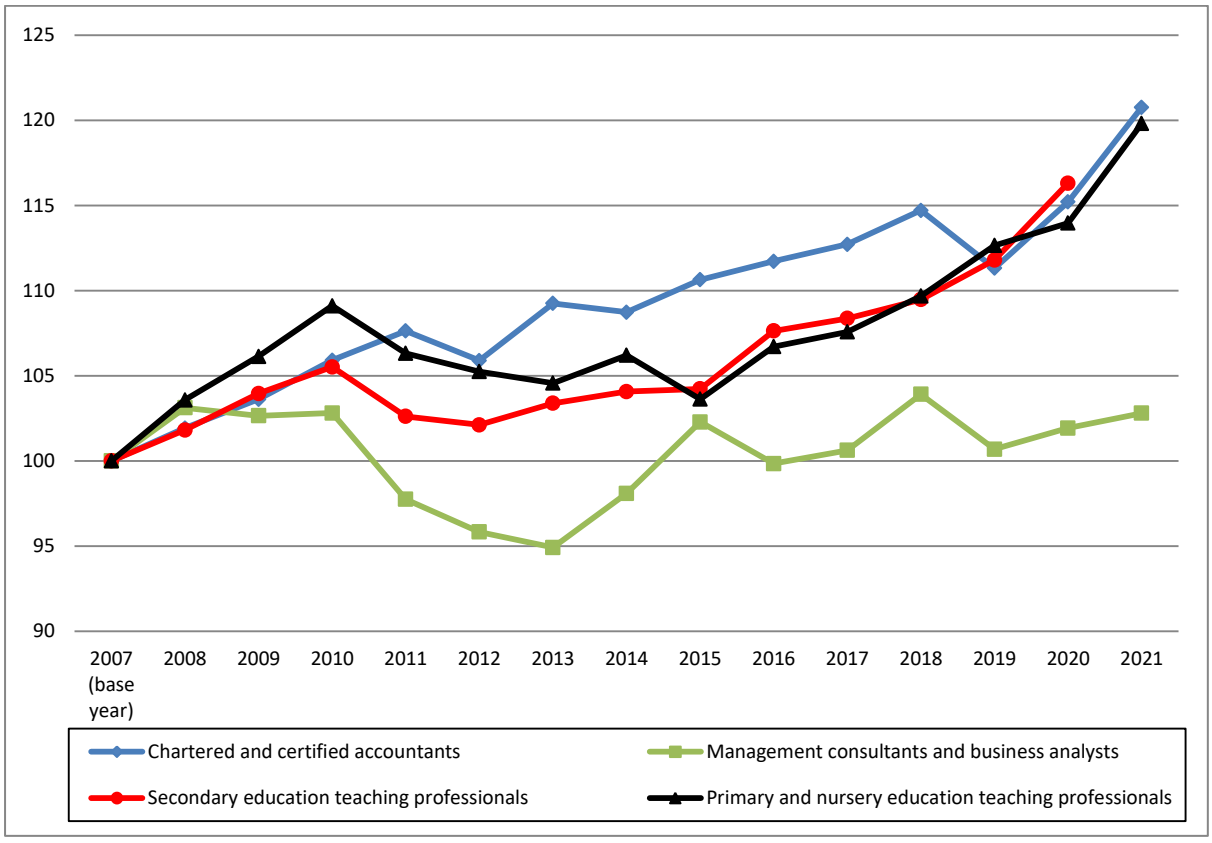
1) Legal professionals

	Legal professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	104.0	101.8	103.6
2009	108.0	104.0	106.1
2010	105.9	105.5	109.1
2011	106.4	102.6	106.3
2012	101.6	102.1	105.2
2013	106.0	103.4	104.6
2014	106.3	104.1	106.2
2015	105.3	104.2	103.6
2016	109.1	107.6	106.7
2017	114.9	108.4	107.6
2018	115.1	109.5	109.7
2019	119.7	111.8	112.7
2020	119.8	116.3	114.0
2021	122.4	116.8	119.8



2) Chartered accountants and management consultants

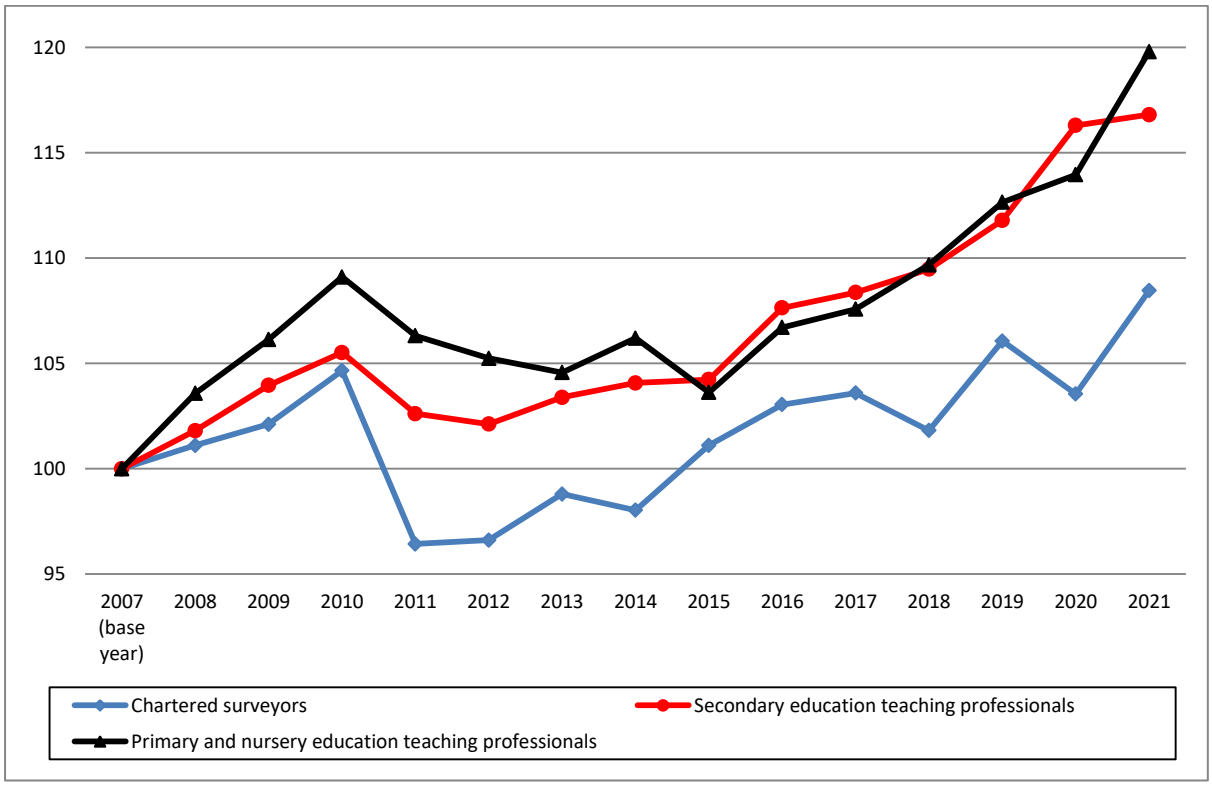
	Chartered and certified accountants	Management consultants and business analysts	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0
2008	101.9	103.1	101.8	103.6
2009	103.6	102.7	104.0	106.1
2010	105.9	102.8	105.5	109.1
2011	107.6	97.7	102.6	106.3
2012	105.9	95.8	102.1	105.2
2013	109.2	94.9	103.4	104.6
2014	108.7	98.1	104.1	106.2
2015	110.6	102.3	104.2	103.6
2016	111.7	99.8	107.6	106.7
2017	112.7	100.6	108.4	107.6
2018	114.7	103.9	109.5	109.7
2019	111.3	100.7	111.8	112.7
2020	115.2	101.9	116.3	114.0
2021	120.8	102.8	116.8	119.8



D Architects, town planners and chartered surveyors

Chartered surveyors

	Chartered surveyors	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	101.1	101.8	103.6
2009	102.1	104.0	106.1
2010	104.7	105.5	109.1
2011	96.4	102.6	106.3
2012	96.6	102.1	105.2
2013	98.8	103.4	104.6
2014	98.0	104.1	106.2
2015	101.1	104.2	103.6
2016	103.0	107.6	106.7
2017	103.6	108.4	107.6
2018	101.8	109.5	109.7
2019	106.1	111.8	112.7
2020	103.5	116.3	114.0
2021	108.5	116.8	119.8

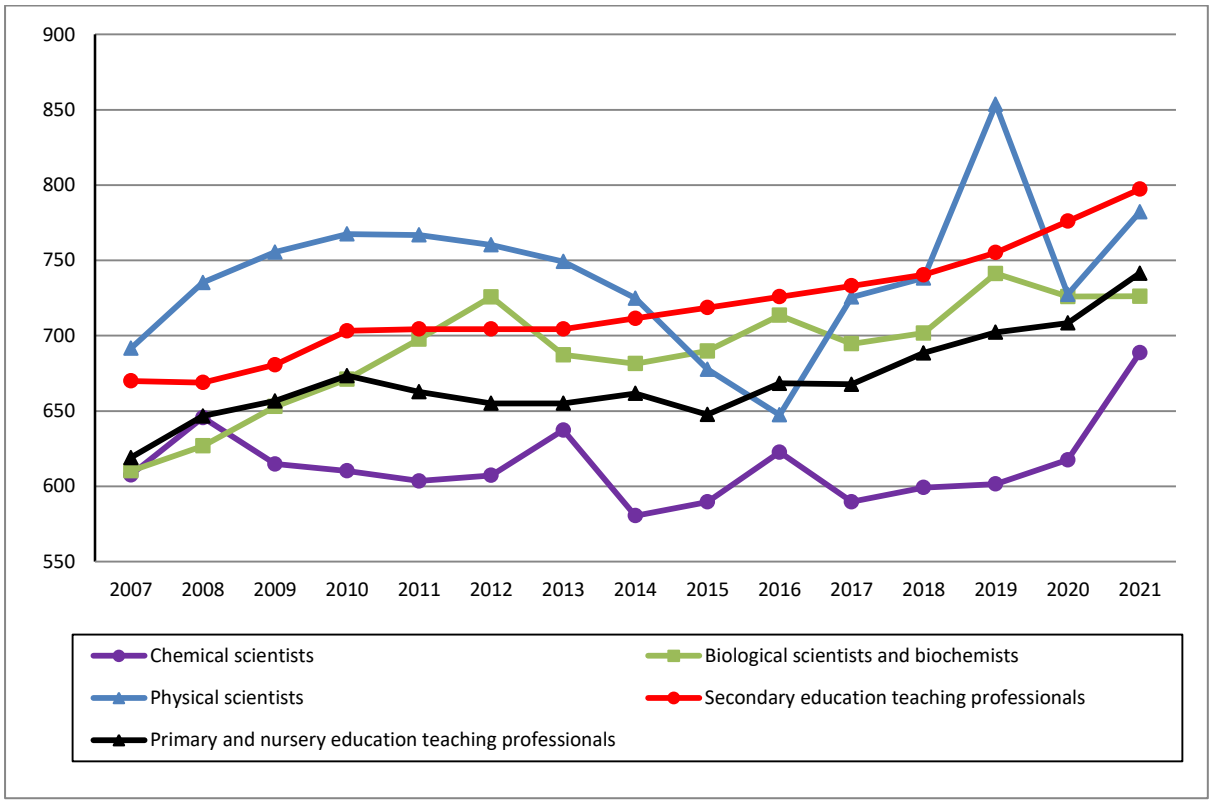


Appendix 3: Median basic weekly earnings (ASHE) 2007 to 2021

A Science, research, engineering and technology professionals

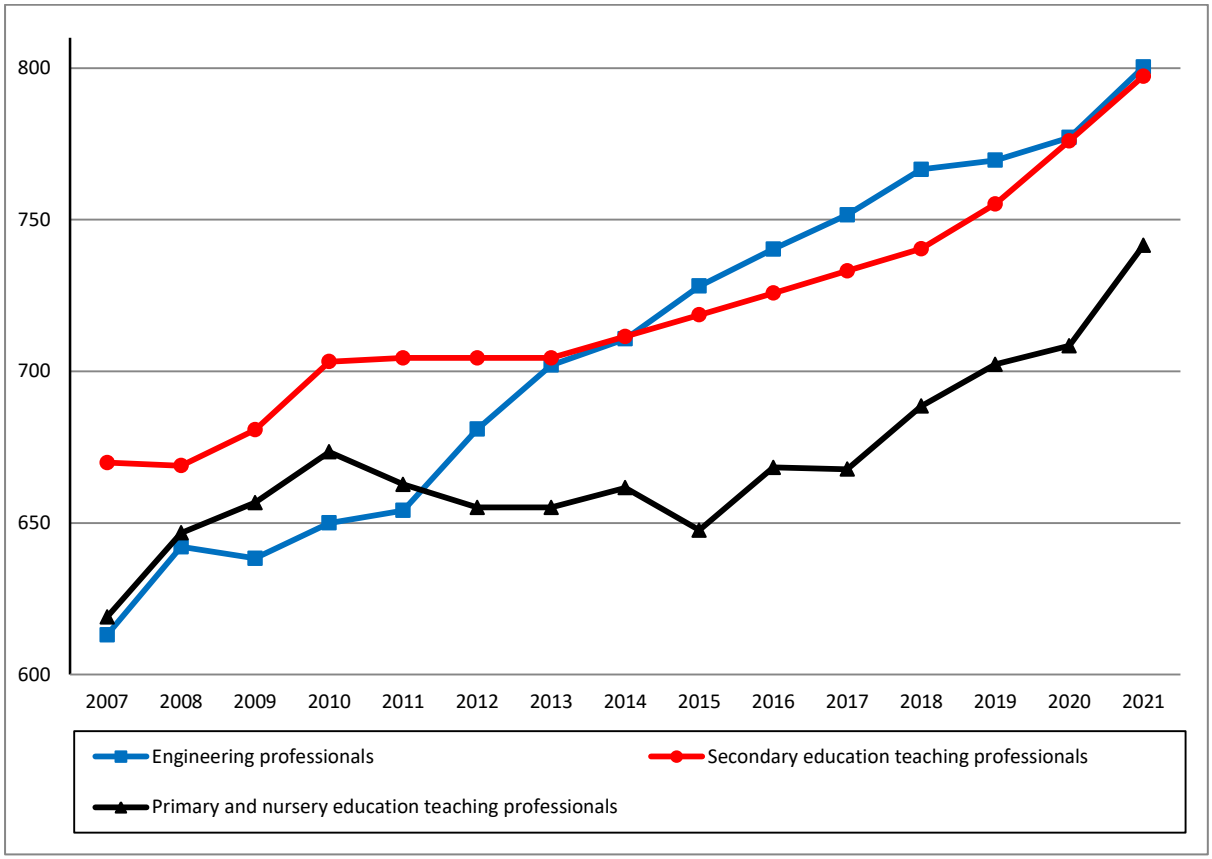
1) Chemical, biological and physical scientists (median basic pay £pw)

	Chemical scientists	Biological scientists and biochemists	Physical scientists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	607.6	610.2	691.6	669.9	619.0
2008	645.6	626.8	735.3	668.9	646.7
2009	614.8	652.9	755.5	680.7	656.7
2010	610.2	671.1	767.5	703.2	673.4
2011	603.5	697.7	766.9	704.4	662.7
2012	607.2	725.7	760.3	704.4	655.1
2013	637.3	687.3	749.2	704.4	655.1
2014	580.5	681.4	724.9	711.5	661.6
2015	589.6	689.8	677.7	718.6	647.6
2016	622.7	713.5	647.4	725.8	668.3
2017	589.7	694.6	725.6	733.1	667.7
2018	599.2	701.7	738.3	740.4	688.5
2019	601.5	741.3	853.6	755.2	702.3
2020	617.6	725.9	727.4	776.0	708.4
2021	688.6	726.2	782.2	797.3	741.5



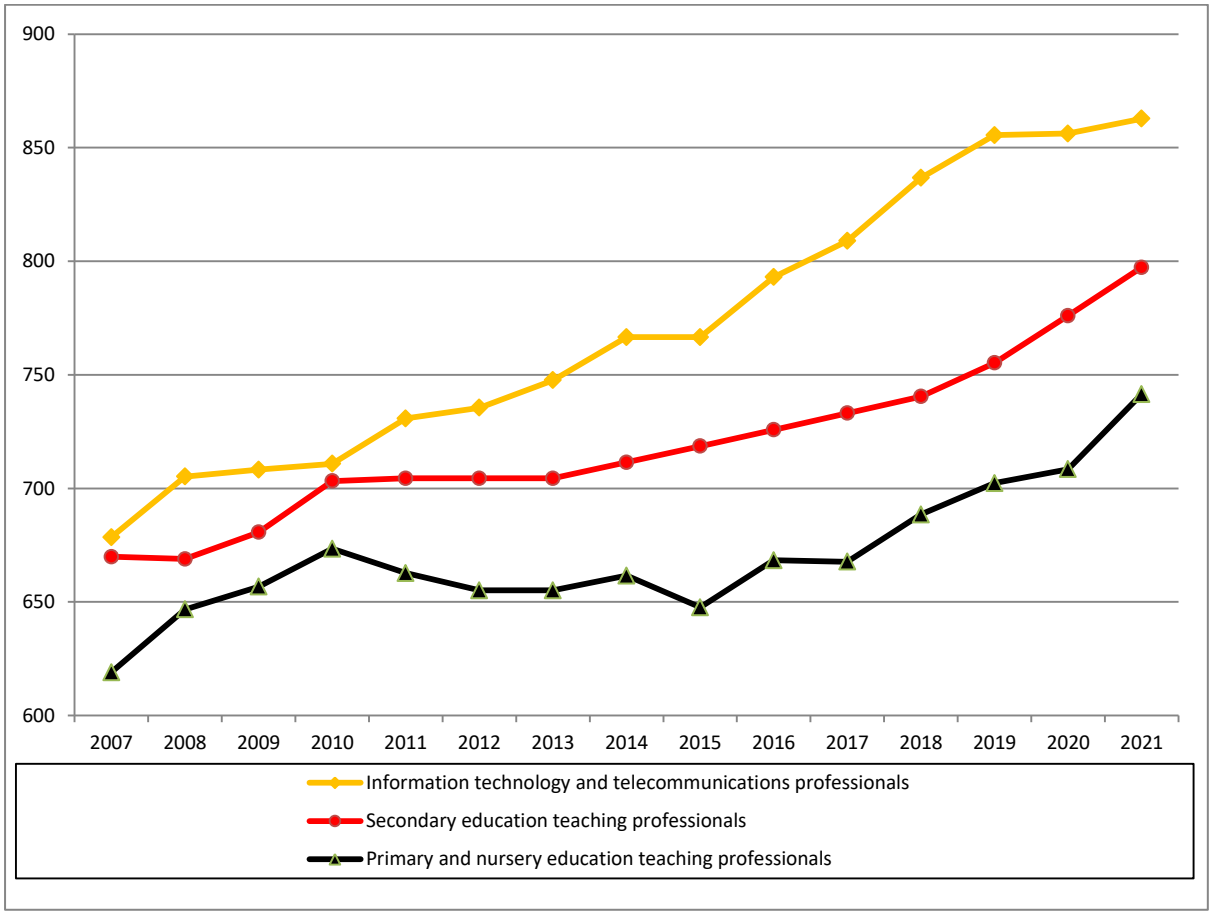
2) Engineering professionals (median basic pay £pw)

	Engineering professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	613.1	669.9	619.0
2008	642.1	668.9	646.7
2009	638.3	680.7	656.7
2010	650.0	703.2	673.4
2011	654.1	704.4	662.7
2012	680.9	704.4	655.1
2013	702.0	704.4	655.1
2014	710.7	711.5	661.6
2015	728.1	718.6	647.6
2016	740.3	725.8	668.3
2017	751.6	733.1	667.7
2018	766.6	740.4	688.5
2019	769.6	755.2	702.3
2020	777.1	776.0	708.4
2021	800.3	797.3	741.5



3) Information technology and telecommunications professionals (median basic pay £pw)

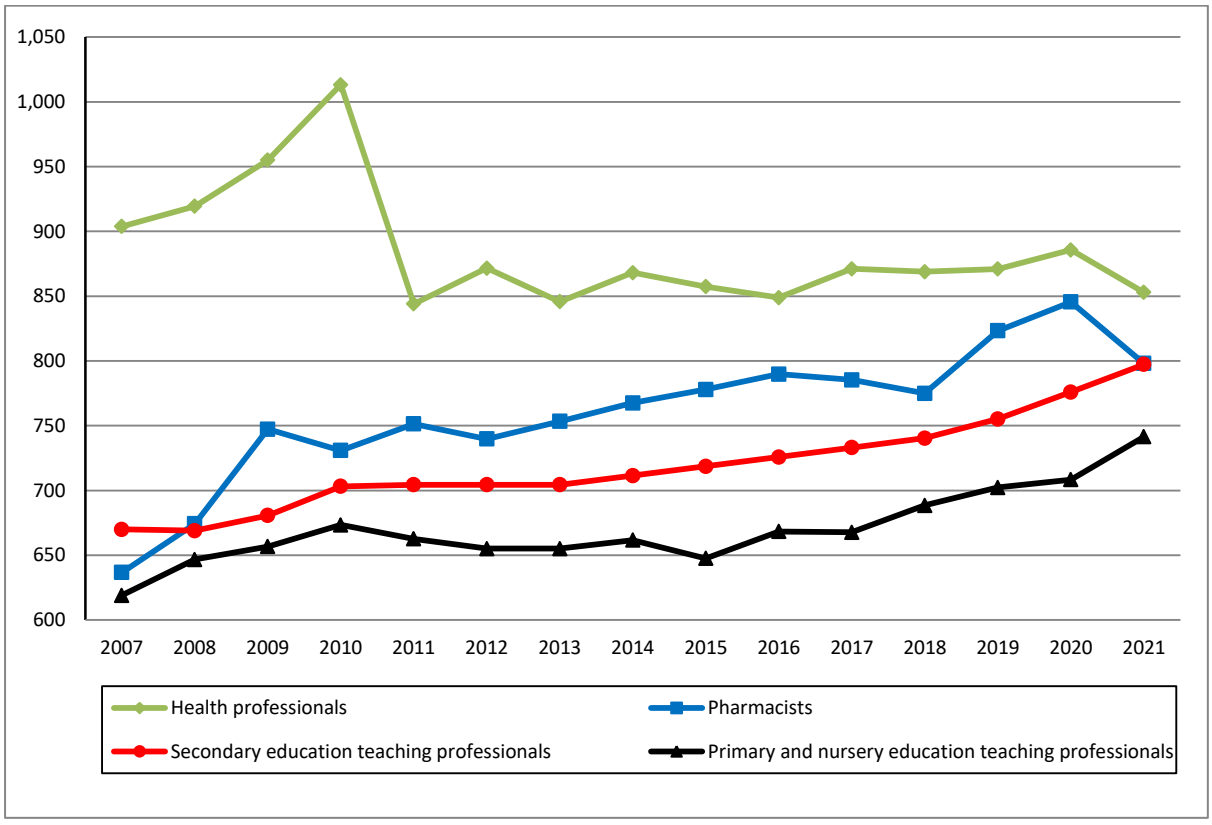
	Information technology and telecommunications professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	678.5	669.9	619.0
2008	705.2	668.9	646.7
2009	708.2	680.7	656.7
2010	710.8	703.2	673.4
2011	730.8	704.4	662.7
2012	735.5	704.4	655.1
2013	747.6	704.4	655.1
2014	766.6	711.5	661.6
2015	766.6	718.6	647.6
2016	793	725.8	668.3
2017	808.9	733.1	667.7
2018	836.7	740.4	688.5
2019	855.5	755.2	702.3
2020	856.2	776.0	708.4
2021	862.8	797.3	741.5



B Health professionals

Health professionals and pharmacists (median basic pay £pw)

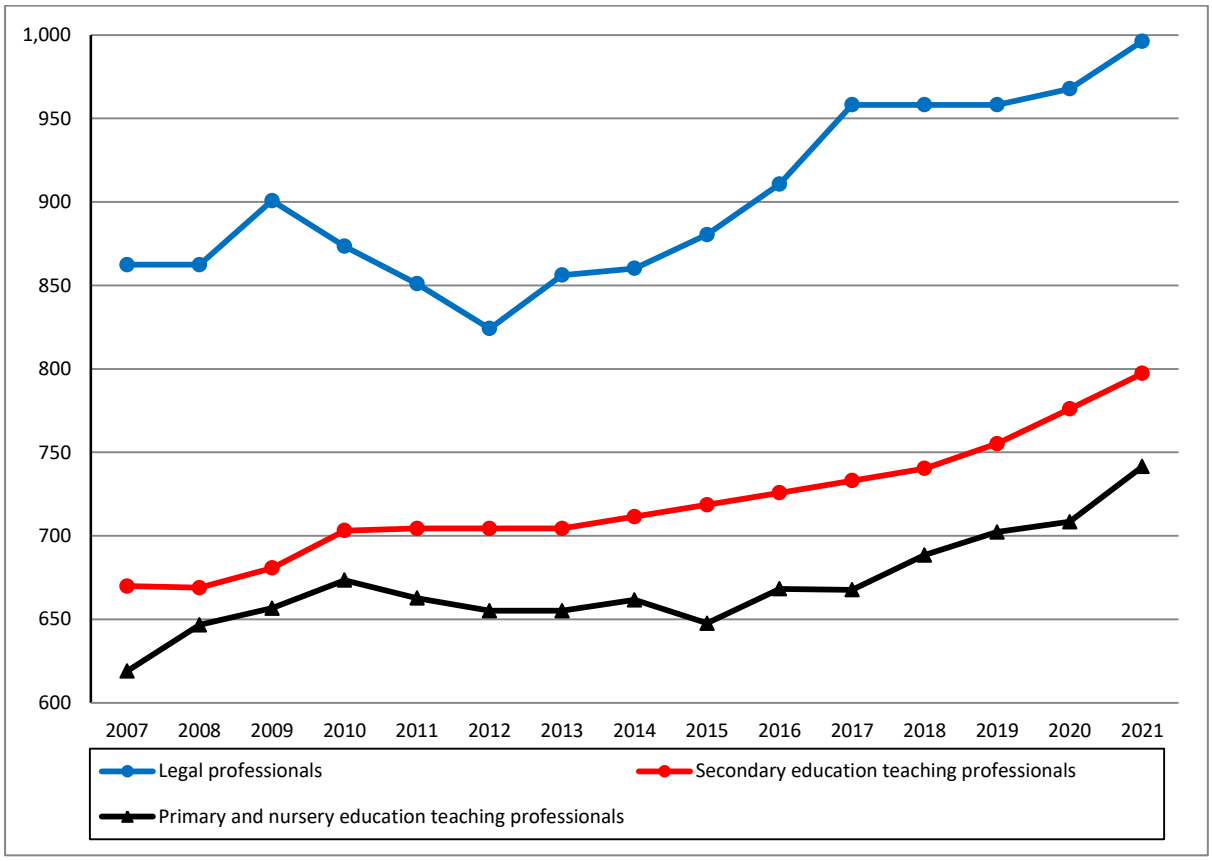
	Health professionals	Pharmacists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	903.9	636.7	669.9	619.0
2008	919.4	674.2	668.9	646.7
2009	955.0	747.3	680.7	656.7
2010	1,013.2	730.9	703.2	673.4
2011	844.1	751.4	704.4	662.7
2012	871.6	739.8	704.4	655.1
2013	845.8	753.3	704.4	655.1
2014	868.2	767.6	711.5	661.6
2015	857.4	778.0	718.6	647.6
2016	848.9	789.8	725.8	668.3
2017	871.1	785.3	733.1	667.7
2018	868.9	775.0	740.4	688.5
2019	871.0	823.3	755.2	702.3
2020	885.7	845.5	776.0	708.4
2021	852.9	798.1	797.3	741.5



C Business, research and administrative professionals

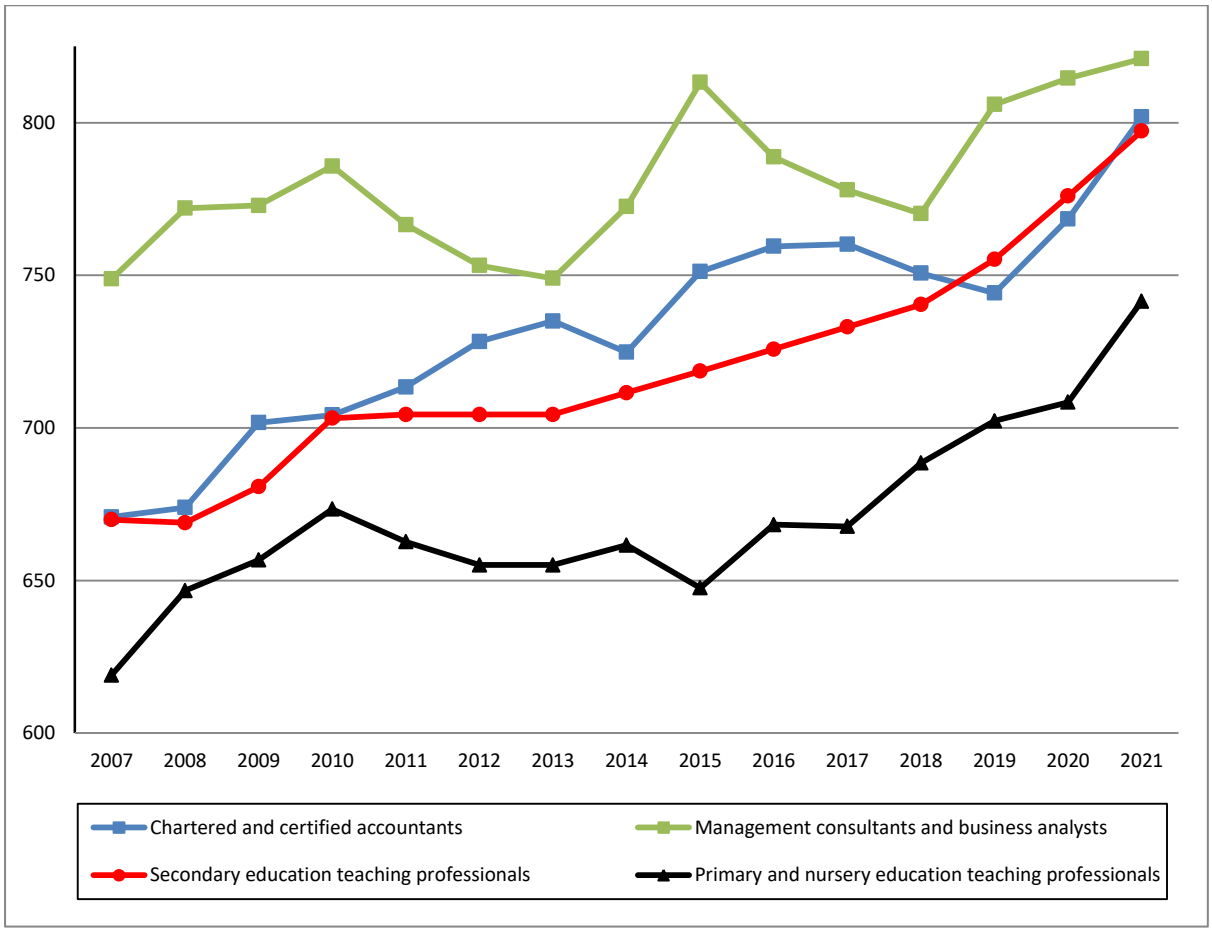
1) Legal professionals (median basic pay £pw)

	Legal professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	862.4	669.9	619.0
2008	862.4	668.9	646.7
2009	900.8	680.7	656.7
2010	873.4	703.2	673.4
2011	851.0	704.4	662.7
2012	824.1	704.4	655.1
2013	856.2	704.4	655.1
2014	860.2	711.5	661.6
2015	880.4	718.6	647.6
2016	910.7	725.8	668.3
2017	958.2	733.1	667.7
2018	958.2	740.4	688.5
2019	958.2	755.2	702.3
2020	967.8	776.0	708.4
2021	996.2	797.3	741.5



2) Chartered accountants and management consultants (median basic pay £pw)

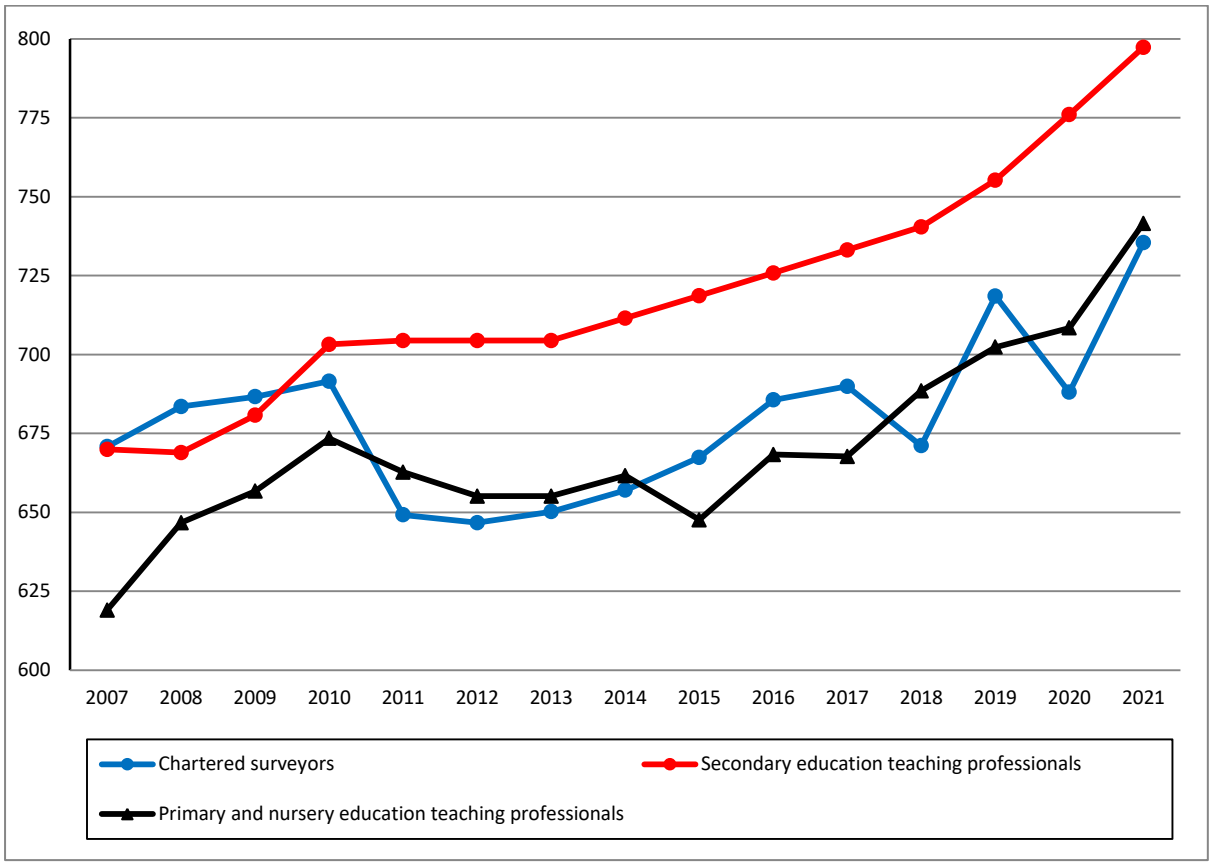
	Chartered and certified accountants	Management consultants and business analysts	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	670.8	748.8	669.9	619.0
2008	673.9	772.0	668.9	646.7
2009	701.7	772.9	680.7	656.7
2010	704.2	785.8	703.2	673.4
2011	713.4	766.6	704.4	662.7
2012	728.3	753.2	704.4	655.1
2013	735.0	749.0	704.4	655.1
2014	724.8	772.5	711.5	661.6
2015	751.2	813.2	718.6	647.6
2016	759.5	788.8	725.8	668.3
2017	760.2	778.0	733.1	667.7
2018	750.7	770.2	740.4	688.5
2019	744.2	806.0	755.2	702.3
2020	768.5	814.6	776.0	708.4
2021	801.9	821.0	797.3	741.5



D Architects, town planners and chartered surveyors

Chartered surveyors (median basic pay £pw)

	Chartered surveyors	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	670.8	669.9	619.0
2008	683.5	668.9	646.7
2009	686.6	680.7	656.7
2010	691.5	703.2	673.4
2011	649.2	704.4	662.7
2012	646.7	704.4	655.1
2013	650.2	704.4	655.1
2014	657.0	711.5	661.6
2015	667.4	718.6	647.6
2016	685.6	725.8	668.3
2017	689.9	733.1	667.7
2018	671.1	740.4	688.5
2019	718.5	755.2	702.3
2020	688.0	776.0	708.4
2021	735.4	797.3	741.5

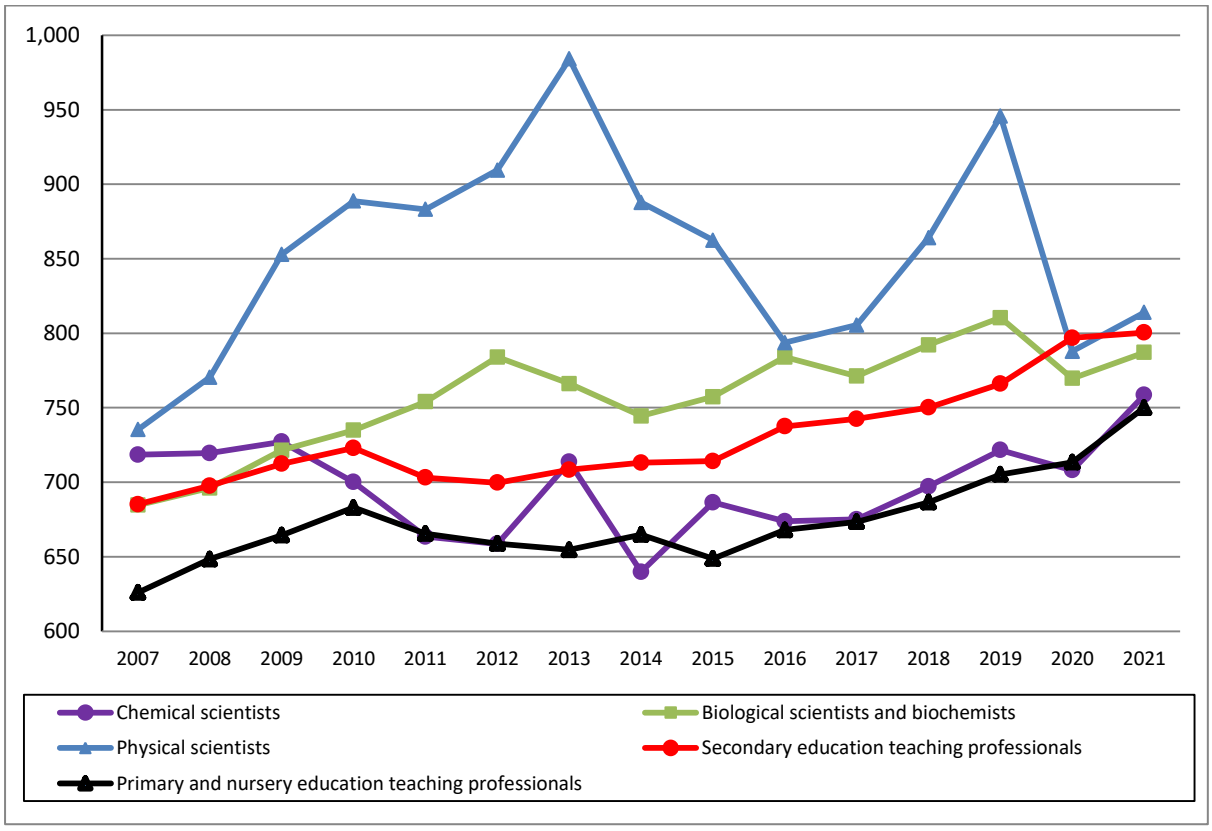


Appendix 4: Average basic weekly earnings (ASHE) 2007 to 2021

A Science, research, engineering and technology professionals

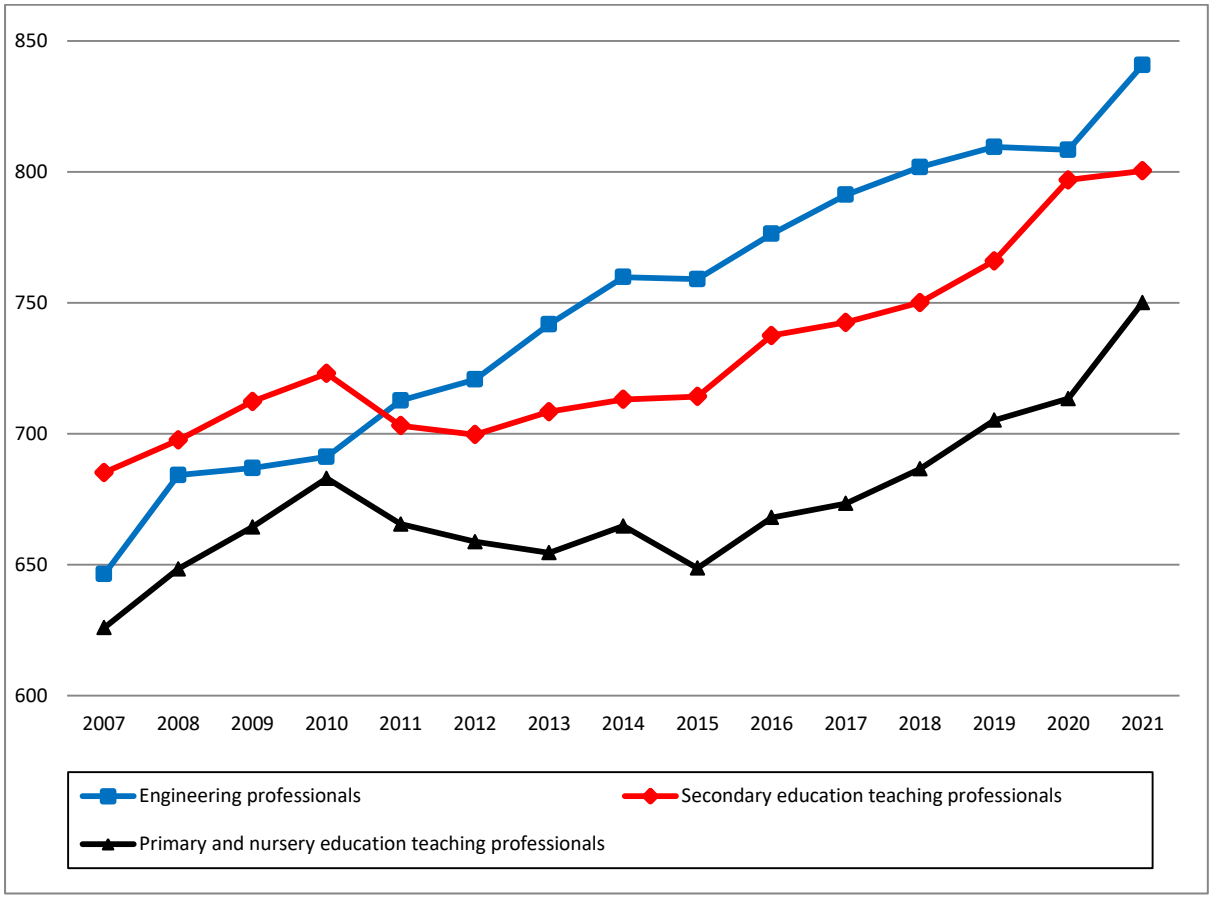
1) Chemical, biological and physical scientists (average basic pay £pw)

	Chemical scientists	Biological scientists and biochemists	Physical scientists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	718.5	684.6	735.3	685.2	626.0
2008	719.5	696.1	770.5	697.6	648.4
2009	727.2	721.5	852.9	712.3	664.4
2010	700.1	734.9	888.7	723.0	683.0
2011	663.5	754.0	883.1	703.1	665.5
2012	658.6	784.0	909.5	699.7	658.8
2013	713.6	766.1	984.1	708.4	654.6
2014	639.8	744.4	887.8	713.1	664.8
2015	686.4	757.3	862.4	714.2	648.7
2016	673.8	784.0	793.7	737.5	668.0
2017	675.1	771.2	805.5	742.5	673.4
2018	697.2	792.2	864.1	750.1	686.6
2019	721.6	810.4	945.7	766.0	705.2
2020	708.0	769.7	787.9	796.9	713.4
2021	758.5	787.1	814.0	800.4	750.0



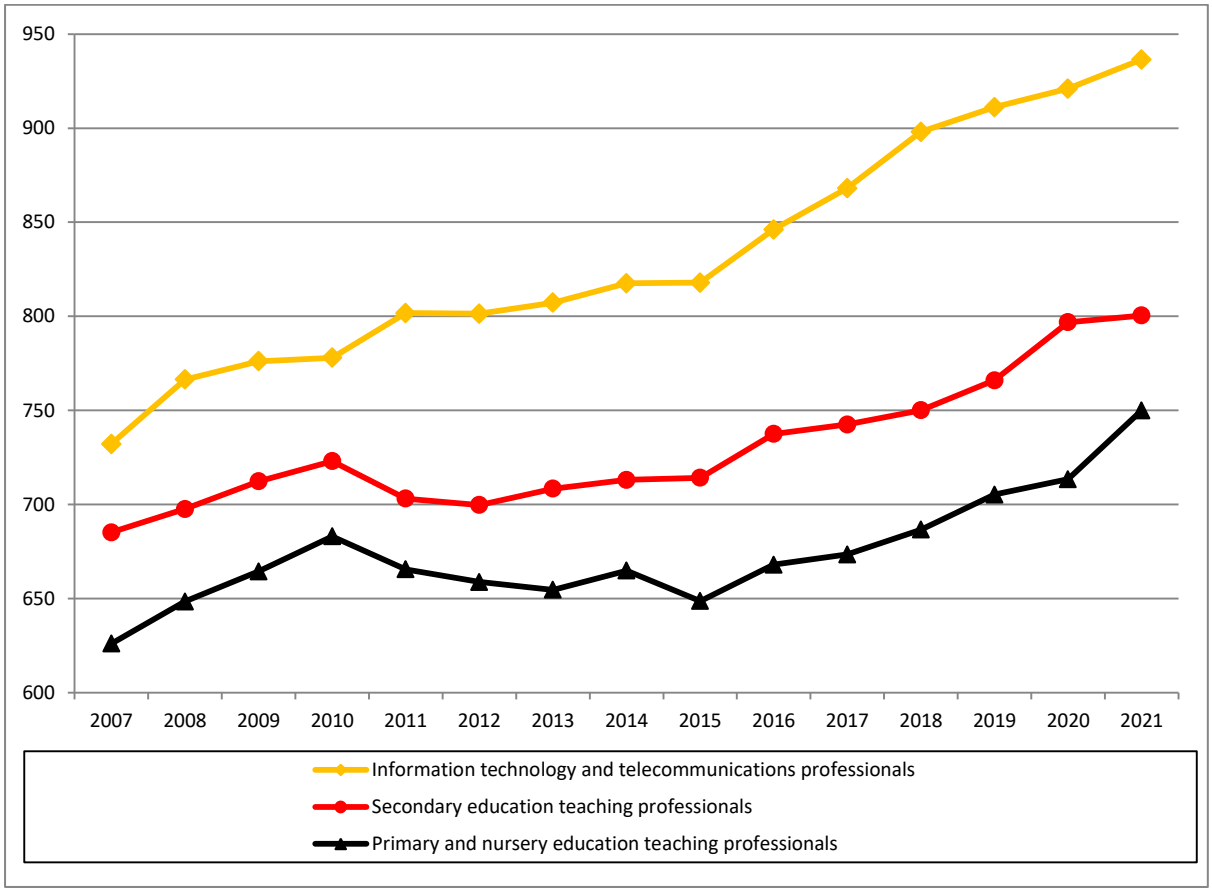
2) Engineering professionals (average basic pay £pw)

	Engineering professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	646.4	685.2	626.0
2008	684.2	697.6	648.4
2009	686.9	712.3	664.4
2010	691.2	723.0	683.0
2011	712.7	703.1	665.5
2012	720.7	699.7	658.8
2013	741.8	708.4	654.6
2014	759.8	713.1	664.8
2015	759.0	714.2	648.7
2016	776.3	737.5	668.0
2017	791.2	742.5	673.4
2018	801.8	750.1	686.6
2019	809.5	766.0	705.2
2020	808.4	796.9	713.4
2021	840.7	800.4	750.0



3) Information technology and telecommunications professionals (average basic pay £pw)

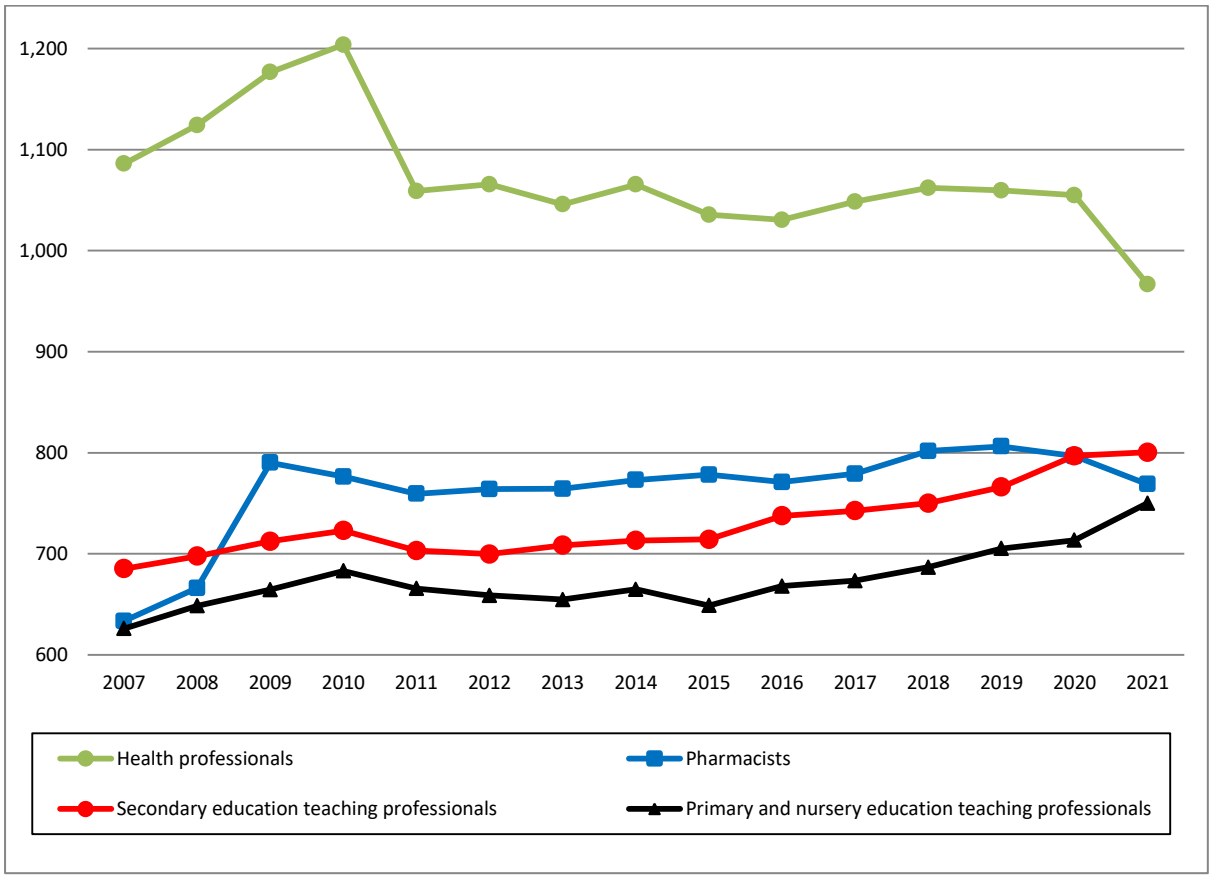
	Information technology and telecommunications professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	732.1	685.2	626.0
2008	766.4	697.6	648.4
2009	776.1	712.3	664.4
2010	778.0	723.0	683.0
2011	801.7	703.1	665.5
2012	801.4	699.7	658.8
2013	807.2	708.4	654.6
2014	817.5	713.1	664.8
2015	817.9	714.2	648.7
2016	846.1	737.5	668.0
2017	868.1	742.5	673.4
2018	898.0	750.1	686.6
2019	911.1	766.0	705.2
2020	921.0	796.9	713.4
2021	936.5	800.4	750.0



B Health professionals

Health professionals and pharmacists (average basic pay £pw)

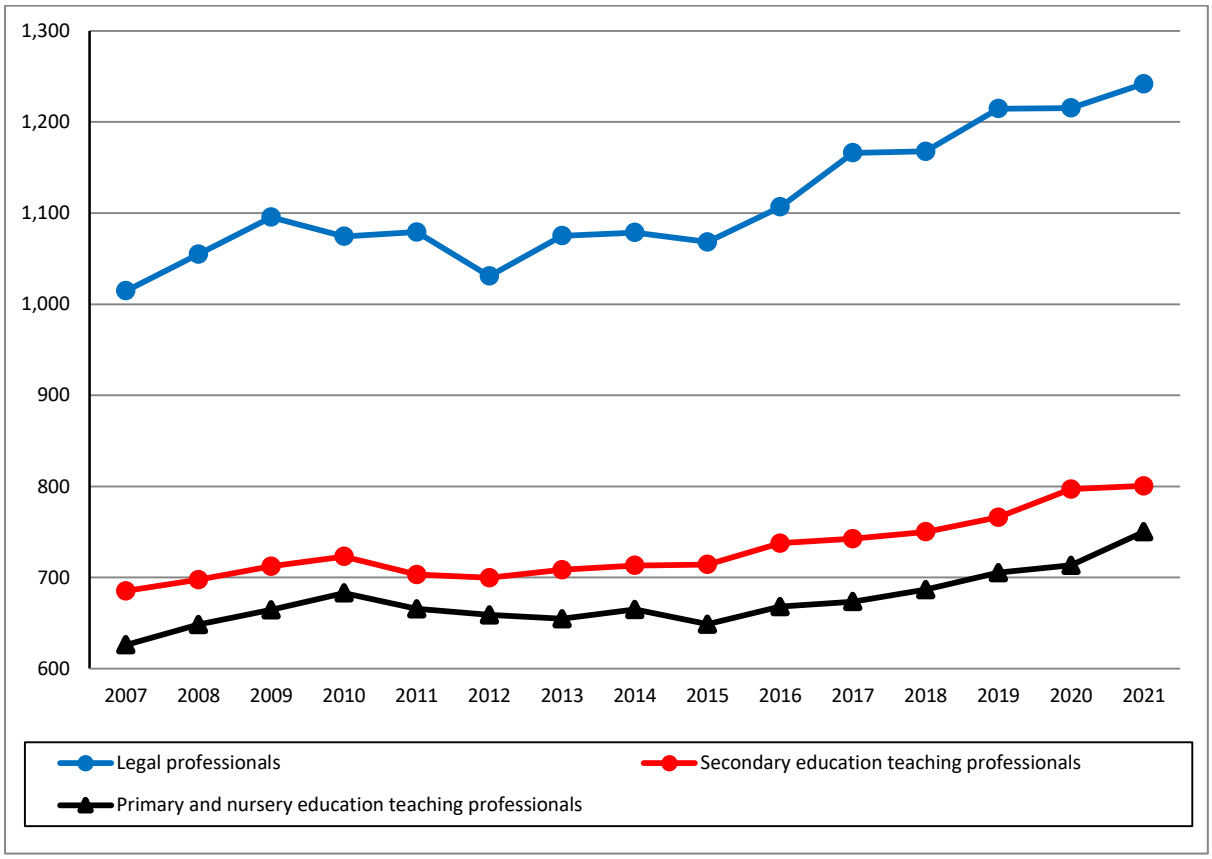
	Health professionals	Pharmacists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	1,086.0	633.4	685.2	626.0
2008	1,124.3	666.1	697.6	648.4
2009	1,176.7	790.1	712.3	664.4
2010	1,203.8	776.3	723.0	683.0
2011	1,059.0	759.3	703.1	665.5
2012	1,065.7	763.9	699.7	658.8
2013	1,045.9	764.3	708.4	654.6
2014	1,065.5	773.0	713.1	664.8
2015	1,035.5	778.3	714.2	648.7
2016	1,030.5	770.9	737.5	668.0
2017	1,048.5	779.1	742.5	673.4
2018	1,062.1	801.6	750.1	686.6
2019	1,059.6	806.3	766.0	705.2
2020	1,054.8	796.6	796.9	713.4
2021	966.7	768.9	800.4	750.0



C Business, research and administrative professionals

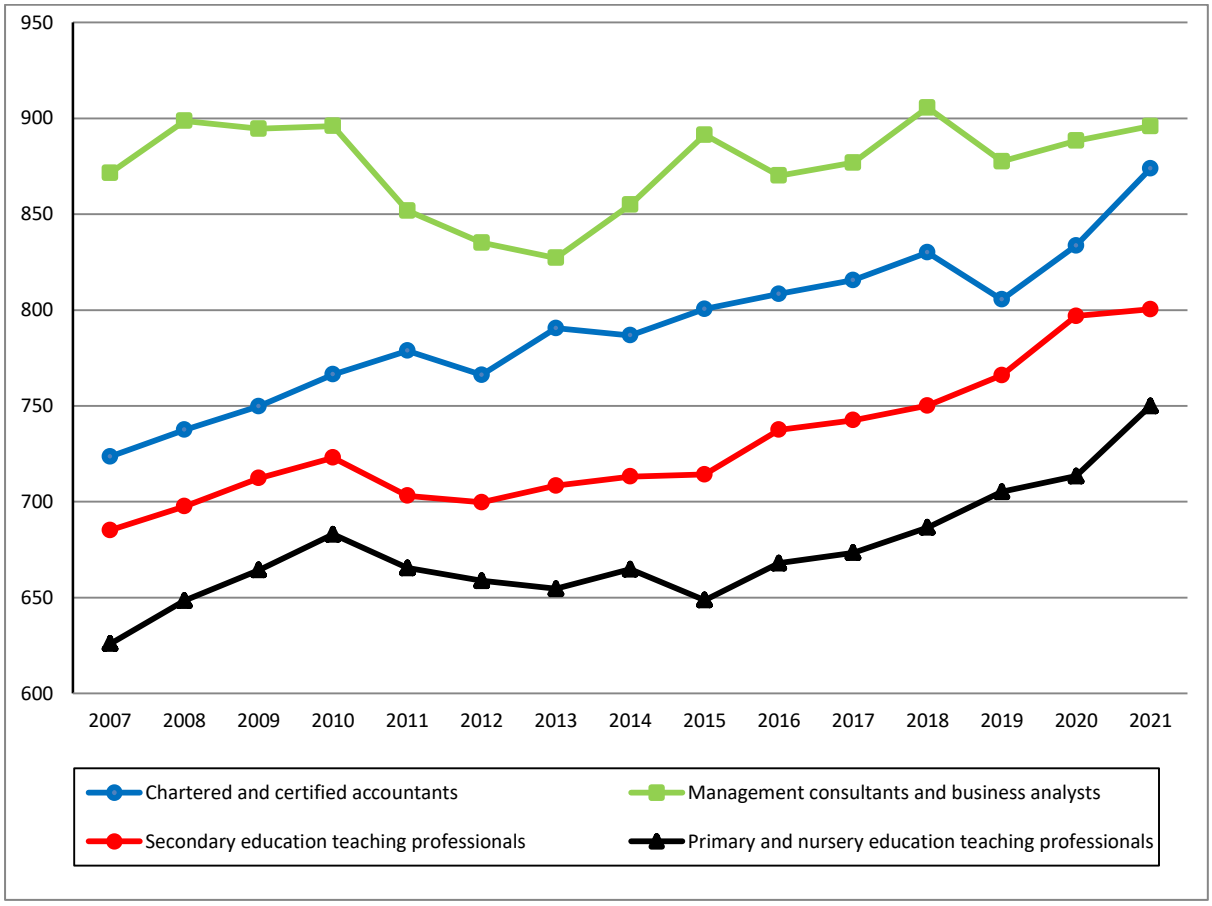
1) Legal professionals (average basic pay £pw)

	Legal professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	1,014.6	685.2	626.0
2008	1,054.9	697.6	648.4
2009	1,095.5	712.3	664.4
2010	1,074.5	723.0	683.0
2011	1,079.1	703.1	665.5
2012	1,030.8	699.7	658.8
2013	1,075.2	708.4	654.6
2014	1,078.7	713.1	664.8
2015	1,068.2	714.2	648.7
2016	1,106.7	737.5	668.0
2017	1,166.2	742.5	673.4
2018	1,167.7	750.1	686.6
2019	1,214.6	766.0	705.2
2020	1,215.3	796.9	713.4
2021	1,241.8	800.4	750.0



2) Chartered accountants and management consultants (average basic pay £pw)

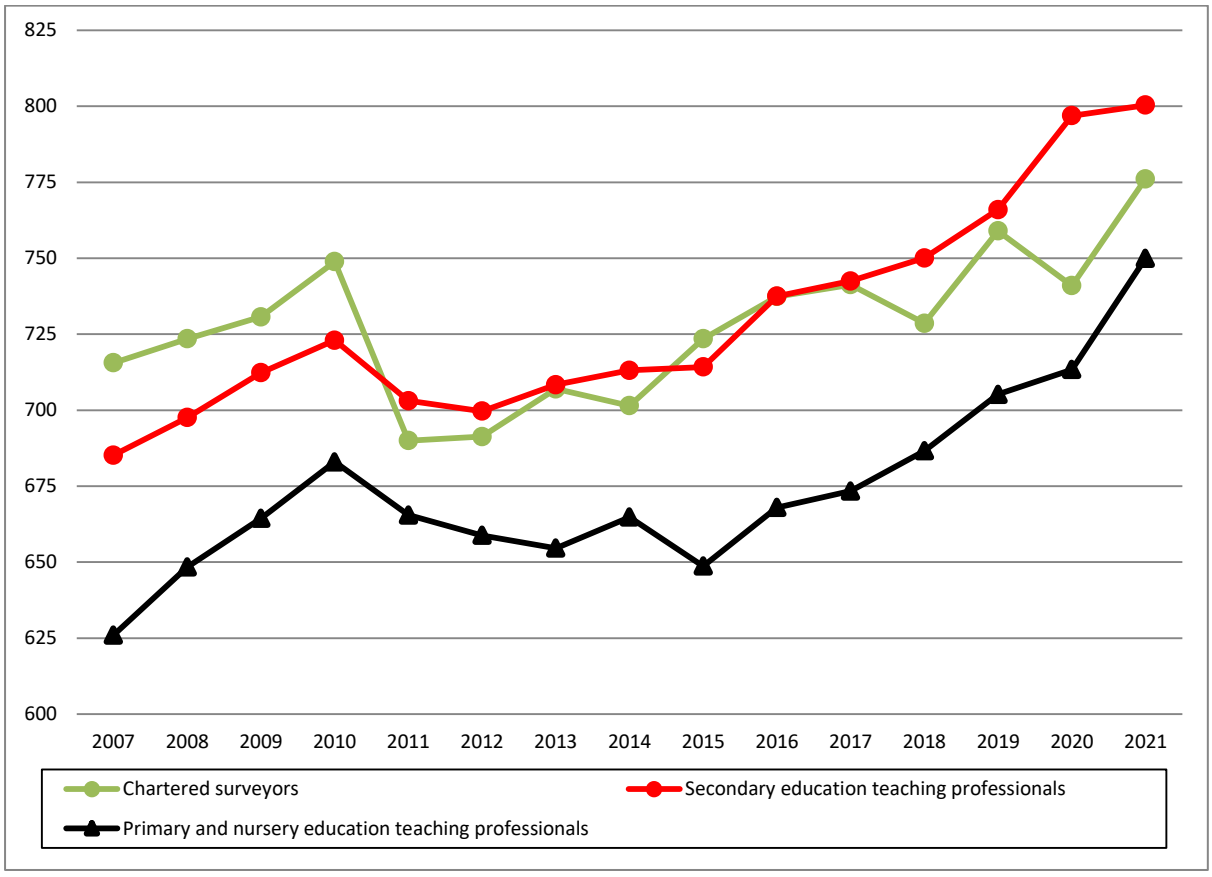
	Chartered and certified accountants	Management consultants and business analysts	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	723.6	871.5	685.2	626.0
2008	737.5	898.7	697.6	648.4
2009	749.8	894.6	712.3	664.4
2010	766.4	896.0	723.0	683.0
2011	778.8	851.8	703.1	665.5
2012	766.2	835.1	699.7	658.8
2013	790.5	827.2	708.4	654.6
2014	786.8	854.9	713.1	664.8
2015	800.6	891.4	714.2	648.7
2016	808.4	870.1	737.5	668.0
2017	815.6	876.9	742.5	673.4
2018	830.0	905.6	750.1	686.6
2019	805.5	877.5	766.0	705.2
2020	833.6	888.3	796.9	713.4
2021	873.8	895.9	800.4	750.0



D Architects, town planners and chartered surveyors

Chartered surveyors (average basic pay £pw)

	Chartered surveyors	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	715.6	685.2	626.0
2008	723.5	697.6	648.4
2009	730.7	712.3	664.4
2010	748.9	723.0	683.0
2011	690.0	703.1	665.5
2012	691.3	699.7	658.8
2013	707.0	708.4	654.6
2014	701.5	713.1	664.8
2015	723.5	714.2	648.7
2016	737.4	737.5	668.0
2017	741.3	742.5	673.4
2018	728.6	750.1	686.6
2019	759.0	766.0	705.2
2020	741.0	796.9	713.4
2021	776.1	800.4	750.0

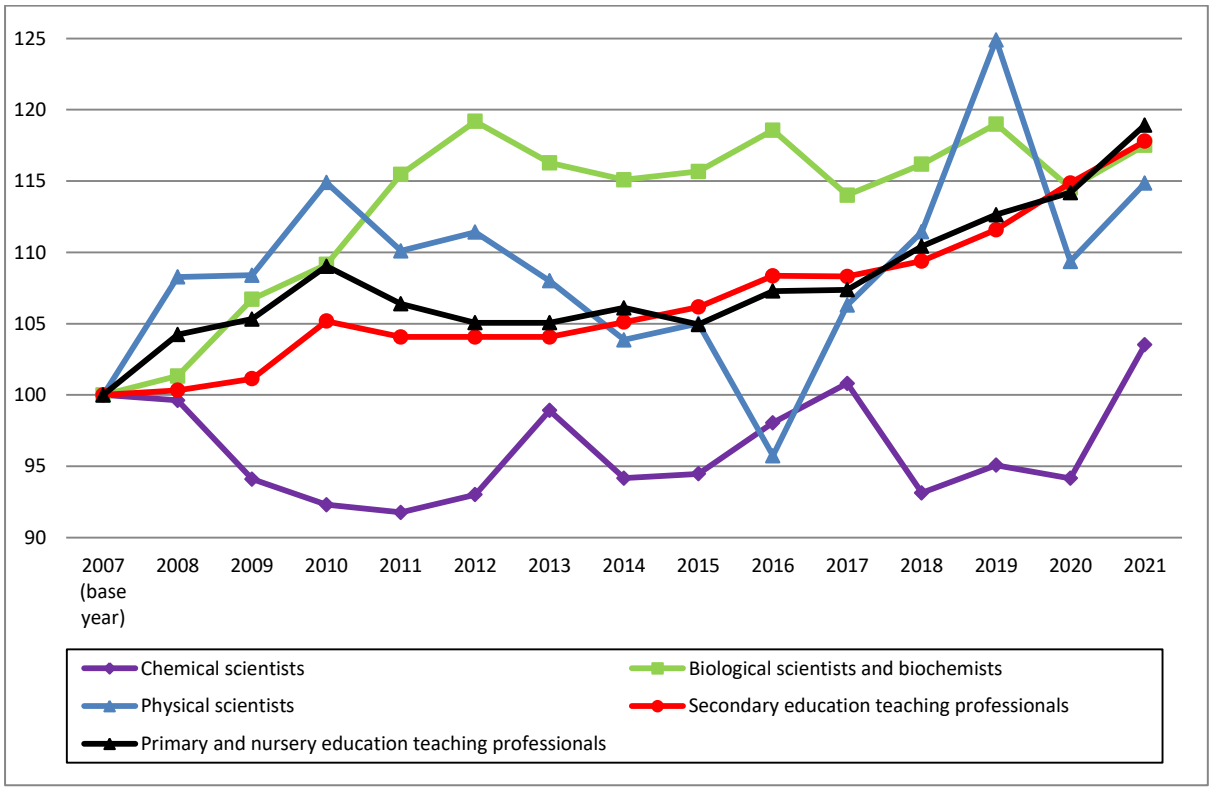


Appendix 5: Indexed median gross weekly earnings 2007 to 2021

A Science, research, engineering and technology professionals

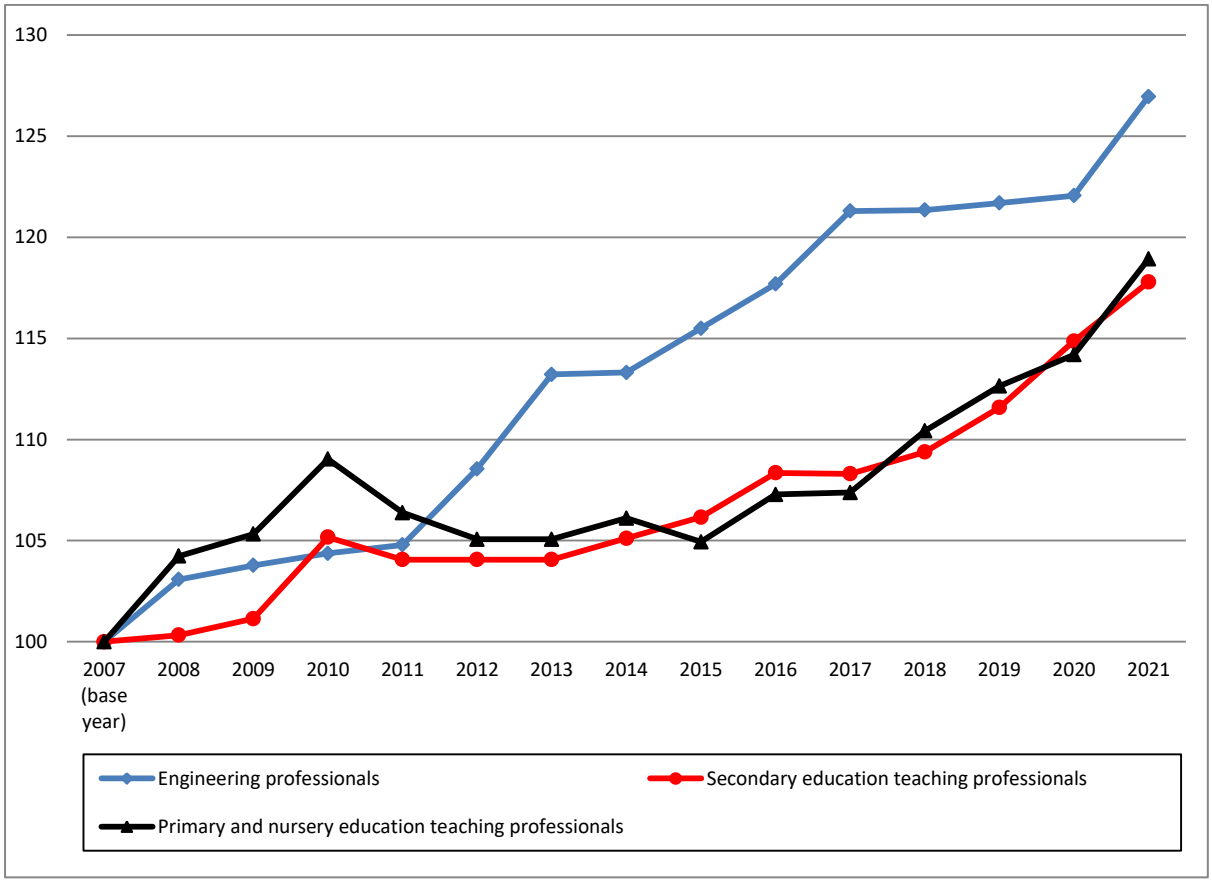
1) Chemical, biological and physical scientists

	Chemical scientists	Biological scientists and biochemists	Physical scientists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0	100.0
2008	99.6	101.3	108.3	100.3	104.2
2009	94.1	106.7	108.4	101.1	105.3
2010	92.3	109.1	114.9	105.2	109.0
2011	91.8	115.5	110.1	104.1	106.4
2012	93.0	119.2	111.4	104.1	105.1
2013	98.9	116.3	108.0	104.1	105.1
2014	94.2	115.1	103.9	105.1	106.1
2015	94.5	115.7	105.0	106.2	104.9
2016	98.0	118.6	95.7	108.3	107.3
2017	100.8	114.0	106.3	108.3	107.4
2018	93.1	116.2	111.4	109.4	110.4
2019	95.1	119.0	124.9	111.6	112.6
2020	94.2	114.5	109.4	114.9	114.2
2021	103.5	117.5	114.9	117.8	118.9



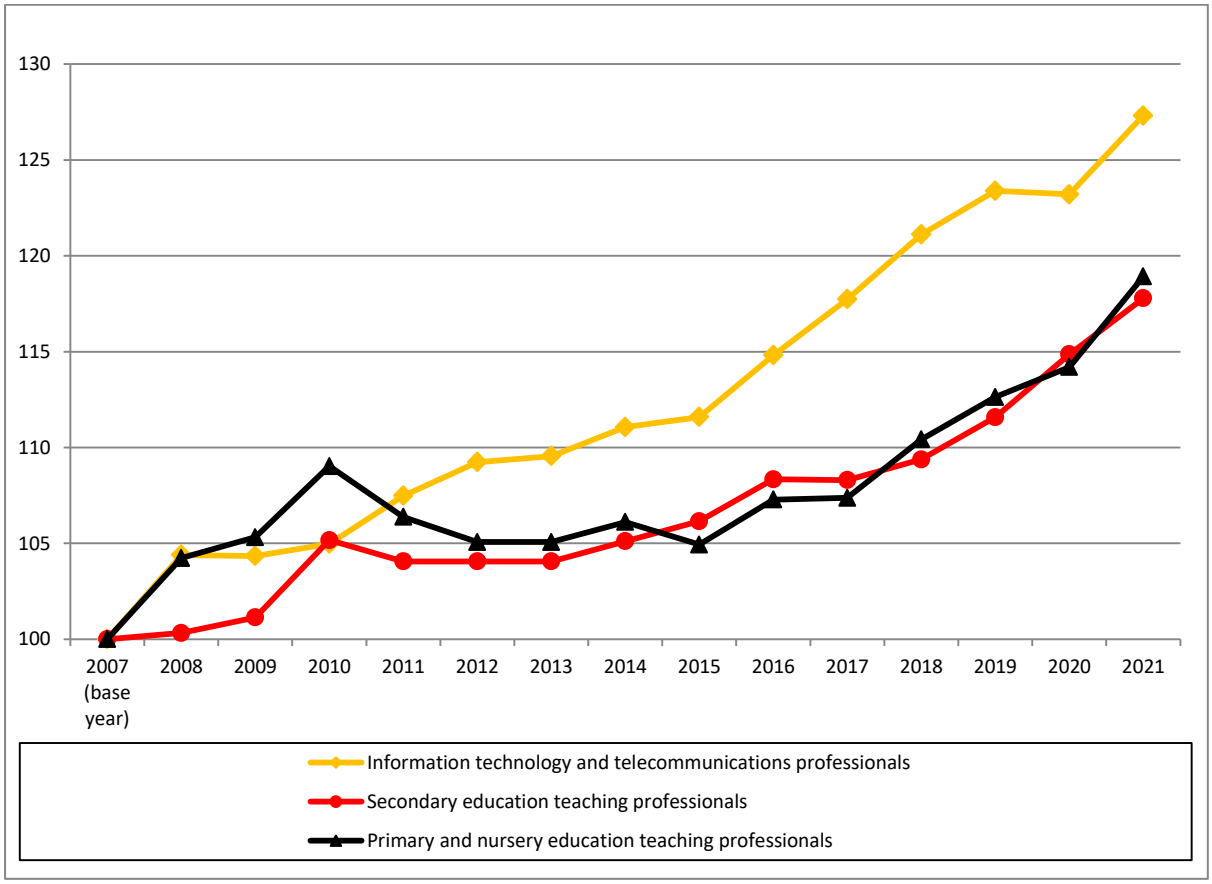
2) Engineering professionals

	Engineering professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	103.1	100.3	104.2
2009	103.8	101.1	105.3
2010	104.4	105.2	109.0
2011	104.8	104.1	106.4
2012	108.6	104.1	105.1
2013	113.2	104.1	105.1
2014	113.3	105.1	106.1
2015	115.5	106.2	104.9
2016	117.7	108.3	107.3
2017	121.3	108.3	107.4
2018	121.3	109.4	110.4
2019	121.7	111.6	112.6
2020	122.1	114.9	114.2
2021	127.0	117.8	118.9



3) Information technology and telecommunications professionals

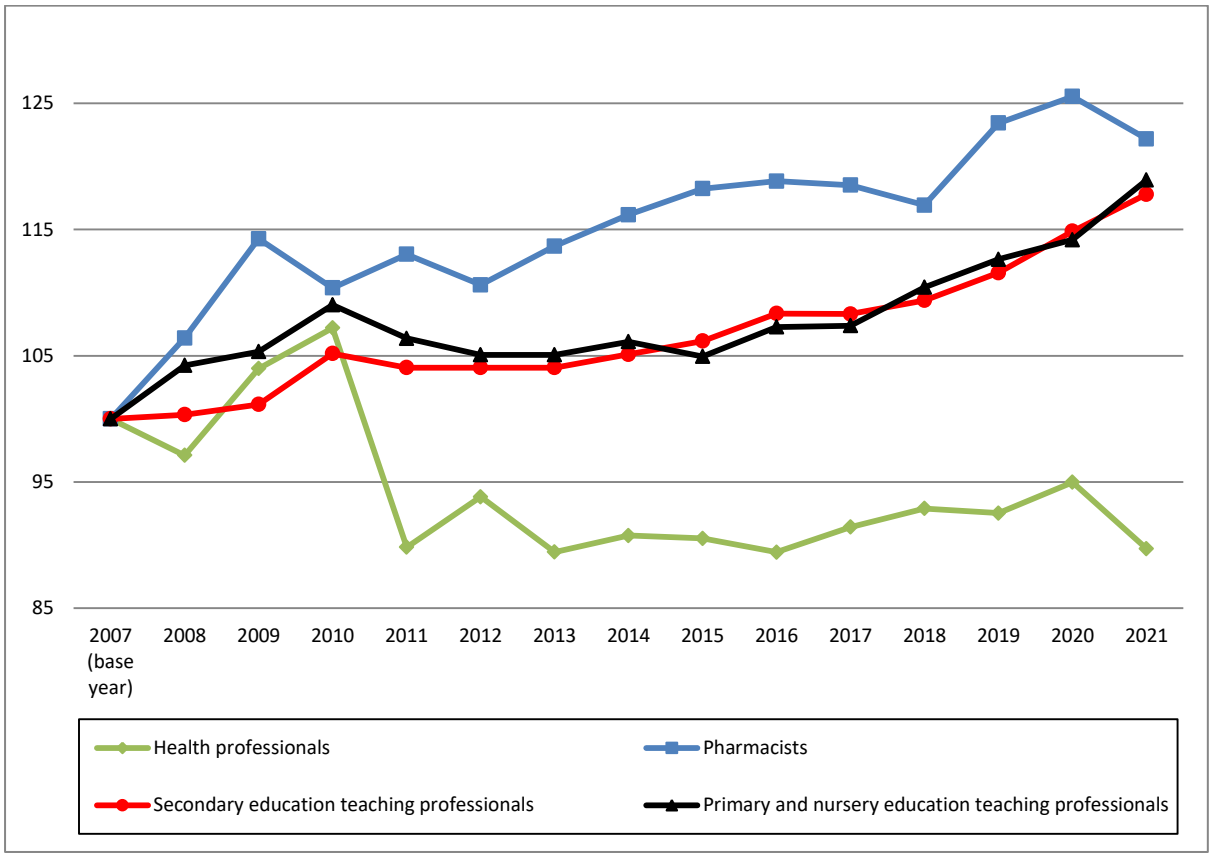
	Information technology and telecommunications professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	104.4	100.3	104.2
2009	104.3	101.1	105.3
2010	105.0	105.2	109.0
2011	107.5	104.1	106.4
2012	109.2	104.1	105.1
2013	109.6	104.1	105.1
2014	111.1	105.1	106.1
2015	111.6	106.2	104.9
2016	114.8	108.3	107.3
2017	117.7	108.3	107.4
2018	121.1	109.4	110.4
2019	123.4	111.6	112.6
2020	123.2	114.9	114.2
2021	127.3	117.8	118.9



C Health professionals

Health professionals and pharmacists

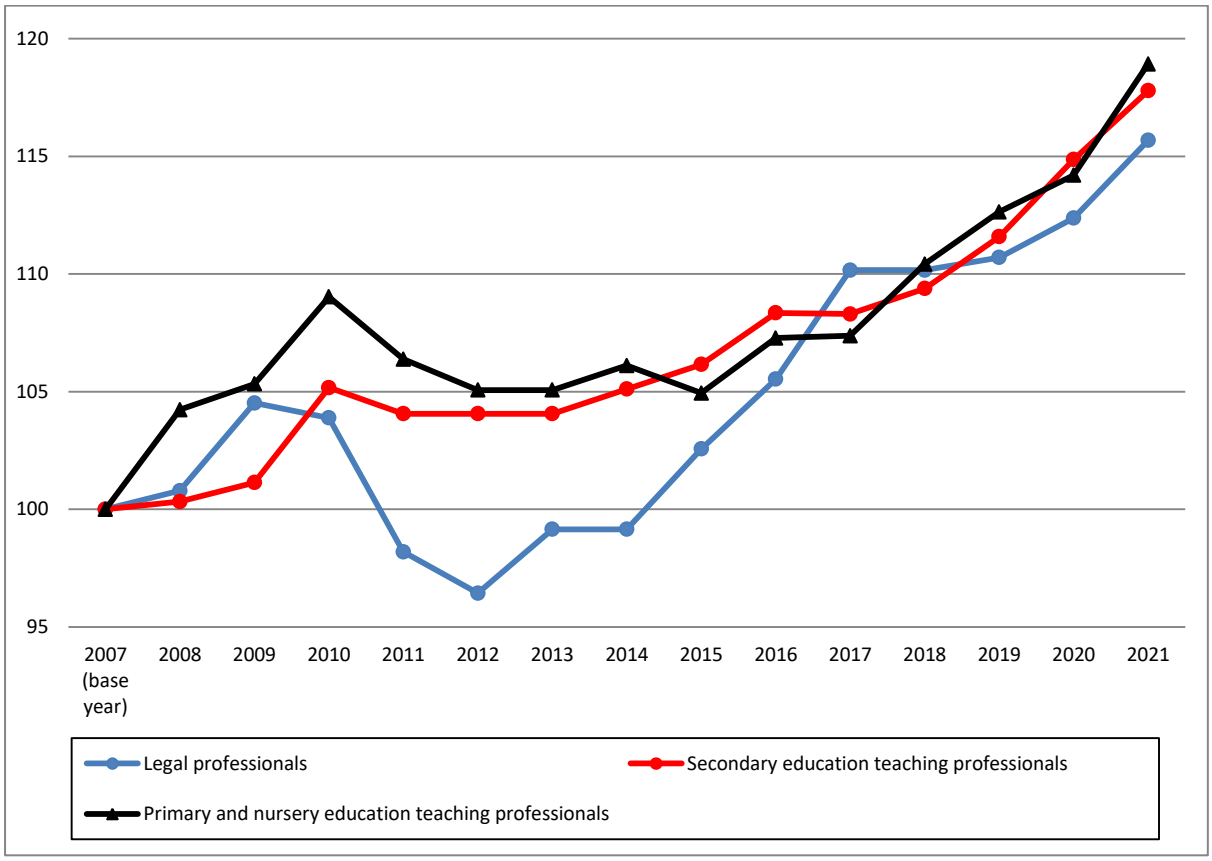
	Health professionals	Pharmacists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0
2008	97.1	106.4	100.3	104.2
2009	104.0	114.3	101.1	105.3
2010	107.2	110.4	105.2	109.0
2011	89.8	113.0	104.1	106.4
2012	93.8	110.6	104.1	105.1
2013	89.5	113.7	104.1	105.1
2014	90.8	116.2	105.1	106.1
2015	90.5	118.2	106.2	104.9
2016	89.4	118.8	108.3	107.3
2017	91.4	118.5	108.3	107.4
2018	92.9	116.9	109.4	110.4
2019	92.5	123.4	111.6	112.6
2020	95.0	125.5	114.9	114.2
2021	89.7	122.2	117.8	118.9



C Business, research and administrative professionals

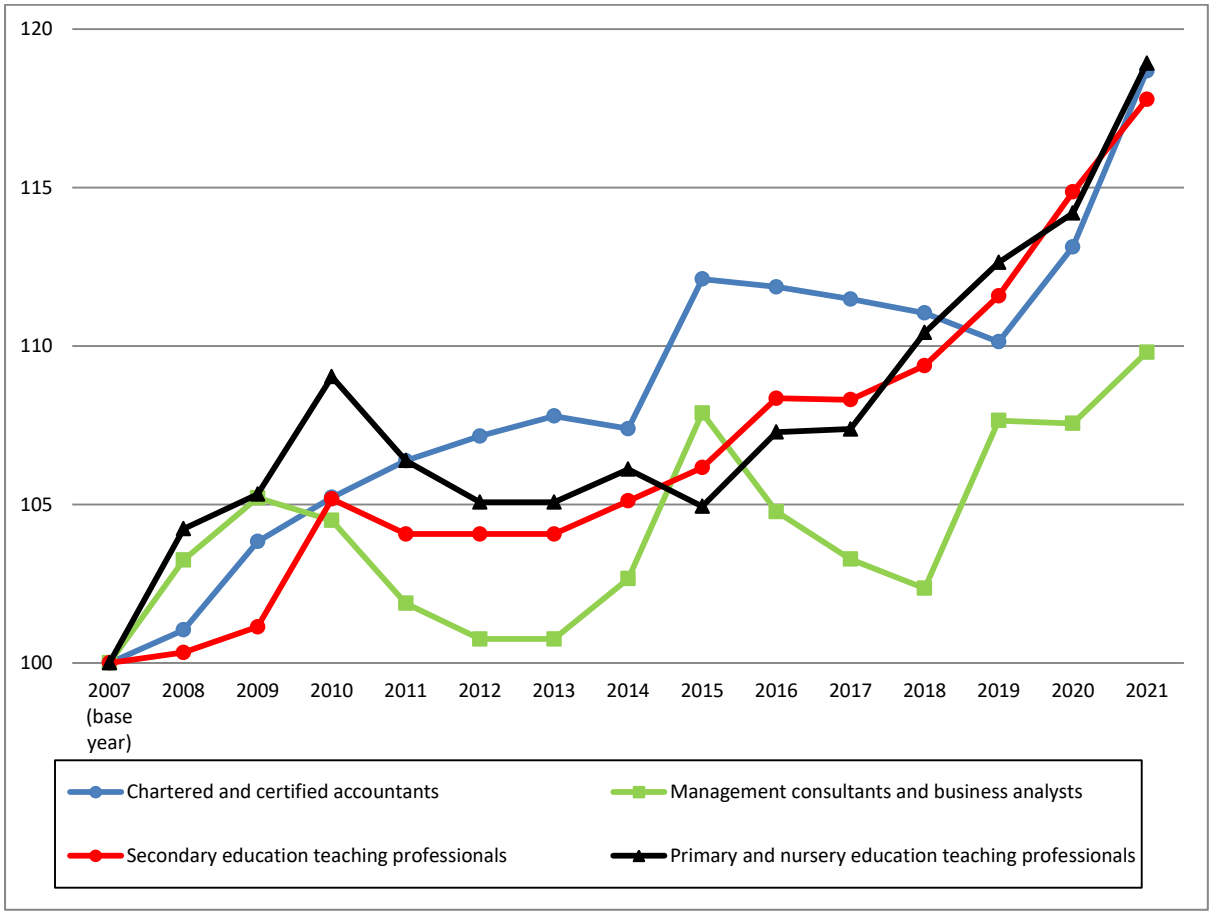
1) Legal professionals

	Legal professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	100.8	100.3	104.2
2009	104.5	101.1	105.3
2010	103.9	105.2	109.0
2011	98.2	104.1	106.4
2012	96.4	104.1	105.1
2013	99.1	104.1	105.1
2014	99.1	105.1	106.1
2015	102.6	106.2	104.9
2016	105.5	108.3	107.3
2017	110.2	108.3	107.4
2018	110.2	109.4	110.4
2019	110.7	111.6	112.6
2020	112.4	114.9	114.2
2021	115.7	117.8	118.9



2) Chartered accountants and management consultants

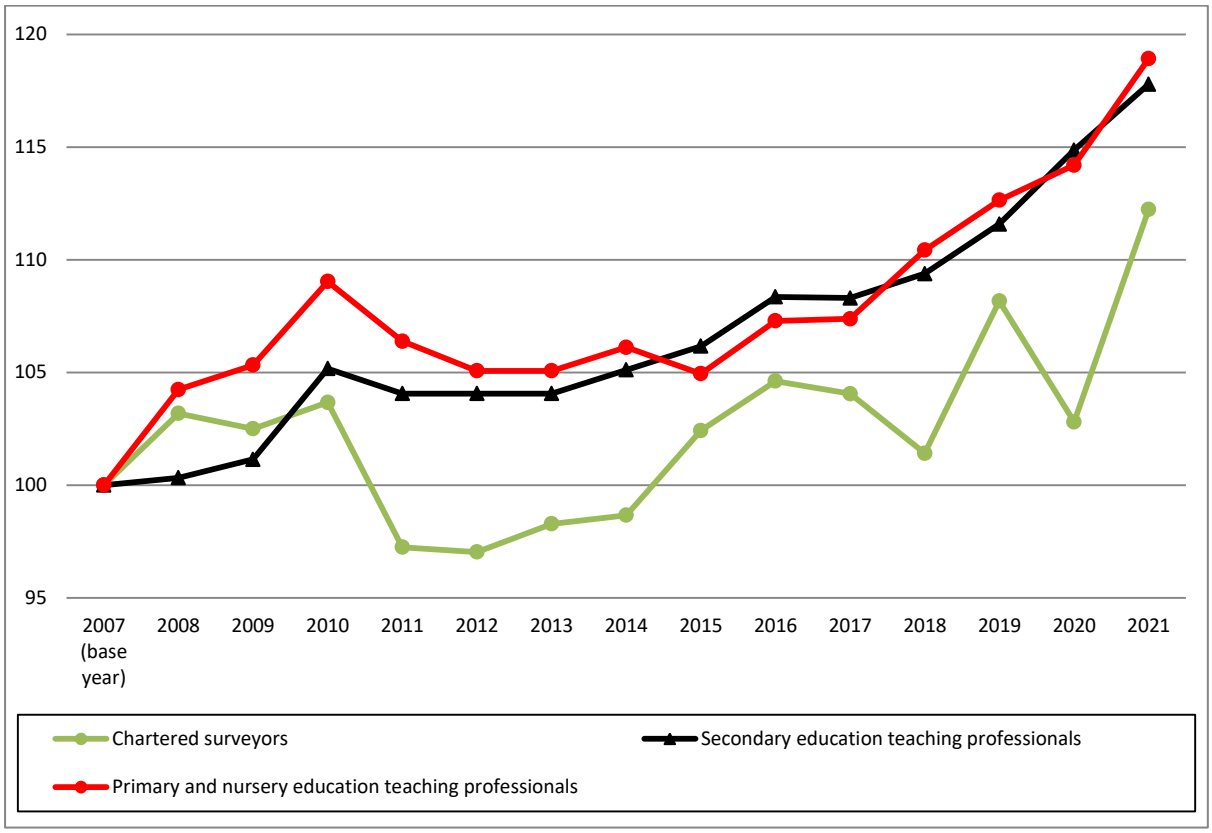
	Chartered and certified accountants	Management consultants and business analysts	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0
2008	101.0	103.2	100.3	104.2
2009	103.8	105.2	101.1	105.3
2010	105.2	104.5	105.2	109.0
2011	106.4	101.9	104.1	106.4
2012	107.2	100.7	104.1	105.1
2013	107.8	100.7	104.1	105.1
2014	107.4	102.7	105.1	106.1
2015	112.1	107.9	106.2	104.9
2016	111.9	104.8	108.3	107.3
2017	111.5	103.3	108.3	107.4
2018	111.0	102.4	109.4	110.4
2019	110.1	107.6	111.6	112.6
2020	113.1	107.6	114.9	114.2
2021	118.7	109.8	117.8	118.9



D Architects, town planners and chartered surveyors

Chartered surveyors

	Chartered surveyors	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	103.2	100.3	104.2
2009	102.5	101.1	105.3
2010	103.7	105.2	109.0
2011	97.2	104.1	106.4
2012	97.0	104.1	105.1
2013	98.3	104.1	105.1
2014	98.7	105.1	106.1
2015	102.4	106.2	104.9
2016	104.6	108.3	107.3
2017	104.1	108.3	107.4
2018	101.4	109.4	110.4
2019	108.2	111.6	112.6
2020	102.8	114.9	114.2
2021	112.2	117.8	118.9

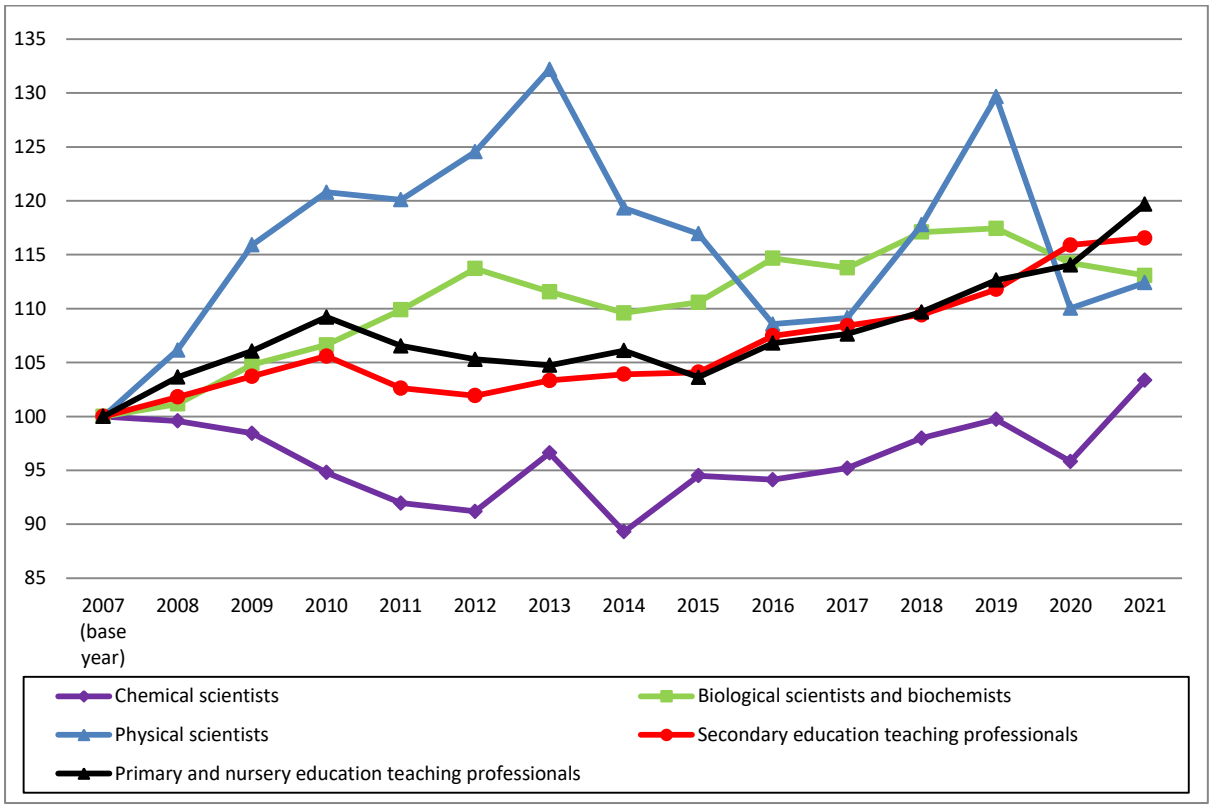


Appendix 6: Indexed average gross weekly earnings 2007 to 2021

A Science, research, engineering and technology professionals

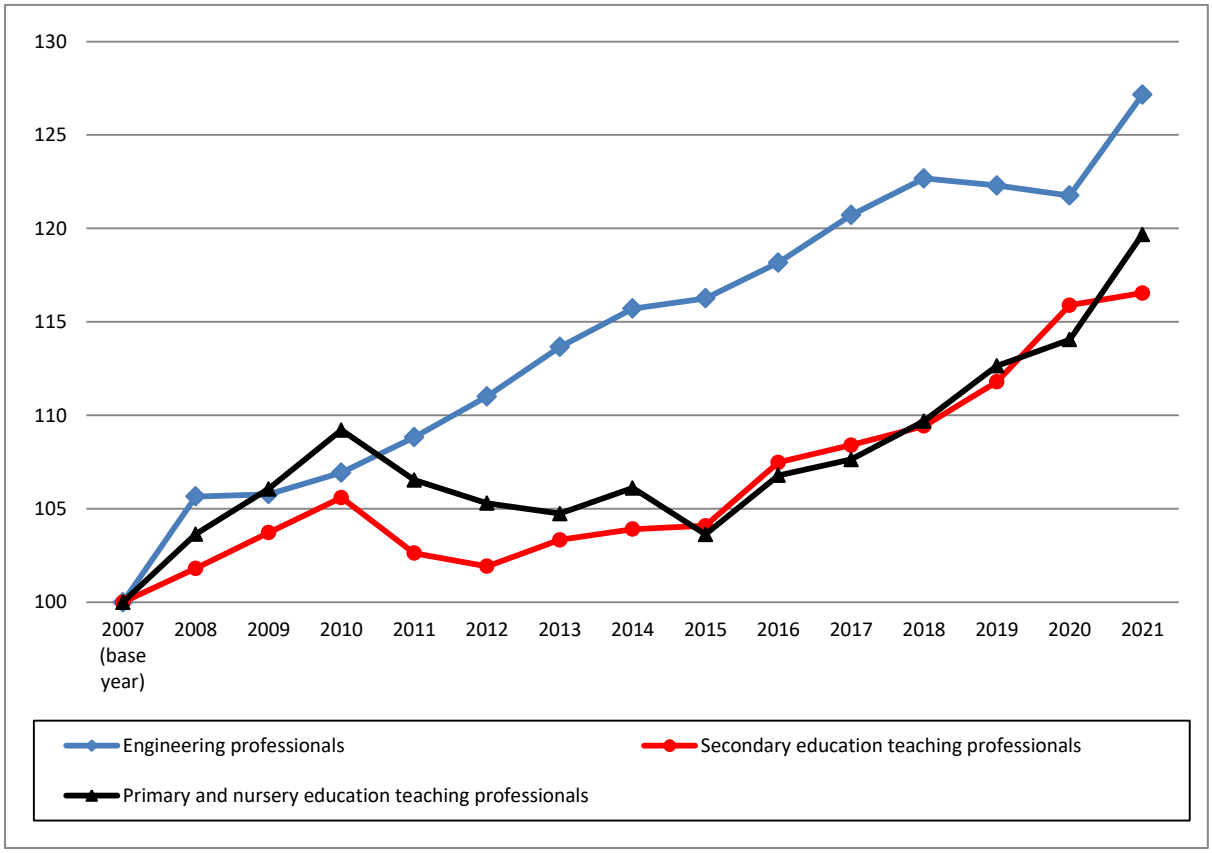
1) Chemical, biological and physical scientists

	Chemical scientists	Biological scientists and biochemists	Physical scientists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0	100.0
2008	99.6	101.2	106.2	101.8	103.6
2009	98.4	104.8	115.9	103.7	106.1
2010	94.8	106.6	120.8	105.6	109.2
2011	92.0	109.9	120.1	102.6	106.5
2012	91.2	113.7	124.6	101.9	105.3
2013	96.6	111.6	132.2	103.3	104.7
2014	89.3	109.6	119.3	103.9	106.1
2015	94.5	110.6	116.9	104.1	103.6
2016	94.1	114.7	108.6	107.5	106.8
2017	95.2	113.8	109.1	108.4	107.6
2018	98.0	117.1	117.8	109.4	109.7
2019	99.7	117.4	129.7	111.8	112.6
2020	95.8	114.2	110.0	115.9	114.0
2021	103.4	113.1	112.4	116.5	119.7



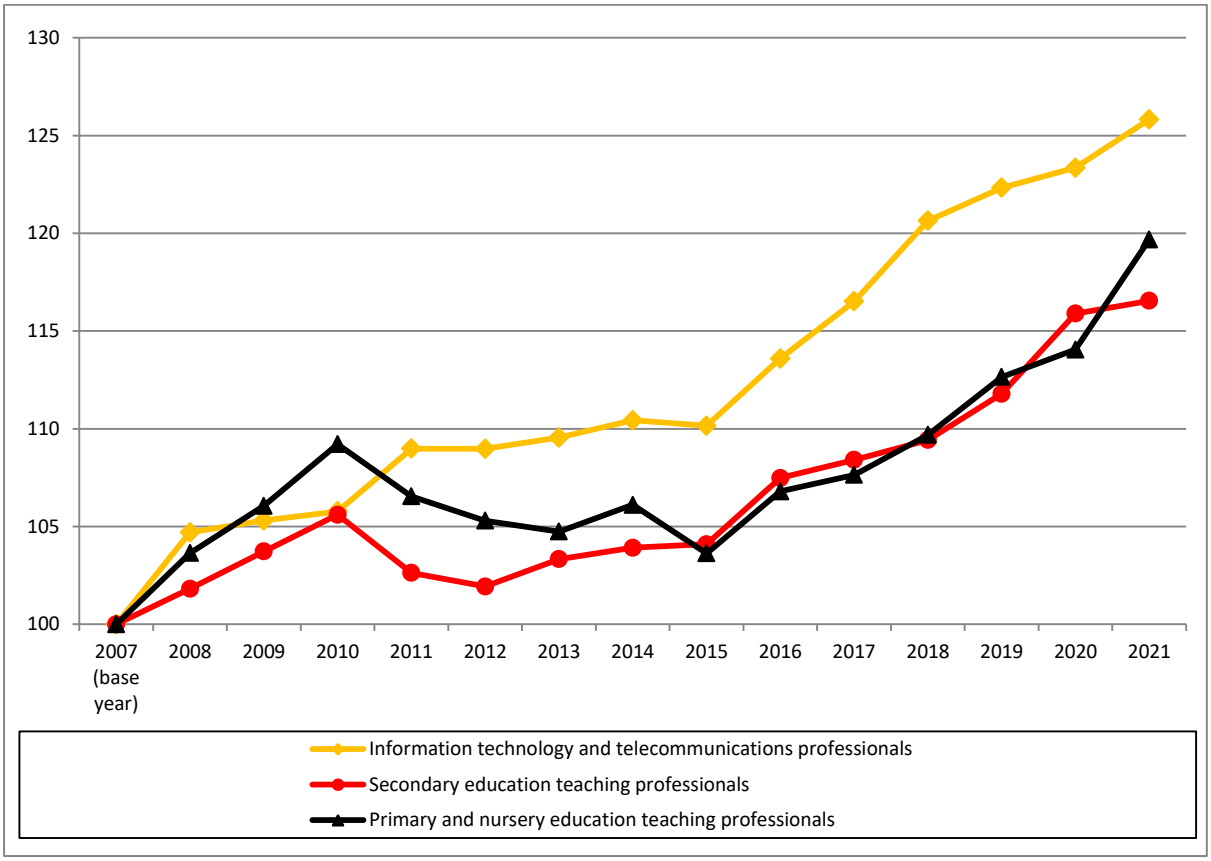
2) Engineering professionals

	Engineering professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	105.7	101.8	103.6
2009	105.8	103.7	106.1
2010	106.9	105.6	109.2
2011	108.8	102.6	106.5
2012	111.0	101.9	105.3
2013	113.7	103.3	104.7
2014	115.7	103.9	106.1
2015	116.3	104.1	103.6
2016	118.2	107.5	106.8
2017	120.7	108.4	107.6
2018	122.7	109.4	109.7
2019	122.3	111.8	112.6
2020	121.8	115.9	114.0
2021	127.2	116.5	119.7



3) Information technology and telecommunications professionals

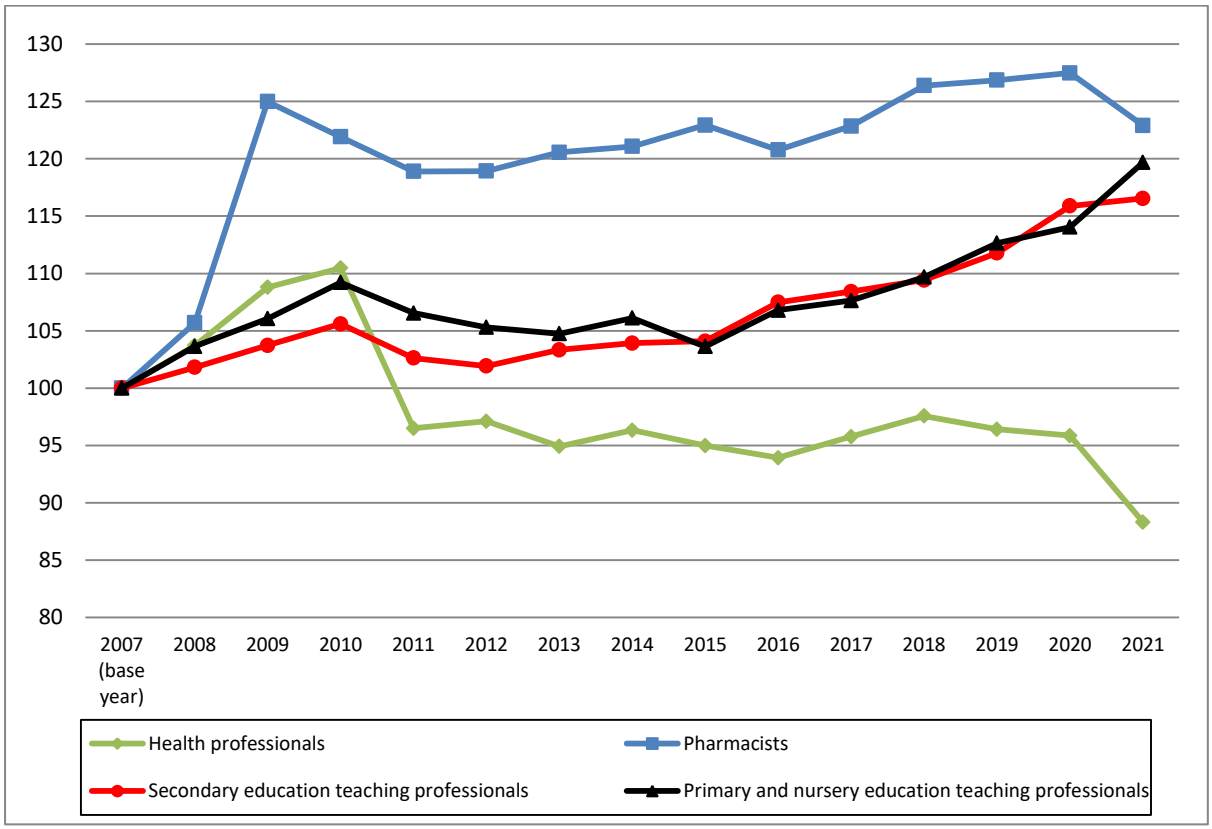
	Information technology and telecommunications professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	104.7	101.8	103.6
2009	105.3	103.7	106.1
2010	105.8	105.6	109.2
2011	109.0	102.6	106.5
2012	109.0	101.9	105.3
2013	109.5	103.3	104.7
2014	110.4	103.9	106.1
2015	110.2	104.1	103.6
2016	113.6	107.5	106.8
2017	116.5	108.4	107.6
2018	120.6	109.4	109.7
2019	122.3	111.8	112.6
2020	123.4	115.9	114.0
2021	125.8	116.5	119.7



C Health professionals

Health professionals and pharmacists

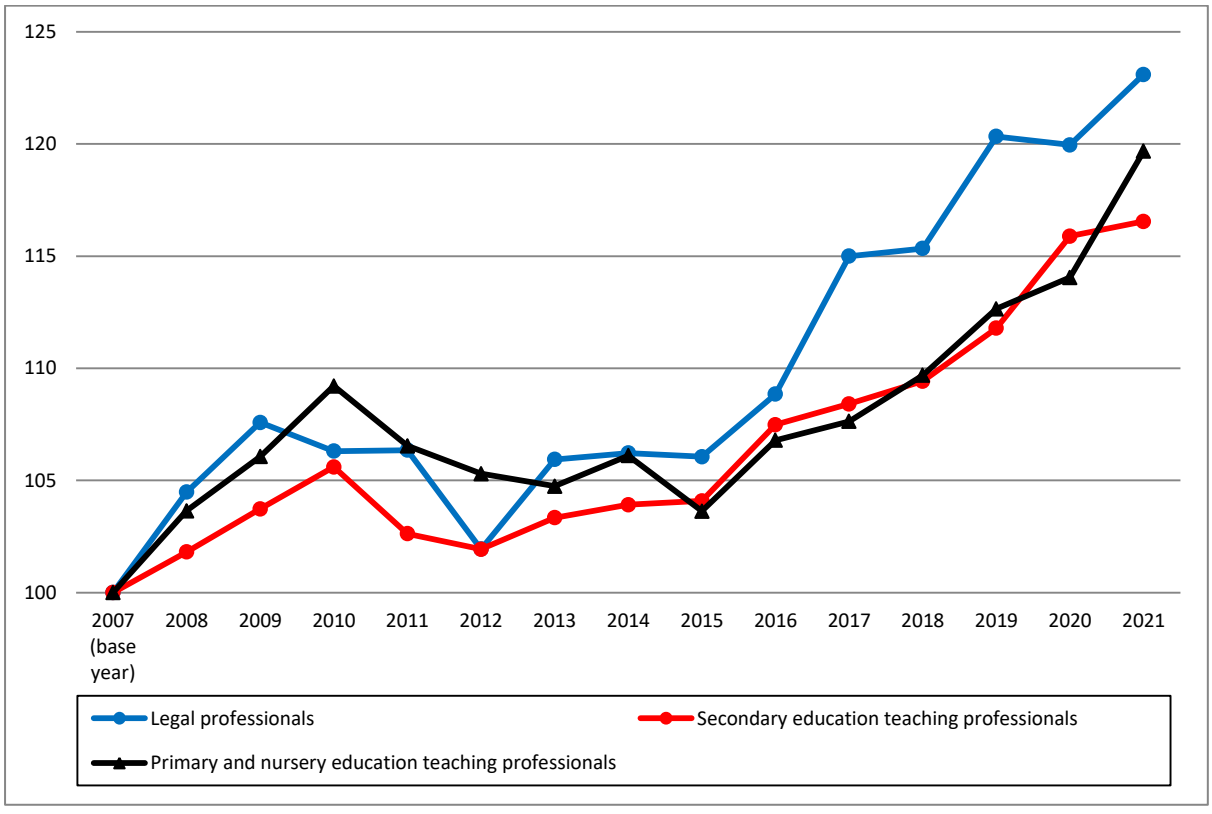
	Health professionals	Pharmacists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0
2008	103.7	105.7	101.8	103.6
2009	108.8	125.0	103.7	106.1
2010	110.5	121.9	105.6	109.2
2011	96.5	118.9	102.6	106.5
2012	97.1	118.9	101.9	105.3
2013	94.9	120.6	103.3	104.7
2014	96.3	121.1	103.9	106.1
2015	95.0	122.9	104.1	103.6
2016	93.9	120.8	107.5	106.8
2017	95.8	122.9	108.4	107.6
2018	97.6	126.4	109.4	109.7
2019	96.4	126.9	111.8	112.6
2020	95.8	127.5	115.9	114.0
2021	88.3	122.9	116.5	119.7



C Business, research and administrative professionals

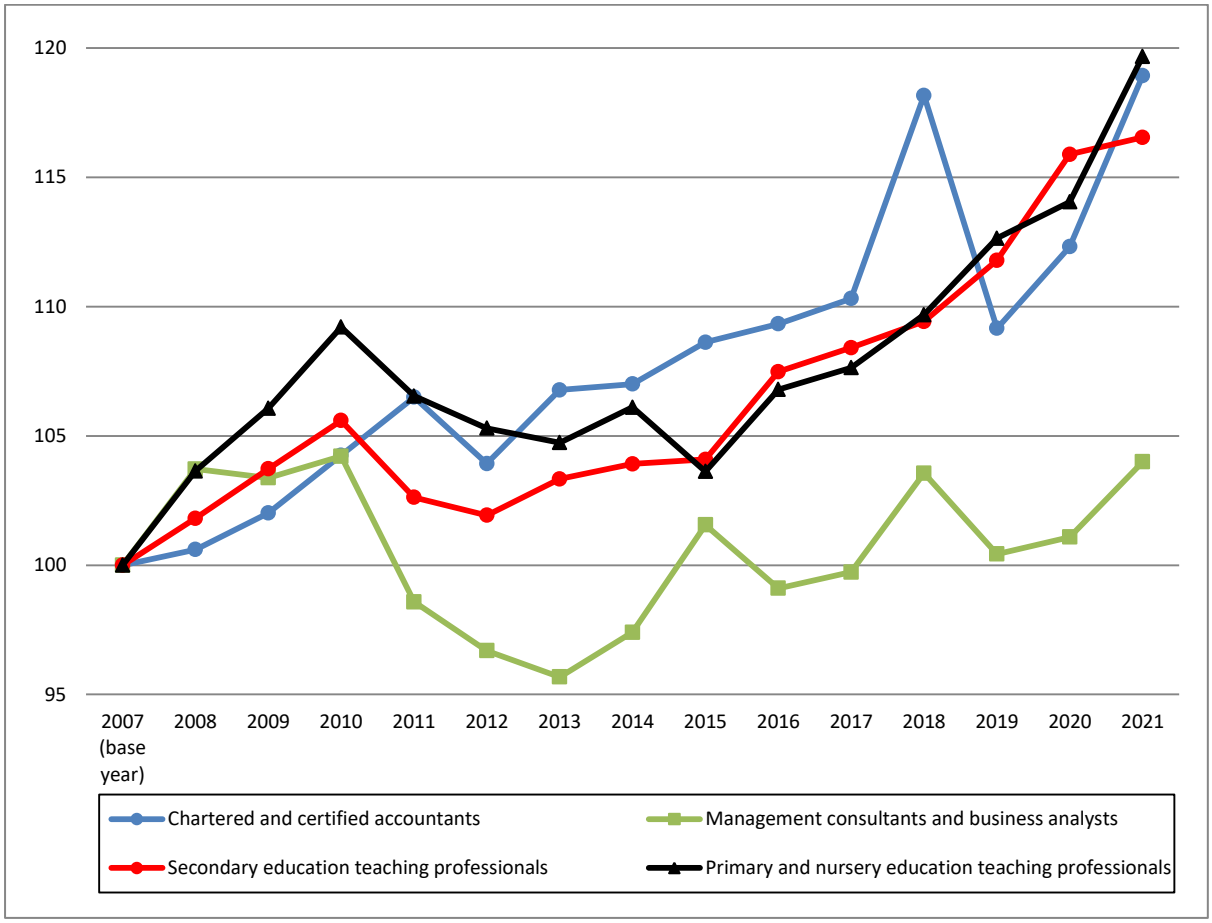
1) Legal professionals

	Legal professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	104.5	101.8	103.6
2009	107.6	103.7	106.1
2010	106.3	105.6	109.2
2011	106.3	102.6	106.5
2012	101.9	101.9	105.3
2013	105.9	103.3	104.7
2014	106.2	103.9	106.1
2015	106.1	104.1	103.6
2016	108.8	107.5	106.8
2017	115.0	108.4	107.6
2018	115.3	109.4	109.7
2019	120.3	111.8	112.6
2020	120.0	115.9	114.0
2021	123.1	116.5	119.7



2) Chartered accountants and management consultants

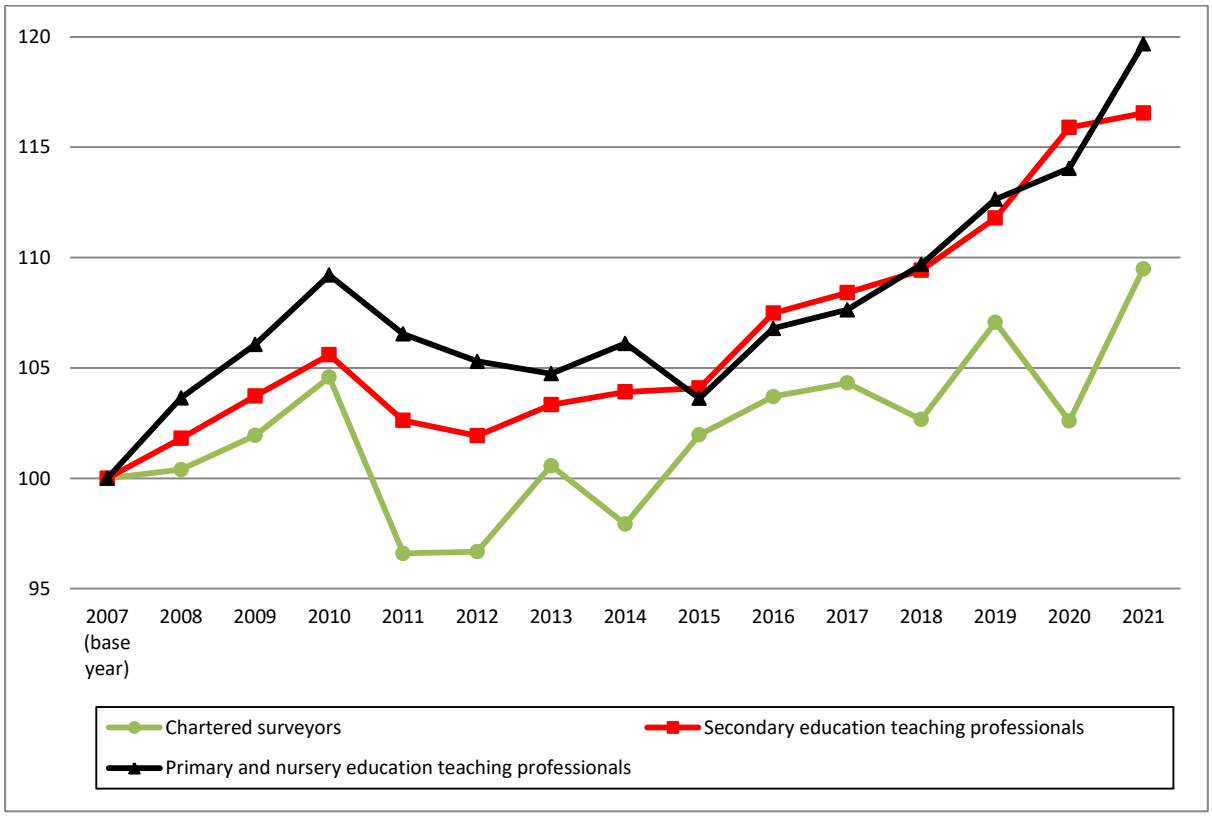
	Chartered and certified accountants	Management consultants and business analysts	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0	100.0
2008	100.6	103.7	101.8	103.6
2009	102.0	103.4	103.7	106.1
2010	104.2	104.2	105.6	109.2
2011	106.5	98.6	102.6	106.5
2012	103.9	96.7	101.9	105.3
2013	106.8	95.7	103.3	104.7
2014	107.0	97.4	103.9	106.1
2015	108.6	101.6	104.1	103.6
2016	109.3	99.1	107.5	106.8
2017	110.3	99.7	108.4	107.6
2018	118.2	103.6	109.4	109.7
2019	109.2	100.4	111.8	112.6
2020	112.3	101.1	115.9	114.0
2021	118.9	104.0	116.5	119.7



D Architects, town planners and chartered surveyors

Chartered surveyors

	Chartered surveyors	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007 (base year)	100.0	100.0	100.0
2008	100.4	101.8	103.6
2009	101.9	103.7	106.1
2010	104.6	105.6	109.2
2011	96.6	102.6	106.5
2012	96.7	101.9	105.3
2013	100.6	103.3	104.7
2014	97.9	103.9	106.1
2015	102.0	104.1	103.6
2016	103.7	107.5	106.8
2017	104.3	108.4	107.6
2018	102.7	109.4	109.7
2019	107.1	111.8	112.6
2020	102.6	115.9	114.0
2021	109.5	116.5	119.7

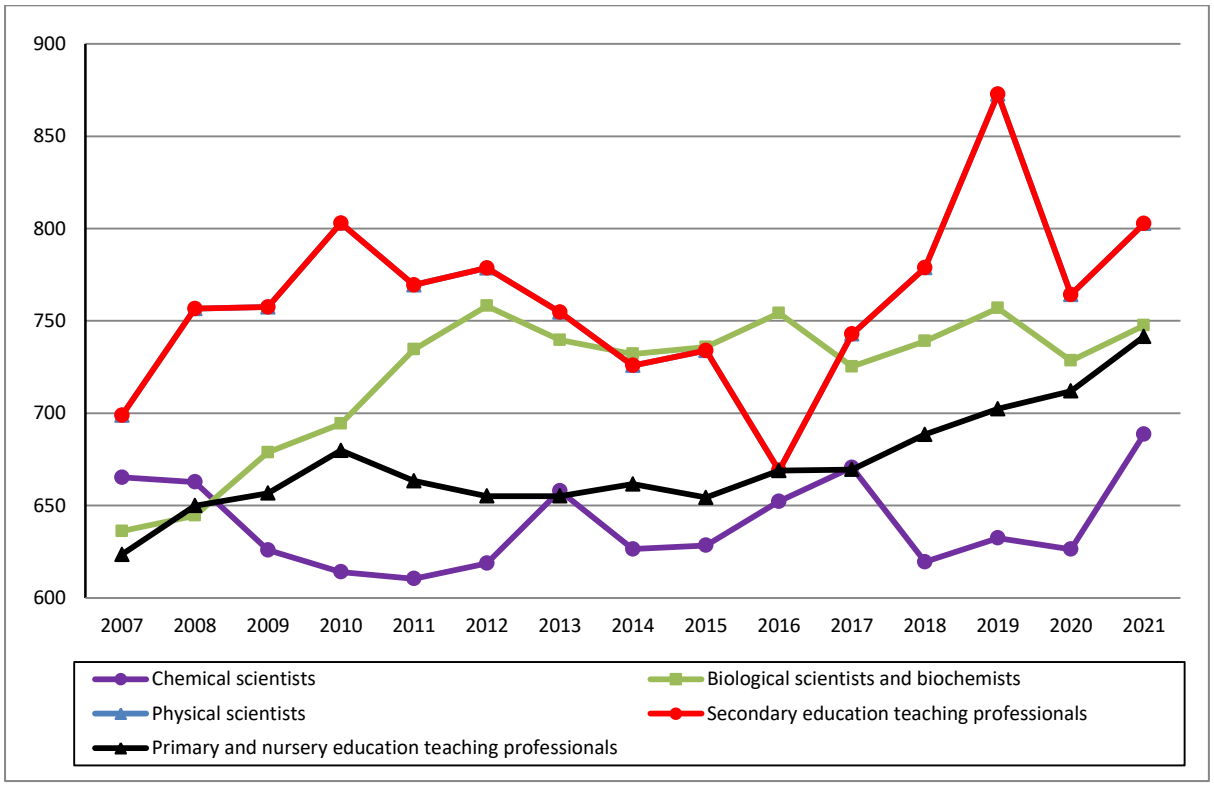


Appendix 7: Median gross weekly earnings (ASHE) 2007 to 2021

A Science, research, engineering and technology professionals

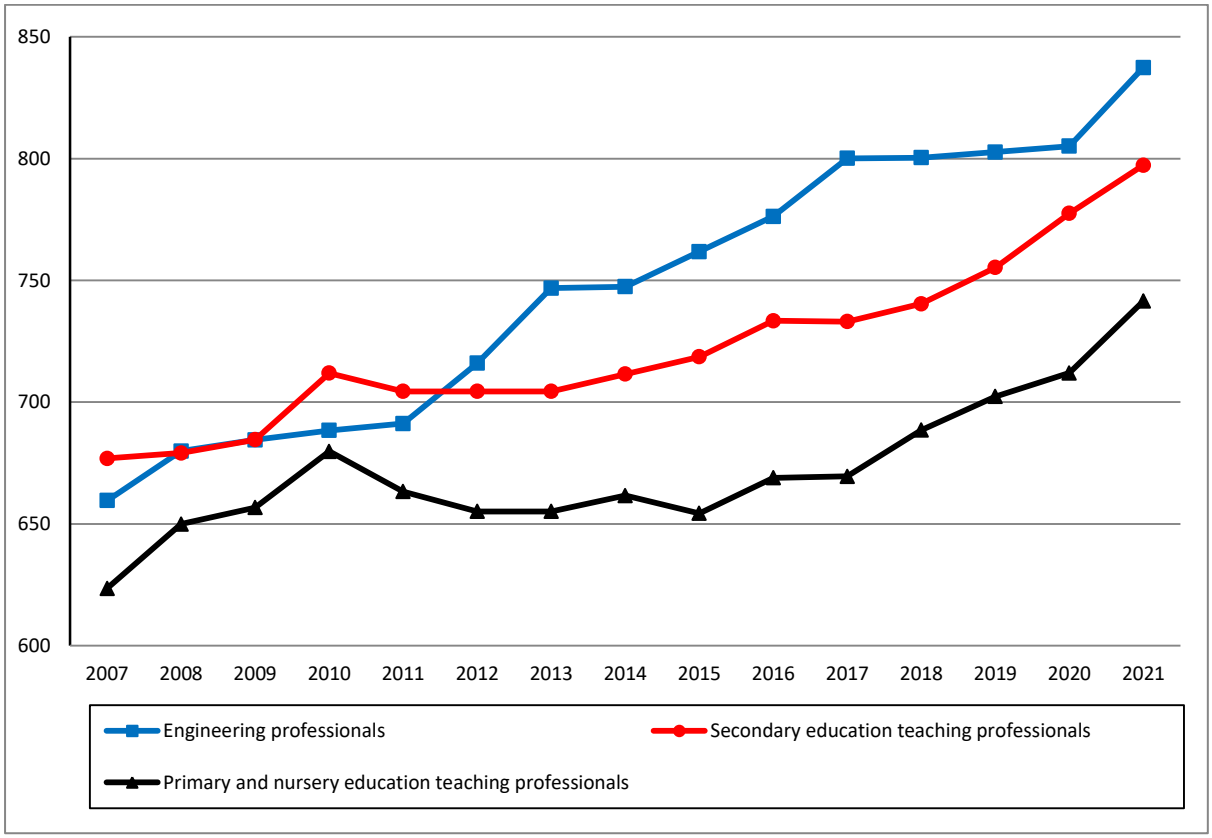
1) Chemical, biological and physical scientists (median gross earnings £pw)

	Chemical scientists	Biological scientists and biochemists	Physical scientists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	665.2	636.1	698.8	676.9	623.5
2008	662.7	644.5	756.6	679.1	649.9
2009	625.9	678.8	757.5	684.6	656.7
2010	614.0	694.3	802.9	711.9	679.8
2011	610.4	734.5	769.4	704.4	663.3
2012	618.7	758.1	778.6	704.4	655.1
2013	658.0	739.6	754.7	704.4	655.1
2014	626.4	732.1	725.8	711.5	661.6
2015	628.4	735.8	733.9	718.6	654.3
2016	652.2	754.2	669.0	733.4	668.9
2017	670.6	725.2	742.8	733.1	669.5
2018	619.5	739.0	778.7	740.4	688.5
2019	632.4	756.9	872.8	755.3	702.3
2020	626.3	728.4	764.2	777.5	712.0
2021	688.6	747.5	802.6	797.3	741.5



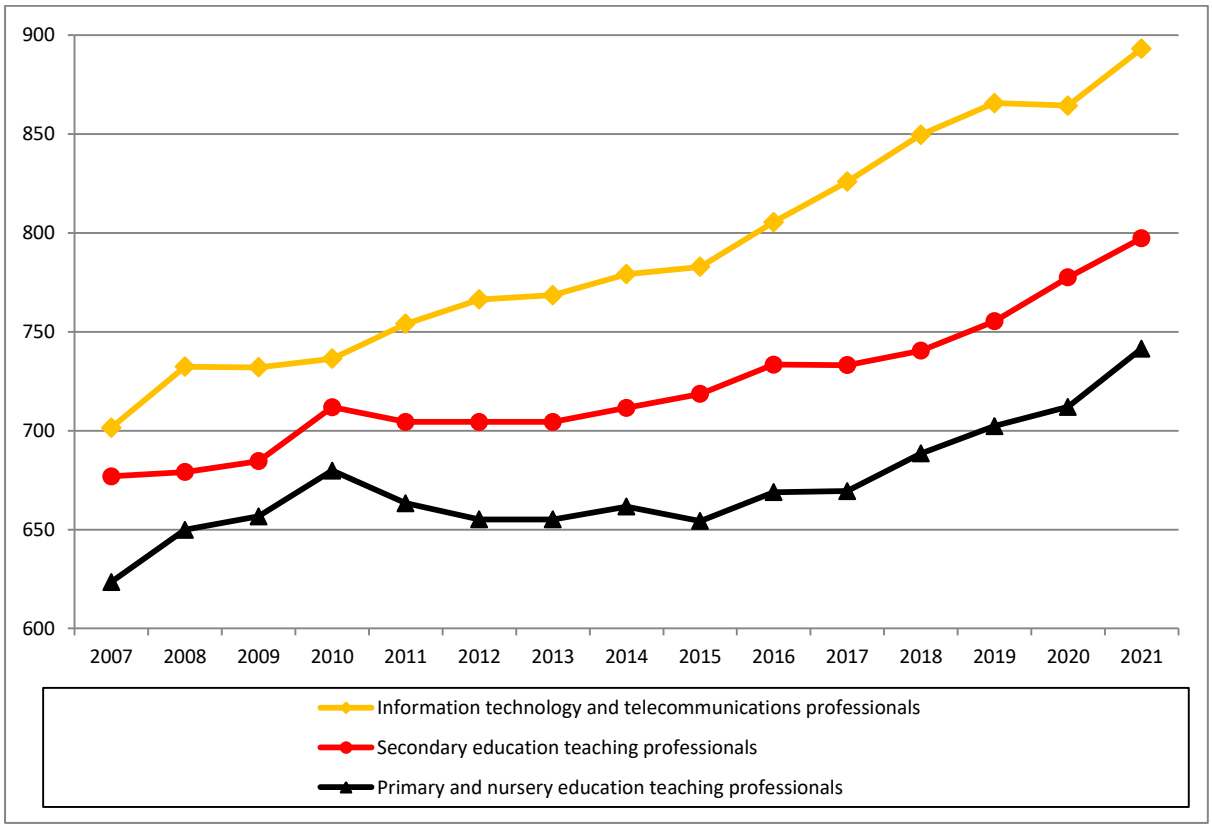
2) Engineering professionals (median gross earnings £pw)

	Engineering professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	659.6	676.9	623.5
2008	679.9	679.1	649.9
2009	684.5	684.6	656.7
2010	688.4	711.9	679.8
2011	691.2	704.4	663.3
2012	716.0	704.4	655.1
2013	746.8	704.4	655.1
2014	747.4	711.5	661.6
2015	761.8	718.6	654.3
2016	776.3	733.4	668.9
2017	800.1	733.1	669.5
2018	800.4	740.4	688.5
2019	802.7	755.3	702.3
2020	805.1	777.5	712.0
2021	837.4	797.3	741.5



3) Information technology and telecommunications professionals (median gross earnings £pw)

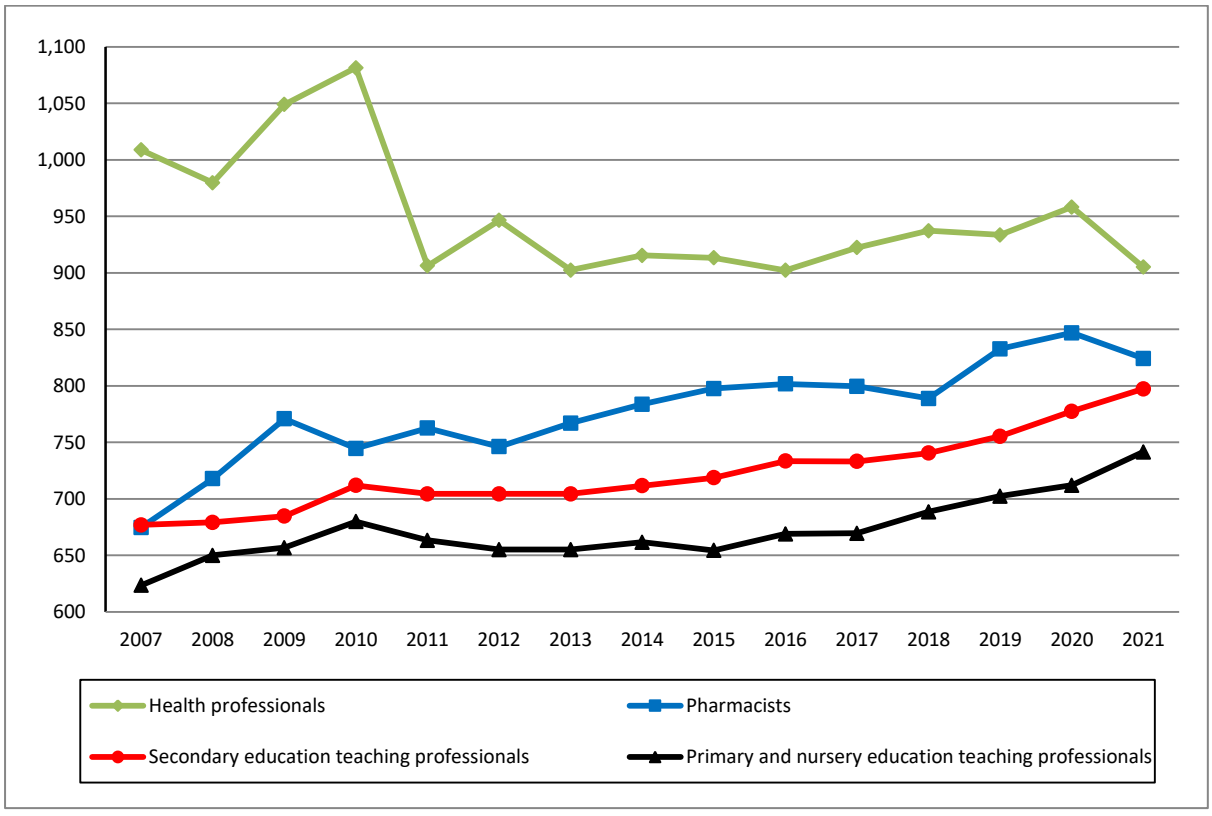
	Information technology and telecommunications professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	701.5	676.9	623.5
2008	732.3	679.1	649.9
2009	732.0	684.6	656.7
2010	736.4	711.9	679.8
2011	754.0	704.4	663.3
2012	766.3	704.4	655.1
2013	768.5	704.4	655.1
2014	779.1	711.5	661.6
2015	782.8	718.6	654.3
2016	805.4	733.4	668.9
2017	825.9	733.1	669.5
2018	849.6	740.4	688.5
2019	865.6	755.3	702.3
2020	864.3	777.5	712.0
2021	893.1	797.3	741.5



B Health professionals

Health professionals and pharmacists (median gross earnings £pw)

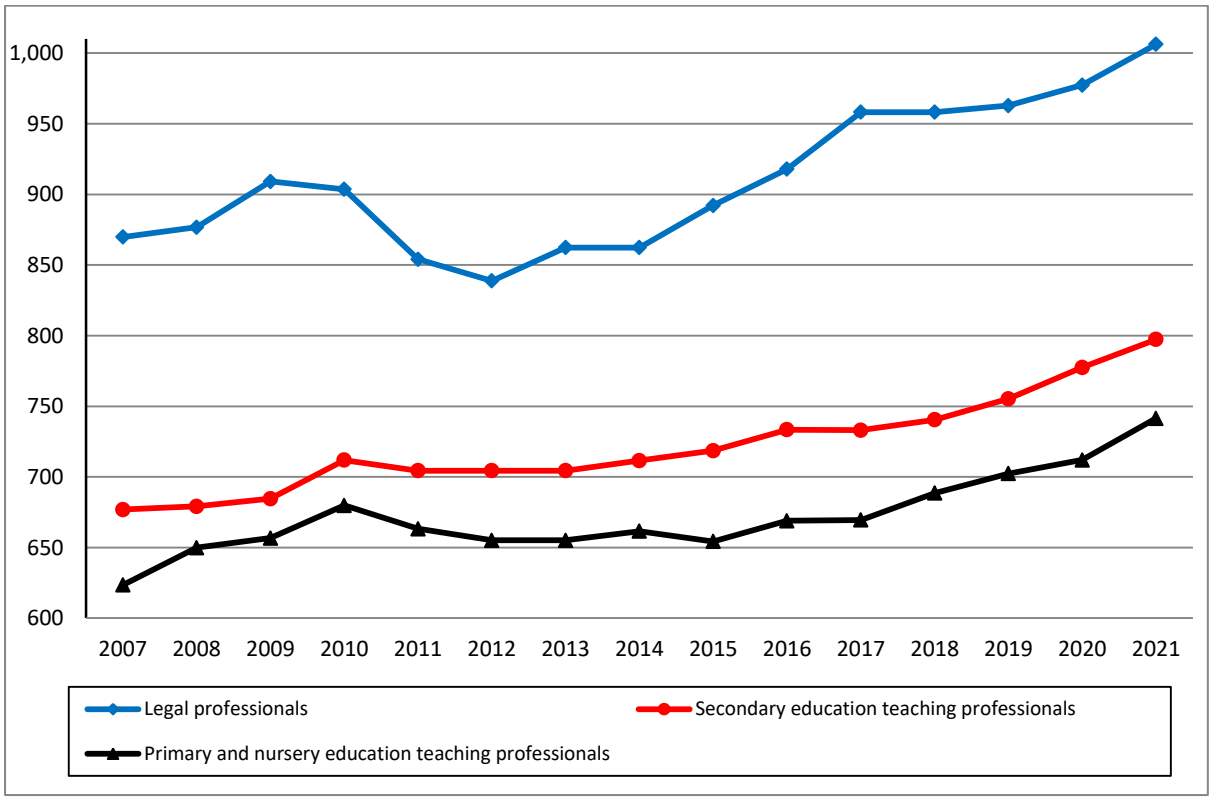
	Health professionals	Pharmacists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	1,008.8	674.6	676.9	623.5
2008	979.7	717.8	679.1	649.9
2009	1,049.0	770.8	684.6	656.7
2010	1,081.4	744.6	711.9	679.8
2011	906.2	762.5	704.4	663.3
2012	946.5	746.2	704.4	655.1
2013	902.4	766.9	704.4	655.1
2014	915.5	783.7	711.5	661.6
2015	913.3	797.6	718.6	654.3
2016	902.2	801.6	733.4	668.9
2017	922.4	799.5	733.1	669.5
2018	937.2	788.8	740.4	688.5
2019	933.5	832.7	755.3	702.3
2020	958.2	846.9	777.5	712.0
2021	905.1	824.2	797.3	741.5



C Business, research and administrative professionals

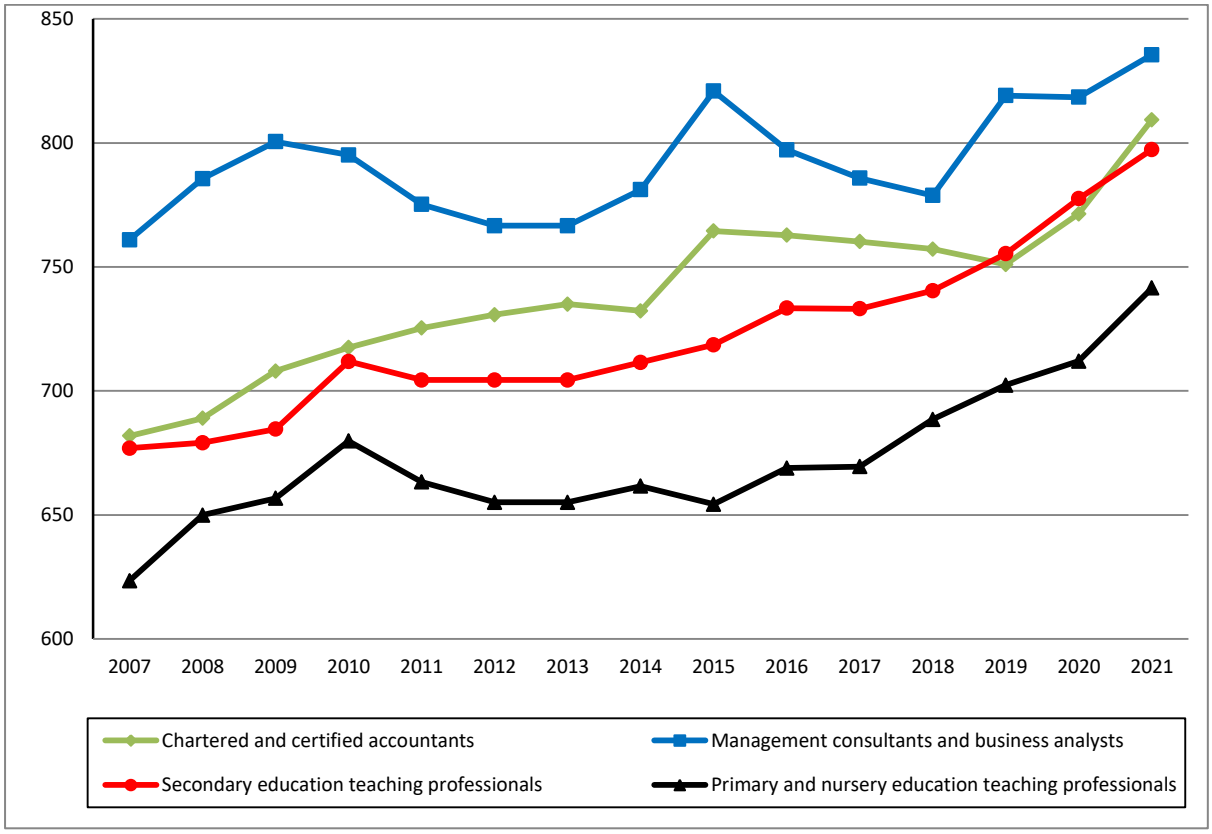
1) Legal professionals (median gross earnings £pw)

	Legal professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	869.8	676.9	623.5
2008	876.7	679.1	649.9
2009	909.1	684.6	656.7
2010	903.6	711.9	679.8
2011	854.1	704.4	663.3
2012	838.8	704.4	655.1
2013	862.4	704.4	655.1
2014	862.4	711.5	661.6
2015	892.1	718.6	654.3
2016	917.9	733.4	668.9
2017	958.2	733.1	669.5
2018	958.2	740.4	688.5
2019	962.9	755.3	702.3
2020	977.4	777.5	712.0
2021	1,006.2	797.3	741.5



2) Chartered accountants and management consultants (median gross earnings £pw)

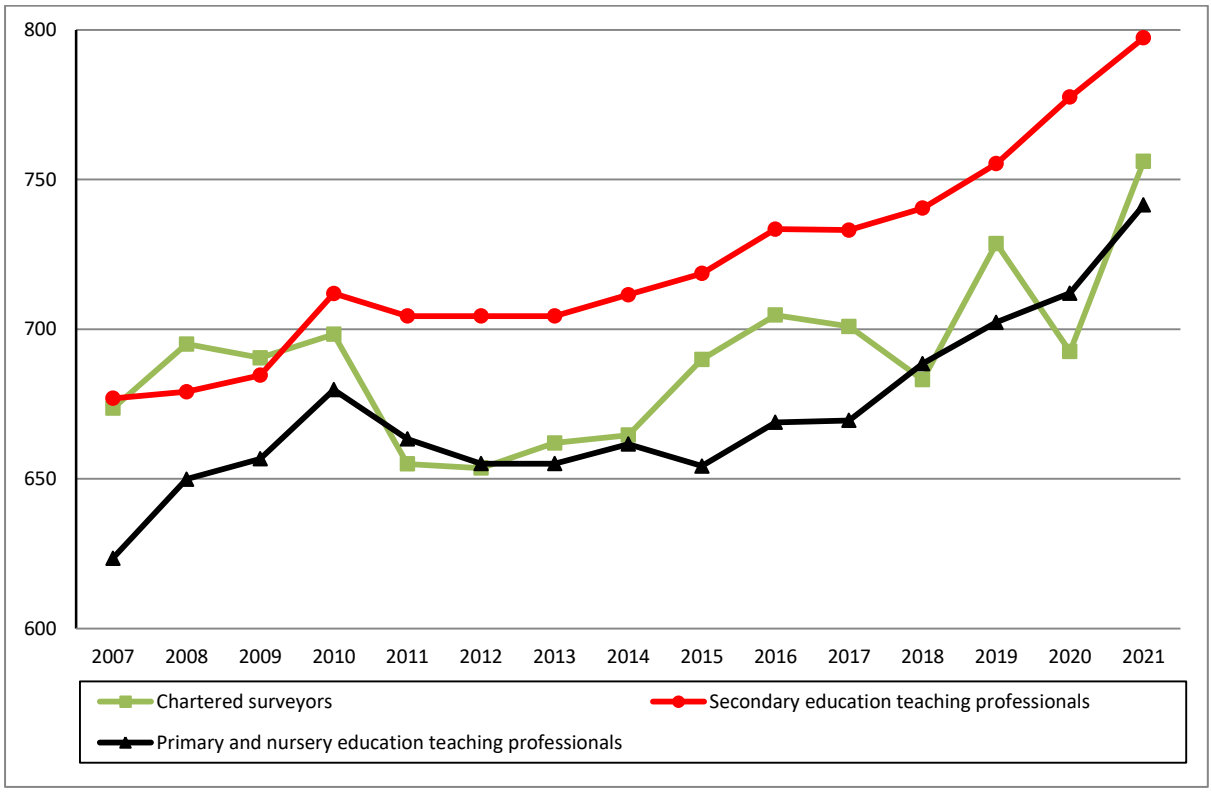
	Chartered and certified accountants	Management consultants and business analysts	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	681.9	760.9	676.9	623.5
2008	689.0	785.6	679.1	649.9
2009	708.0	800.5	684.6	656.7
2010	717.5	795.1	711.9	679.8
2011	725.4	775.2	704.4	663.3
2012	730.7	766.6	704.4	655.1
2013	735.0	766.6	704.4	655.1
2014	732.3	781.1	711.5	661.6
2015	764.5	820.9	718.6	654.3
2016	762.8	797.2	733.4	668.9
2017	760.2	785.8	733.1	669.5
2018	757.2	778.8	740.4	688.5
2019	751.0	819.1	755.3	702.3
2020	771.4	818.4	777.5	712.0
2021	809.3	835.5	797.3	741.5



D Architects, town planners and chartered surveyors

Chartered surveyors (median gross earnings £pw)

	Chartered surveyors	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	673.6	676.9	623.5
2008	695.0	679.1	649.9
2009	690.4	684.6	656.7
2010	698.3	711.9	679.8
2011	655.0	704.4	663.3
2012	653.6	704.4	655.1
2013	662.0	704.4	655.1
2014	664.6	711.5	661.6
2015	689.9	718.6	654.3
2016	704.7	733.4	668.9
2017	700.9	733.1	669.5
2018	683.1	740.4	688.5
2019	728.6	755.3	702.3
2020	692.5	777.5	712.0
2021	756.0	797.3	741.5

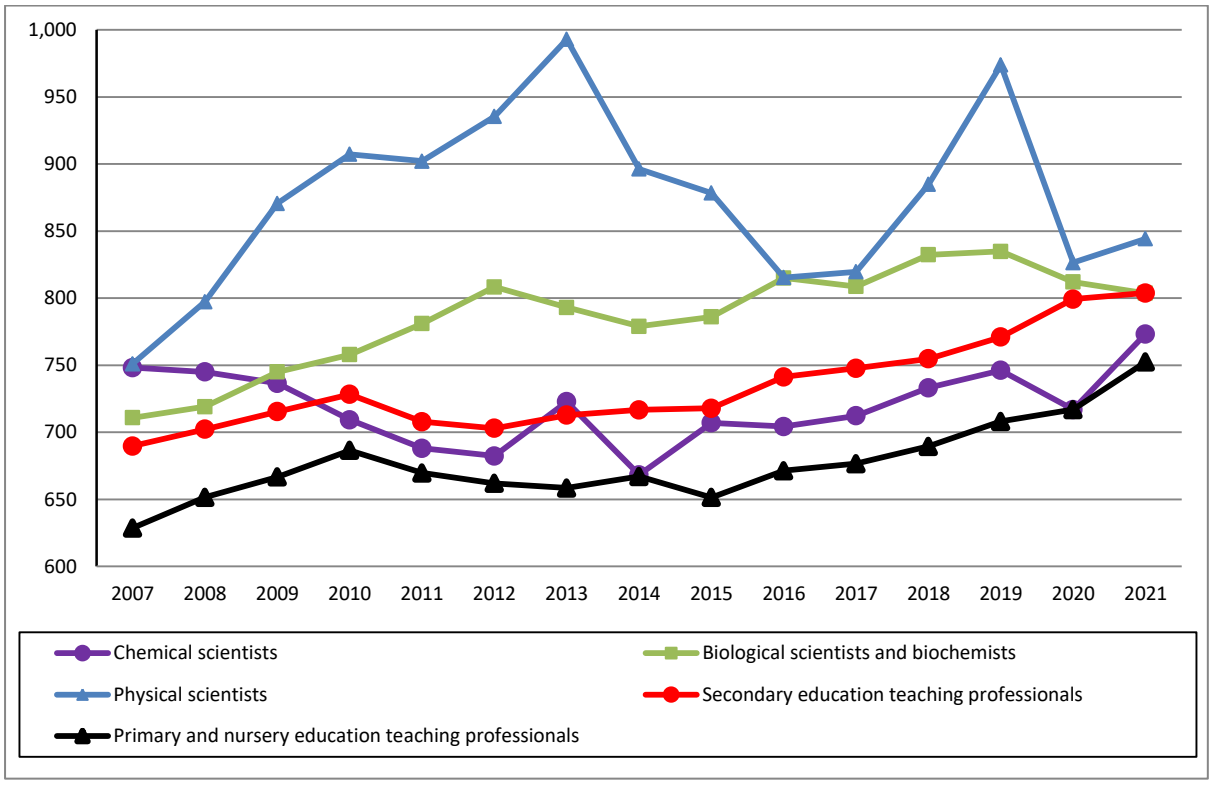


Appendix 8: Average gross weekly earnings (ASHE) 2007 to 2021

A Science, research, engineering and technology professionals

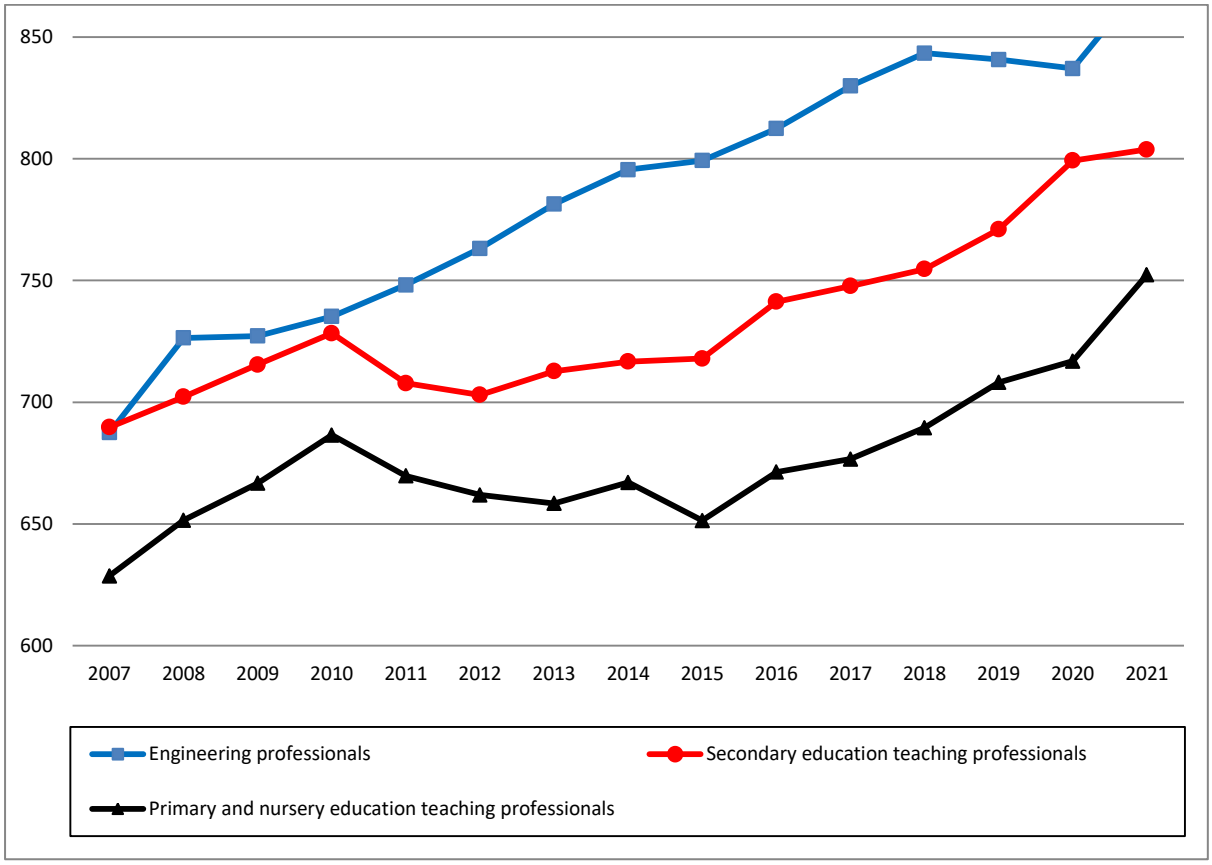
1) Chemical, biological and physical scientists (average gross earnings £pw)

	Chemical scientists	Biological scientists and biochemists	Physical scientists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	748.2	710.8	751.1	689.7	628.6
2008	745.0	719.0	797.3	702.2	651.5
2009	736.5	744.9	870.6	715.4	666.7
2010	709.3	757.9	907.3	728.3	686.5
2011	688.0	781.0	902.1	707.8	669.7
2012	682.3	808.3	935.5	703.0	661.9
2013	722.8	793.0	993.0	712.7	658.4
2014	668.2	779.0	896.3	716.7	667.0
2015	707.0	786.0	878.4	717.9	651.4
2016	704.3	815.0	815.4	741.3	671.3
2017	712.3	808.7	819.7	747.7	676.6
2018	733.1	832.3	884.8	754.7	689.5
2019	746.2	834.8	973.9	771.0	708.1
2020	716.9	812.0	826.5	799.3	716.9
2021	773.3	803.7	844.3	803.8	752.3



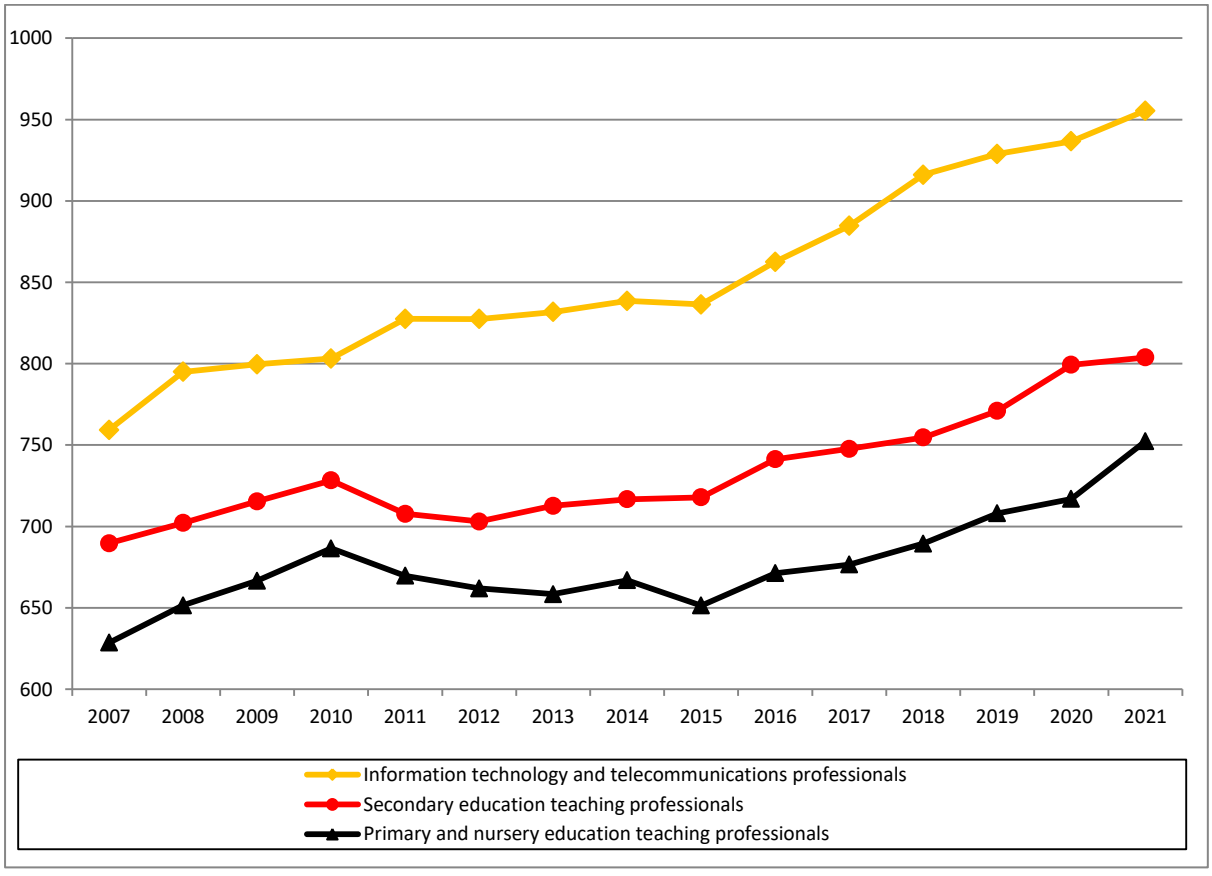
2) Engineering professionals (median basic pay £pw)

	Engineering professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	687.5	689.7	628.6
2008	726.4	702.2	651.5
2009	727.2	715.4	666.7
2010	735.2	728.3	686.5
2011	748.2	707.8	669.7
2012	763.2	703.0	661.9
2013	781.4	712.7	658.4
2014	795.5	716.7	667.0
2015	799.3	717.9	651.4
2016	812.4	741.3	671.3
2017	829.9	747.7	676.6
2018	843.4	754.7	689.5
2019	840.8	771.0	708.1
2020	837.1	799.3	716.9
2021	874.2	803.8	752.3



3) Information technology and telecommunications professionals (median basic pay £pw)

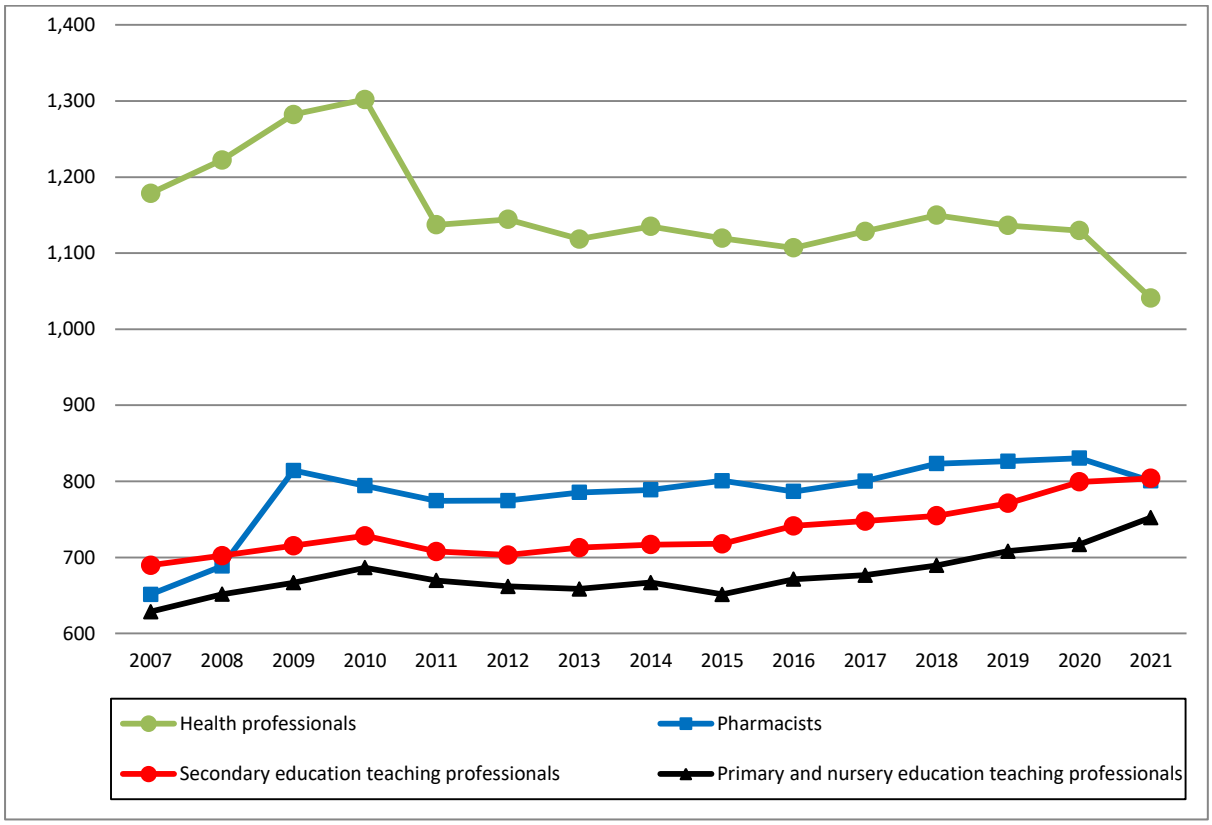
	Information technology and telecommunications professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	759.3	689.7	628.6
2008	795.0	702.2	651.5
2009	799.6	715.4	666.7
2010	803.1	728.3	686.5
2011	827.5	707.8	669.7
2012	827.4	703.0	661.9
2013	831.8	712.7	658.4
2014	838.5	716.7	667.0
2015	836.4	717.9	651.4
2016	862.5	741.3	671.3
2017	884.7	747.7	676.6
2018	916.0	754.7	689.5
2019	928.8	771.0	708.1
2020	936.6	799.3	716.9
2021	955.4	803.8	752.3



B Health professionals

Health professionals and pharmacists (median basic pay £pw)

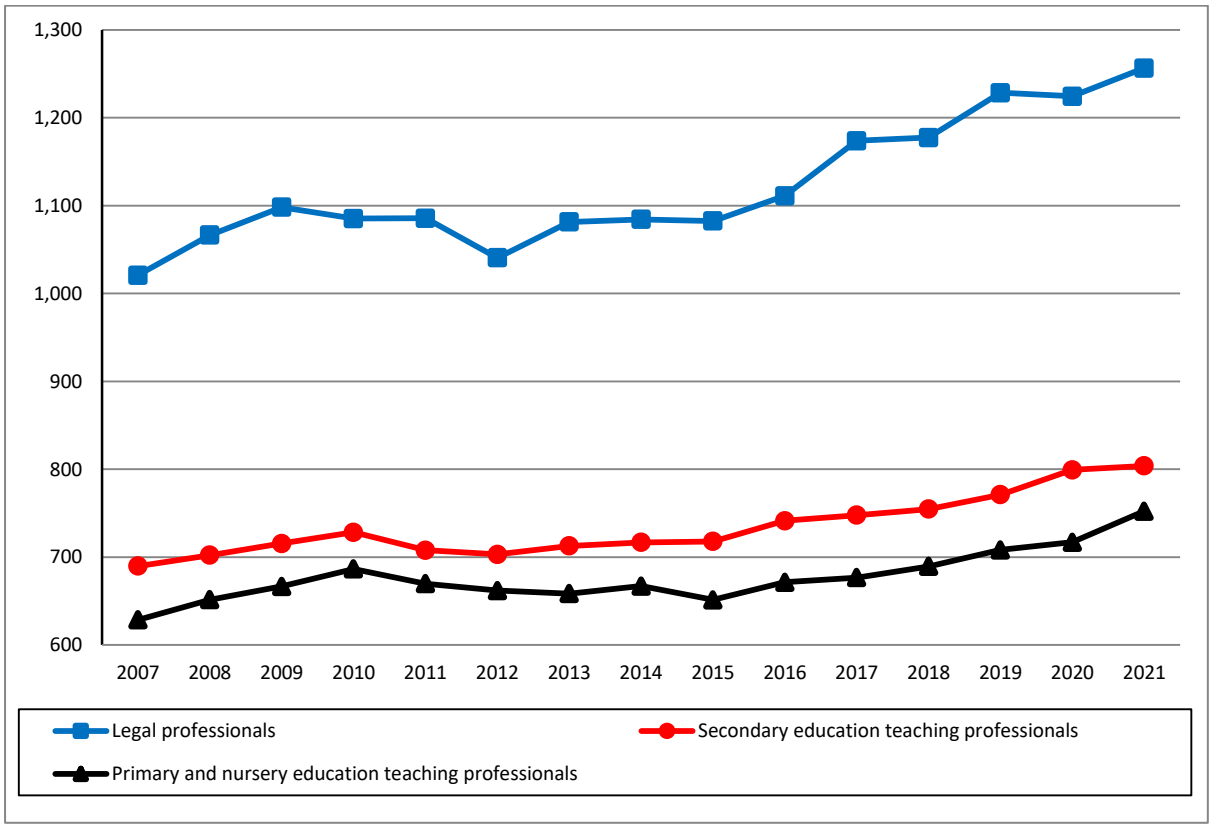
	Health professionals	Pharmacists	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	1178.6	651.4	689.7	628.6
2008	1,222.4	688.5	702.2	651.5
2009	1,282.2	814.2	715.4	666.7
2010	1,302.0	794.2	728.3	686.5
2011	1,137.3	774.5	707.8	669.7
2012	1,144.5	774.7	703.0	661.9
2013	1,118.6	785.4	712.7	658.4
2014	1,135.2	788.7	716.7	667.0
2015	1,119.5	800.8	717.9	651.4
2016	1,107.0	786.7	741.3	671.3
2017	1,128.7	800.3	747.7	676.6
2018	1,149.9	823.3	754.7	689.5
2019	1,136.3	826.4	771.0	708.1
2020	1,129.6	830.5	799.3	716.9
2021	1040.8	800.6	803.8	752.3



C Business, Research and Administrative professionals

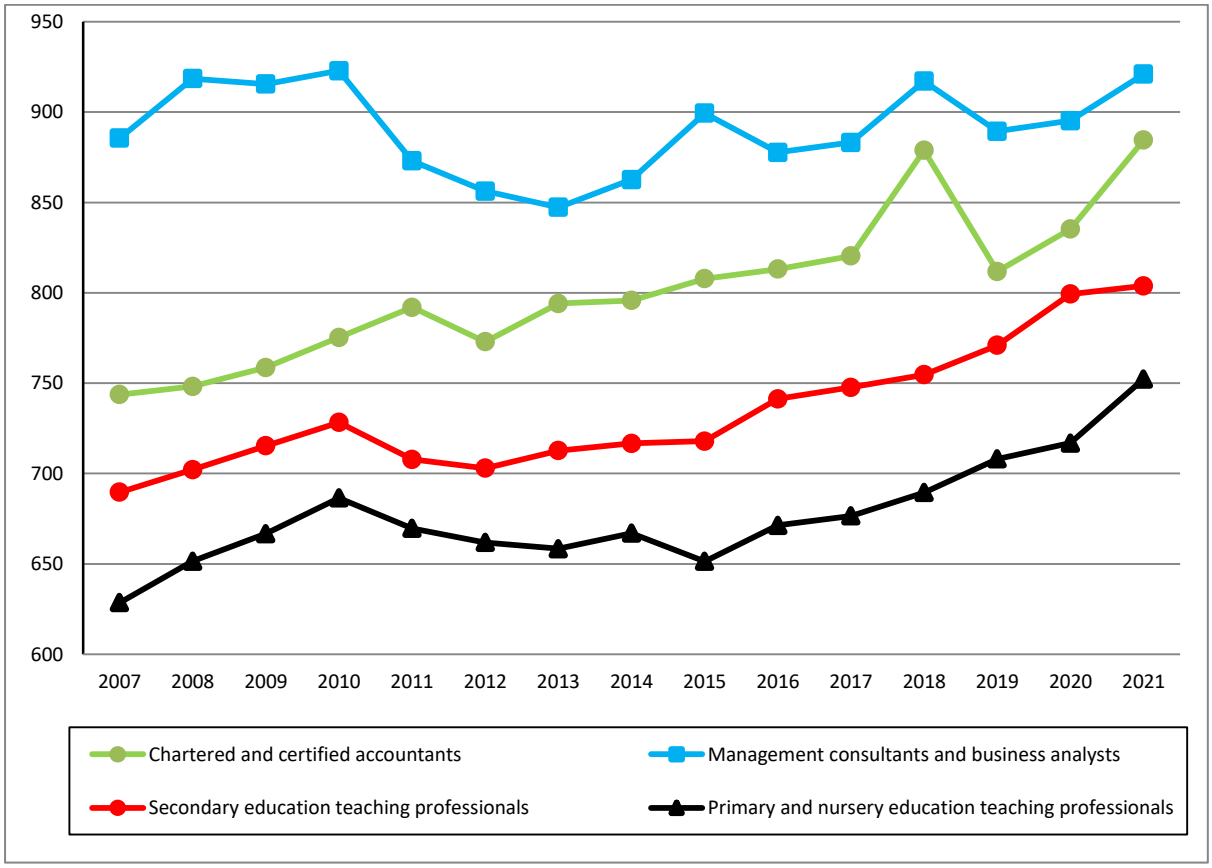
1) Legal professionals (median basic pay £pw)

	Legal professionals	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	1020.8	689.7	628.6
2008	1,066.5	702.2	651.5
2009	1,098.2	715.4	666.7
2010	1,085.2	728.3	686.5
2011	1,085.6	707.8	669.7
2012	1,040.6	703.0	661.9
2013	1,081.4	712.7	658.4
2014	1,084.3	716.7	667.0
2015	1,082.6	717.9	651.4
2016	1,111.1	741.3	671.3
2017	1,173.9	747.7	676.6
2018	1,177.4	754.7	689.5
2019	1,228.4	771.0	708.1
2020	1,224.5	799.3	716.9
2021	1256.6	803.8	752.3



2) Chartered accountants and management consultants (median basic pay £pw)

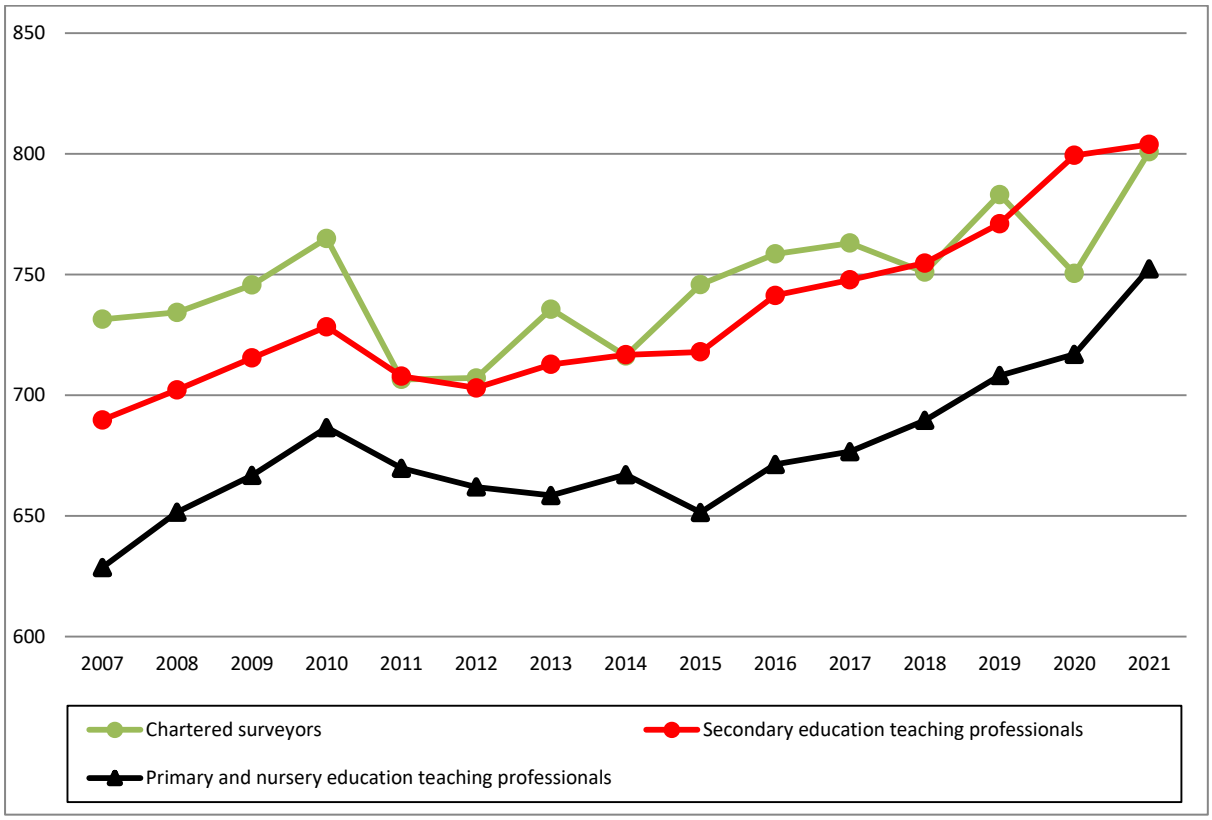
	Chartered and certified accountants	Management consultants and business analysts	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	743.7	885.6	689.7	628.6
2008	748.2	918.5	702.2	651.5
2009	758.7	915.5	715.4	666.7
2010	775.3	922.9	728.3	686.5
2011	792.0	873.0	707.8	669.7
2012	772.9	856.3	703.0	661.9
2013	794.1	847.3	712.7	658.4
2014	795.8	862.6	716.7	667.0
2015	807.8	899.4	717.9	651.4
2016	813.1	877.7	741.3	671.3
2017	820.4	883.2	747.7	676.6
2018	878.8	917.1	754.7	689.5
2019	811.8	889.4	771.0	708.1
2020	835.3	895.2	799.3	716.9
2021	884.5	921.0	803.8	752.3



D Architects, town planners and chartered surveyors

Chartered surveyors (median basic pay £pw)

	Chartered surveyors	Secondary education teaching professionals	Primary and nursery education teaching professionals
2007	731.4	689.7	628.6
2008	734.3	702.2	651.5
2009	745.6	715.4	666.7
2010	764.9	728.3	686.5
2011	706.5	707.8	669.7
2012	707.1	703.0	661.9
2013	735.6	712.7	658.4
2014	716.2	716.7	667.0
2015	745.8	717.9	651.4
2016	758.5	741.3	671.3
2017	763.0	747.7	676.6
2018	750.9	754.7	689.5
2019	783.1	771.0	708.1
2020	750.4	799.3	716.9
2021	800.8	803.8	752.3



Appendix 9: Use of ASHE data

For the purposes of our analysis we have used full-time basic weekly and gross weekly earnings data from the Annual Survey of Hours and Earnings (ASHE), produced by the Office for National Statistics (ONS). As far as possible, we have tried to be consistent in collating occupational data for the period 2007 to 2021.

The Standard Occupational Classification (SOC) codes have also changed once since 2007. As a result, our analysis incorporates codes from SOC 2000 and 2010. This means that some of the occupational definitions featured in this report have changed in the period analysed, although we do not think this detracts from the overall robustness of the datasets. Details of changes to some of the occupational definitions over time are shown below.

SOC	Occupational definitions 2007-2010	Definitions used in current report
2113	Physicists, geologists and meteorologists	Physical scientists
2213	Pharmacists/pharmacologists	Pharmacist
2423	Management consultants, actuaries, economists and statisticians	Management consultants and business analysts

Factors to bear in mind when interpreting results

The ONS provides guidance on data validation and quality assurance including sections on accuracy, sampling and non-sampling errors as well as the likely effect of data revisions. It points out that in terms of accuracy – The degree of closeness between an estimate and the true value – its estimates are subject to various sources of error. Total error consists of two elements, the sampling error and the non-sampling error.

Sampling error

Sampling error occurs because estimates are based on a sample rather than a census. ASHE estimates this error through coefficients of variation (CV) which are published alongside all ASHE outputs. The CV is the ratio of the standard error (SE) of an estimate to the estimate itself, expressed as a percentage. Generally speaking, when all other factors are constant, the smaller the CV value, the higher the quality of the estimate.

In published tables, ASHE uses colour coding as a quick reference guide to the CV of the estimates; estimates with CVs less than or equal to 5% are published with no colour fill; estimates with CVs between 5% and 10% are published with a light green background; estimates with CVs between 10% and 20% are published with a dark green background; cells for which estimates have been suppressed on quality or disclosure grounds are also filled in dark green as shown here.

Key	Statistical robustness
CV <= 5%	Estimates are considered precise
CV > 5% and <= 10%	Estimates are considered reasonably precise
CV > 10% and <= 20%	Estimates are considered acceptable
x = CV > 20%	Estimates are considered unreliable for practical purposes

It should be noted that at low levels of disaggregation, high coefficients of variation imply estimates of low quality. For example, for an estimate of £400 with a CV of 10%, the true value is likely to lie between £321.60 and £478.40. This range is given by the estimate +/- 1.96 x the standard error (1.96 multiplied by 10% of £400 equals £78.40). Where these ranges for different estimates overlap, interpretation of differences between the relevant domains becomes more difficult.

Non-sampling error

ASHE statistics are also subject to non-sampling errors. For example, there are known differences between the coverage of the ASHE sample and the target population (that is, all employee jobs). For example, jobs that are not registered on PAYE schemes are not surveyed. These jobs are known to be different from the PAYE population in the sense that they typically have low levels of pay. Consequently, ASHE estimates of average pay are likely to be biased upwards with respect to the actual average pay of the employee population.

Non-response bias may also affect ASHE estimates. This may happen if the jobs for which respondents do not provide information are different from the jobs for which respondents do provide information. For ASHE, this is likely to be a downward bias on earnings estimates since non-response is known to affect high-paying occupations more than low-paying occupations.

Finally, ASHE results tables do not account for differences in the composition of different 'slices' of the employee workforce. For example, figures for the public and private sectors include all jobs in those sectors and are not adjusted to account for differences in the age, qualifications or seniority of the employees or the nature of their jobs, all factors which may affect how much employees earn, particularly in teaching.

Various procedures are in place to minimise errors in returned data. Returns undergo a range of checks which include validation against previous returns and expected values, selective editing (a technique for prioritising suspicious values for follow-up based on their impact on published results) and re-contacting businesses for verification. Similar checks are also made at the aggregate level for key results.

Revisions

Provisional results are published in the November following the survey reference date. Revised results are then published one year later alongside the following year's provisional results. The revised results take account of late returns to the survey and amendments to data resulting from validating returns to the current year's survey. Revisions are usually quite small, with revision at the UK level typically around 0.1%.