IFF Research

Cost of delivering apprenticeship standards

The Institute for Apprenticeships and Technical Education and the Education and Skills Funding Agency

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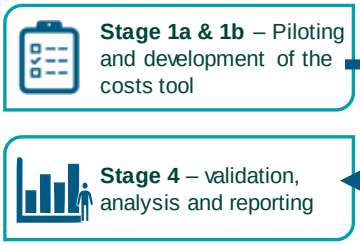
Summary

Introduction

The Institute for Apprenticeships and Technical Education (the Institute) is responsible for advising the Department for Education (DfE) on funding levels for apprenticeship standards. The Institute is working with the DfE to develop the best approach to pricing apprenticeships in the long-term. This research project supports this work by providing the Institute with robust evidence on the actual costs of training and assessment for apprenticeship standards.

Method



Average costs

Total median eligible cost:

£7,058

Among the providers and standards sampled, the overall mean cost per apprentice for delivering elements of the apprenticeship standard eligible for government funding was **£8,655**, and the median **£7,058***. Teaching costs make up the largest share of mean costs with the remainder split fairly evenly across (i) assessment excluding end-point assessment (EPA), (ii) administration and (iii) the fee charged for EPA. Consumables comprised the smallest share.

*Costs collected March to September 2019

Decision making

Training providers pointed to a range of factors in deciding which standards to offer. In general, it tended to be a mix of assessment of the level of demand for a course (how many potential employers and learners will be interested); the level of funding available; and capacity to deliver the course. Training providers were cautious with respect to what they were prepared to offer and were often looking to deliver courses which built upon their existing expertise.

Cost drivers

This research shows that **average duration** is the biggest driver of cost, as expected - where the duration is longer costs are higher. **Increased hours** delivering training (classroom, 1-to-1 and supporting distance learning) lead to increased costs, although increased **proportions** of classroom and supporting distance learning lead to reduced costs. Larger class sizes drive lower costs, while **higher average training salaries** lead to higher costs, which is unsurprising given that the cost of delivery of training is the largest component cost feeding into the overall cost of apprenticeship standard delivery.

Introduction

1.1 The research aimed to provide the Institute for Apprenticeships and Technical Education (the Institute) and the Education and Skills Funding Agency (the ESFA) with more up to date and granular data to enable consideration of the individual costs associated with training and assessment. The project's overarching aim was to provide the Institute with robust evidence on the actual costs of training and end-point assessment (EPA) for apprenticeship standards. More specifically, this research sought to understand:

- The typical cost of delivering apprenticeship standards across different levels and sectors;
- The granular detail of how costs are made up from different elements of training and assessment – for example tutor salaries, consumables[1], administration;
- The key factors or variables that produce a significant difference in either the overall or granular costs – for example type of standard, level, provider characteristics, cohort size; and
- Wider factors which may affect providers' commercial decisions around offering apprenticeships.

1.2 To meet these aims, cost data was collected from all types of training provider across 54 apprenticeship standards across multiple routes and levels. Preliminary cost data was also gathered from end-point assessment organisations (EPAOs) across 17 apprenticeship standards. This data, alongside qualitative insights gathered from in-depth interviews, forms the basis of this report.

1.3 For EPAOs in particular, the data provides an initial view on the cost of EPA, with many EPAOs still in the early stages of EPA delivery and having delivered relatively low volumes of assessments at the time of fieldwork. Although the training provider market for standards is more developed, it is worth bearing in mind that some training providers had not yet reached a 'steady state' for delivery, with some still delivering apprenticeship frameworks alongside apprenticeship standards and some yet to have their first cohort complete on the standard being discussed.

Methodology

1.4 The research was commissioned in October 2018. In order to meet the aims and objectives outlined above, the research spanned two audiences - apprenticeship training providers and EPAOs. In broad terms, the research was undertaken in four stages which included piloting and testing, collecting costs from training providers and EPAOs, qualitative in-depth interviews, and validation, analysis and reporting.

1.5 Training provider costs were collected via an online tool, followed by an in-depth interview to check the figures and explore the context of the data. Each training provider gave costs for between one and three standards; each data collection for each standard represents a 'data

[1] "Consumables" refers to equipment or supplies necessary to enable a particular learning activity to happen in the delivery of the apprenticeship, which would not normally have a lifespan beyond the individual apprenticeship being funded. For further information see latest rules available at: https://www.gov.uk/guidance/apprenticeship-funding-rules.

point' in the final data. A total of 204 training provider data points were collected from 138 training providers. In terms of coverage by standard, the 54 standards covered by the research represent 15% of all standards approved for delivery by September 2018[2] and 54% of all starts in the 2018/19 academic year[3].

1.6 The process was similar for EPAOs, but the data was collected via a detailed spreadsheet ahead of the in-depth interview; data was collected from a total of eight EPAOs, covering 17 standards.

1.7 Once data was collected from training providers and EPAOs, it was processed and validated through a number of stages. While some costs were reported directly by training providers (such as fees for EPA and mandatory qualifications), many of the individual cost figures were calculated based on other information reported by the training providers, such as hours spent by different job roles and their associated salaries. These individual elements (both reported and calculated) were then summed together to give an estimated total cost.

1.8 We would expect to see a degree of variation in costs when comparing between variable factors such as level and route, due to the differences in duration of standards and the associated required staff hours at the different levels. To mitigate for the effect of apprenticeship duration when comparing mean costs, costs are generally presented throughout as both a mean monthly cost per learner as well as at an overall level.

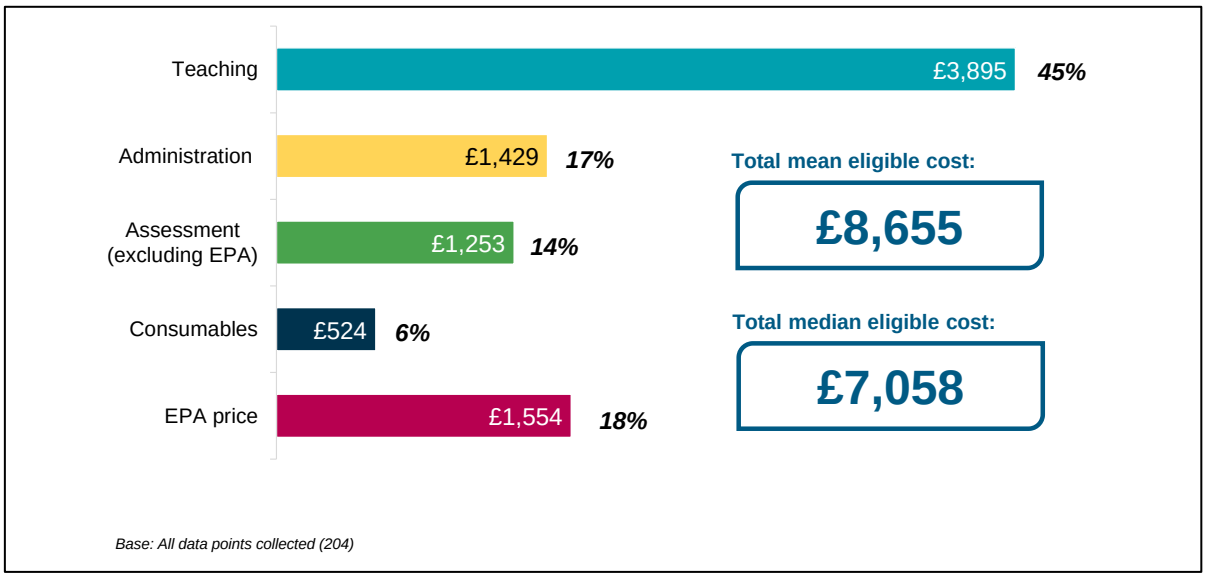
Training provider costs

1.9 Across the 54 standards covered by the research, the overall mean cost per apprenticeship for delivering elements of the apprenticeship standard eligible for funding was £8,655 and the median was £7,058 (Figure 1.1). The largest share of these mean eligible costs was made up of teaching costs (£3,895) which made up nearly half (45%) of overall eligible costs. The remainder of total eligible costs per learner split relatively evenly across the fee charged for EPA as reported by training providers (£1,554), administration (£1,429), and assessment costs excluding EPA (£1,253), with consumables comprising the smallest proportion (£524).[4]

1.10 The total eligible cost per apprentice, which includes the price paid for EPA (noting that this is inclusive of EPAO margin), represented 80% of the funding band maximum on average (noting that the actual difference between eligible costs and funding band maximum will vary between individual standards, and between different cohorts of apprentices undertaking a standard). Training providers do not necessarily charge the maximum funding band level and employers can negotiate downwards.

[2] Data downloaded from https://www.instituteforapprenticeships.org/apprenticeship-standards/
[3] https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships#apprenticeship-and-traineeships-current-data
[4] It should be noted that the EPA price is the price given by training providers and includes any surplus (or loss) that an EPAO is making on the EPA price being paid, whereas all the other costs included in Figure 1.1 do not include this, as such the EPA price is not directly comparable with the other costs. The costs of EPA given by EPAOs are presented in Chapter 11.

Figure 1.1 Total eligible costs per learner[5]



1.11 Face-to-face delivery (covering both classroom teaching and one-to-one delivery) contributed to over half of the mean teaching costs.

1.12 Costs related to assessment excluding EPA accounted for 14% of the average eligible delivery cost per apprentice. The largest proportion of these costs was made up of costs for on-programme assessment, covering assessment during the course of the standard of knowledge, skills and behaviour, prior to EPA, carried out face-to-face (£796 per learner on average). This was followed by registration and certification costs for mandatory qualifications (£248).

1.13 Overall, administration accounted for 17% of the average delivery cost per apprenticeship, the bulk of this was made up of administration linked to training and assessment (excluding EPA), which was equal to two-thirds of the mean overall administration cost. Other administration costs included administration linked to EPA (£144 per learner on average), administration linked to the Individualised Learner Record (ILR) (£145) and other eligible administration costs which did not fit into the categories provided in the costing tool. It is worth noting that many training providers had not yet reached the point of EPA, and therefore figures given for administration hours and costs associated with EPA were often estimates and could therefore change over time.

1.14 The cost of consumables, including materials and software costs, made up just 6% of the average cost of delivering an apprenticeship standard. Among data points where consumables costs were incurred, the mean monthly cost per learner was £22.

1.15 Although the main focus of this report is the analysis of eligible costs incurred by training providers when delivering apprenticeships, we also collected ineligible costs associated with delivery.[6] Ineligible costs are not directly comparable to eligible costs as they may include costs that do not directly relate to delivery of the standard's core content requirements (as defined by the published standard), they may also not relate to the standard itself but wider learning (such

[5] The mean funding band across all 204 data points is £12,392.
[6] Eligible costs associated with training and assessment are funded, whereas ineligible costs are not.

as career planning), this is notwithstanding that the provider or employer may still view these elements as important.

1.16 The total overall mean cost to training providers of delivering an apprenticeship was £11,062 including both eligible and ineligible costs. Three-quarters (78%) of this was made up of eligible costs (£8,655) and the remaining quarter (22%) are ineligible costs, equating to an average of £2,407 per learner. Around two-thirds of ineligible costs are made up of ineligible overheads (66%), with the remainder divided between ineligible teaching costs (including costs of delivering training in addition to that required by the standard), ineligible administration costs (including accommodation costs for additional training and room hire costs for additional training) and a smaller proportion made up of ineligible assessment costs.

Summarising the drivers of the cost of apprenticeship standard training

1.17 In order to look more closely at what is driving the overall cost of training, a linear regression model was used to look at statistical correlations to understand what may be driving costs. The model was run on the provider costs data, using the total eligible costs excluding EPA fees. The advantage of the multivariate approach was that it looked at the impact of one variable, such as number of learners, on overall cost, while at the same time controlling for other variables, such as duration, method of delivery, average salary costs or region. However, it is worth noting that a regression model can only be a simplified representation of real life, and therefore care needs to be taken not to make simple extrapolations based on the findings. Route was not included in the model due to the large number of categories, resulting in base sizes not sufficient for the analysis; similarly, Sector Subject Area was not used due to low bases in some of the categories.

1.18 The final model explained around 56% of the variance in the data; this means that if we were trying to predict overall cost using the information that we gathered, our prediction of cost would be improved by 56% compared with not having that information (but note that 44% of the variance remains unexplained).[7] Wider underlying variables may have impacted on the differences, for example differences in costs between provider types may have been influenced by the types of standards that those providers deliver. Key findings from this analysis included:

- **Longer average durations were associated with higher costs** and duration can be considered a key driver of cost. The model found a positive effect, which is consistent with what we would expect – where the duration was longer, costs were higher;
- **Higher staff hours spent delivering training** (both supporting self-directed or distance learning, classroom teaching, and one-to-one delivery) **were associated with increased costs**; generally, the more teaching delivered on the standard, the higher the cost;
- However, **greater proportions of classroom training and supporting self-directed or distance learning were associated with lower costs** – suggesting that these forms of training brought efficiencies compared with other modes of delivery;
- Further to this, **as the average class size increased the overall cost of delivery per apprentice fell;**

[7] Further details on the method used for the regression model are provided in the Technical Report.

- The **salaries of staff delivering training** were also found to have a significant impact on overall costs, with higher training salaries having higher overall costs, which is perhaps unsurprising as the cost of teaching was the single highest cost feeding into the overall costs of delivery; and

- **Independent Training Providers (ITPs) and Further Education (FE) Colleges** were associated with lower costs compared with Employer Providers.[8]

1.19 How these various factors interact to drive costs, and how costs vary by apprenticeship type, different apprenticeship elements, as well as provider and learner characteristics are explored in the next few sections.

Impact of type of apprenticeship on training provider costs (excluding EPA)

1.20 The research considered different types of apprenticeships looking for example at duration, route, level, and funding band.

1.21 As outlined above, apprenticeship duration was a significant driver of the overall cost, as might be expected, the longer the apprenticeship, the greater the cost of delivery.

1.22 Apprenticeships with a duration of less than two years had among the highest mean and median teaching costs, with teaching costs equivalent to 42% of the funding band on average, compared with 25% among apprenticeships lasting for 48 months or longer.

1.23 Costs varied widely by apprenticeship route; if we consider those with at least ten data points, the highest mean monthly cost was among Digital (£503) and the lowest was among the Business and Administration route (£216). Mean total eligible cost was lowest again for Business and Administration (£3,597), and highest among the Engineering and Manufacturing route (£10,656) and the Digital route (£9,975). Both of the latter apprenticeship routes had high teaching costs, assessment costs excluding EPA, and administration costs, relative to other routes.

1.24 As discussed earlier, eligible teaching costs generally made up the largest share of overall eligible costs. Differences by route in monthly teaching costs were driven by a number of factors including the number of hours of teaching each month, the mean hourly teaching cost and the mean classroom size, and the type of delivery. Qualitatively it was reported by providers in almost every route that rising staff costs due to competition between providers and industry jobs was putting pressure on costs.

1.25 Although the level of apprenticeship in itself was found not to be a significant driver of costs in the regression model, this did not mean that there wasn't any variation in costs by level. Overall, Level 5 had the lowest total eligible mean monthly costs per learner (£237), and Level 4 had the highest (£371). These variations however were more likely to be down to other factors such as the mix of apprenticeship standards included within each level and the type of delivery these standards used. For example, the lower total costs at Level 5 could be attributed to a higher prevalence of Business and Administration standards in the data, which were identified as having lower costs than other routes, while higher costs at Level 4 could be due to the lower

[8] Employer Providers were used as the reference category in the model

proportion of classroom teaching delivered at this level (71% of total teaching hours, compared with 91% overall).

1.26 Funding bands for the 54 standards covered by the research ranged from £3,000 to £27,000 per apprenticeship. As could be expected, there was a clear trend of total eligible costs increasing as the funding band increased. However, there was no clear pattern between funding band and *monthly* costs per apprenticeship. This indicates that the relationship between higher funding bands and higher mean total costs is likely to be driven by factors such as duration.

Impact of apprenticeship elements on training provider costs (excluding EPA)

1.27 The research investigated the impact on costs of different elements of apprenticeship delivery such as delivery method, additional training where requested by employers, mandatory qualifications and licenses to practice, and assessment methods.

1.28 Total eligible costs per learner increased with the number of delivery methods used, this was most marked for teaching costs, with monthly teaching costs rising from £74 per learner on average among those using a single delivery method, to £208 per learner among those using all four main delivery methods (these were face-to-face classroom delivery, face-to-face one-to-one delivery, distance learning, and online livestreaming).

1.29 As the proportion of classroom training goes up, the overall cost of delivery decreases; this is likely to be due to the fact that classroom teaching had a mean cost of £2.46 per learner per hour, as the staff costs for the teaching time were divided across the number of students in the class. This compares to a mean cost of £21.36 per learner per hour for one-to-one training. However, greater proportions of staff time supporting self-directed or distance learning were also found to reduce costs, although this mode of delivery had a high hourly cost, at £21.27 per learner. This suggests that while the time spent supporting learners was more intensive and therefore costly, it was balanced out by learners then being able to undertake further learning without direct supervision.

1.30 Turning to on-programme assessment excluding EPA, face-to-face on-programme assessment made up the largest proportion of assessment costs, this reflects a greater number of hours spent on face-to-face assessment.[9] The mean hourly cost of conducting face-to-face assessment (£19.90) was only marginally higher than the mean hourly costs for conducting telephone (£18.31) or online (£19.50) assessment.

1.31 Two-fifths (41%) of data points collected included additional training requested by the employer, beyond the minimum required for the standard. It is important to note that this additional training, while important to the employer, may or may not relate to the core requirements of the standard, or indeed the specific occupation covered by the apprenticeship. Where training providers delivered additional training beyond the minimum requirements for the standard, although this extra training is not itself eligible for government funding, there appears to be a knock-on effect on the delivery of eligible elements of training within this group, with those offering additional training having a mean monthly cost of £176 per learner, compared with £156 per learner among cases where additional training was not included.

[9] On-programme assessment excluding EPA includes assessment during the course of the standard of knowledge, skills and behaviour, prior to EPA; it can include activities such as performance reviews, developing a portfolio of evidence, and feedback from line managers and other colleagues.

Impact of training provider characteristics on training provider costs (excluding EPA)

1.32 The research considered how provider type related to the costs of apprenticeship training, including the type of training institution, locality, region and size of provider.

1.33 Higher Education Institutions (HEIs) had the highest mean eligible cost at £13,665, this finding is supported by the regression analysis which showed Further Education Colleges (FE Colleges) and Independent Training Providers (ITPs) were associated with lower overall costs.[10] This finding for HEIs may reflect the nature of the apprenticeships they offered, with the average funding band being higher than other training provider types at £22,750. Using the more comparable monthly overall eligible cost, the highest average was reported by Employer Providers at £405 per month, followed by HEIs at £301 and ITPs at £300. The lowest average was that of FE Colleges at £258. These variations by provider type are likely to reflect differences in the cost profiles between different types of institution, including the type and mix of delivery and the current infrastructure to organise and deliver apprenticeship training.

1.34 HEIs had the highest total teaching cost average of £6,013, but when this is distributed on a per month basis, they actually had the lowest total teaching cost at £136 per month. The majority of teaching at HEIs was done face-to-face in the classroom, with a much larger average class size than any other provider type. This means that although teaching salaries were highest at HEIs, this cost was spread across more apprentices, leading to efficiencies and lower costs per apprentice per month.

1.35 Training providers offering apprenticeships only in rural areas had the highest average total eligible cost, at £8,461 and highest average monthly total eligible cost, at £345, compared with an average of £290 overall. A number of training providers mentioned the challenges associated with delivering apprenticeships in rural areas, such as greater transport costs. High levels of one-to-one teaching in rural areas, and relatively high teaching salaries (compared with suburban areas, which also saw a high proportion of one-to-one delivery) contributed to these high costs.

1.36 By region, the highest average eligible costs were reported by providers operating only in the Central region (comprising East of England, East Midlands and West Midlands), at £367 per month and £8,705 over the course of the apprenticeship. However, when taken as a percentage of the funding band, the Central region did not stand out as having particularly high cost levels; the total eligible cost for data points operating in the Central region only was equivalent to 69% of the funding band on average, in line with providers operating in a mix of regions but not nationally (69%) and in the North only (66%), and lower than those operating nationally (82%).

1.37 Perhaps surprisingly, training providers operating only in London and the South East region did not stand out as having higher costs compared to the other regions (having a mean monthly cost of £247). Anecdotally, a small number of providers noted costs of delivery were higher in London, however although London and the South East had the highest mean hourly teaching cost (£25.01 compared to an overall mean of £22.22) they also reported larger class sizes and a high proportion of classroom delivery, helping to bring down mean monthly costs. The highest teaching costs were incurred by providers with national coverage, driven by larger quantities of staff time spent on one-to-one delivery and supporting self-directed or distance learning, both of which were more expensive per hour per apprentice than other teaching methods. National

[10] Employer Providers were used as the reference category in the model.

providers also had the lowest average class size for their classroom teaching (nine learners compared with an overall average of 12).

1.38 A number of measures were used to extrapolate the impact of training provider size, including the overall income of the training provider, the total number of learners, the total number of apprentices, and the number of apprenticeship standards they had on offer.

1.39 All measures of provider size show a similar pattern. Overall, the very largest providers seem able to achieve lower costs on a monthly basis. For example, total costs for training providers with 5,000 or more learners (representing just under a quarter of the data points in the sample) were lower than for those with fewer than 5,000 learners (a mean £226 per month compared with £309). This difference appears to be largely driven by higher mean teaching costs among those with fewer than 5,000 learners, as the mean administration and consumable costs were largely similar.

Impact of cohort and learner characteristics on training provider costs (excluding EPA)

1.40 Considering the interplay between cohort and learner characteristics, as highlighted earlier, increased class sizes were correlated with lower costs of delivery. Although the mean hourly teaching cost was higher in cases with larger class sizes (£32.17 in cases with class sizes of 20 or more, compared with £19.90 in cases with a class size of less than five), these higher salary levels were offset by the larger groups. As the cost of teaching was spread across more apprentices, the mean monthly classroom teaching cost per learner broadly decreased as class sizes increased.

1.41 Although there was no clear correlation between the overall cohort size and the cost of delivery, the total cost made up a larger proportion of the funding band on average among cases with a single learner cohort (89%, compared with 67% overall). Single learner cohorts also had higher than average teaching costs, equivalent to 58% of the funding band on average, nearly twice as high as those with a cohort size of 10 or more (31%). Higher teaching costs for single learner cohorts were likely to be driven by training providers that delivered “roll on, roll off” programmes, these providers allowed learners to be registered at any time of year, and as a result often delivered training on a one-to-one basis either online or by visiting the learner at their place of work.

Training provider calculated costs compared to reported income

1.42 When comparing calculated costs to reported income, as outlined earlier, some providers had not reached a ‘steady state’ for the delivery of apprenticeship standards. For example, some had not had a full cohort complete at the time of fieldwork, and some were still offering frameworks alongside standards. Additionally, most providers pointed out that costs can vary considerably between individual apprentices and cohorts. This is likely to mean that the relationship between providers’ costs and income will change over time as the market, and providers’ delivery of standards further develops. Therefore, it should be noted that these figures do not necessarily represent true surplus or loss as such, and extrapolations around profit cannot be made from this data, due to multiple factors including the nature of the figures reported and calculations involved.

1.43 Overall, 77% of data points had calculated eligible costs that were within the reported income they received up to the funding band maximum, although in the qualitative feedback around half of providers felt that they were able to deliver the standard within the income they received.

1.44 Many providers noted that they would expect to make cost savings as time progresses, as they expected increases in the number of apprentices they could deliver the standard to, and to being able to achieve greater efficiency once they had more experience of delivering the course. Many providers did not consider income and costs at the level of individual standards, and instead worked on the basis of achieving sufficient contributions to overheads and re-investment across the department or organisation as a whole.

1.45 Overall, across all data points, calculated eligible costs were a mean 20% lower than reported income (median 30% lower), though it should be noted that this figure does not represent a true margin, due to multiple factors including the nature of the figures reported and the calculations involved. This difference between calculated eligible costs and reported income was lower for apprenticeships with short durations of less than 18 months (a mean difference of 11%), Level 2 standards (a mean difference of 0%, meaning that on average calculated costs were broadly equal to reported income), and in cases where no classroom teaching was provided (a mean difference of -4%, i.e. here, on average, calculated costs were slightly higher than reported income).

End-Point Assessment

1.46 Although the bulk of this report focuses on costs provided by training providers, a key element of apprenticeship standards is the EPA which is carried out by EPAOs. Given the immaturity of the EPA market at the time of the research, collection of data from EPAOs was conducted on a smaller scale than the provider costs exercise. Along with data on EPA price from training providers, the research gathered cost data from eight EPAOs covering 17 standards. The sampling and recruitment strategy was based on trying to achieve the best possible spread of routes, standards and assessment methods. Within the final sample, seven assessment methods were covered (out of a possible 10).[11] All EPAOs who gave a detailed cost had conducted at least one EPA, however, in some cases, due to the EPAOs being at a relatively early stage of development and delivery, only a handful of EPAs had been delivered at the point of fieldwork.

1.47 Overall there was still a lot of uncertainty within the market as to the amount employers would be charged for EPA, the extent to which re-takes would be a feature, the cost for EPAOs to deliver assessments, and the volume of apprentices each EPAO might eventually be assessing. As such, the EPA data presented should be treated with caution.

1.48 As the market for EPA is in a relatively early stage of development, many EPAOs reported it being ‘early days’ and that the volume of learners they had assessed was only just starting to increase after a significant period of development. Similarly, and particularly with standards that were of a longer duration, some training providers had not put any apprentices through EPA at

[11] The assessment methods covered included written or online knowledge test, observation or practical assessment, professional dialogue or viva, interview or panel discussion, portfolio or log book, presentation or showcase, and case study. The three methods not covered by the sampled EPAOs were verbal knowledge test, project and employer/peer review.

the stage when their data on delivery costs was collected. Therefore, many of the costs collected at this stage were based on initial estimates given the immaturity of the market.

1.49 In general, data collected from training providers suggests that EPAOs were charging less than 20% of the funding band. The EPA fee, as reported by training providers, was an average of 13% of the funding band, although the cost of re-takes could push up employers' and training providers' costs and these costs were unknown for some providers at this stage. The mean fee for EPA reported by EPAOs (£1,121) was lower than the mean fee reported by training providers (£1,554), while there was a similar difference between the medians, albeit at a lower level (£1,200 vs £825 reported by EPAOs). These differences were primarily a factor of the wider range of standards covered by the training provider data (the training provider dataset included a number of standards with higher funding bands that were not present in the EPAO dataset), hence these average reported fees are not directly comparable.

1.50 As expected, the bulk of the 'steady state' cost of delivering EPAs for EPAOs were assessment costs, particularly the costs of assessor time. Qualitatively, a number reported that multiple modes of assessment within a standard and any face-to-face assessments would increase costs, though it is difficult due to the small number of points to unpick this conclusively at this stage. For some standards, for example in Catering and Hospitality, EPAOs noted that multiple days of face-to-face time could be required either because more than one practical observation across different days was needed or because it was difficult to observe all criteria in one visit, thereby increasing costs for time and travel.

Commercial decision-making

1.51 Training providers and EPAOs were asked to describe factors that influence their commercial decision-making in terms of which standards they offered. This was a key area of focus in the in-depth qualitative interviews with 25 providers and five EPAOs.

1.52 Training providers largely based their commercial decisions around: the level of employer and learner demand for a course; the level of funding available for the course, and how that relates to likely costs; and their assessment of their own capacity to deliver the course. In general, training providers were open to delivering new standards as long as there was a business case for doing so. However, they also tended to be cautious, and often preferred to expand their offer in terms of different levels rather than introduce new subject areas as this allowed them to build upon their existing sphere of expertise, and ensure sufficient demand was built for new standards. The extent to which they might need to invest in new equipment or machinery when expanding into new subject areas was also a consideration.

1.53 EPAOs reported that their decision-making was also driven by demand, in terms of whether there would be a sufficiently large volume of learners to assess, and the level of competition from other EPAOs. Other considerations were the opportunity to make a sufficient margin, and there being a sufficient supply of assessors to carry out the assessments.

2 Introduction

Background and objectives

2.1 An in-depth review of apprenticeships was undertaken between 2010-2015 which included the Richard Review[12], the Holt Review[13] on making apprenticeships more accessible to small and medium-sized enterprises (SMEs), and the Wolf Report[14] on vocational education. Wide-ranging reforms followed, and in December 2015 the government made a commitment to increase the volume and quality of apprenticeships in England.[15]

2.2 Key to these reforms was the introduction of a set of new, employer-led apprenticeship standards across all levels and sectors, to create a more highly skilled, productive and internationally competitive workforce. These standards are developed through apprenticeship 'trailblazer' groups of employers, working together with the Institute for Apprenticeships and Technical Education (the Institute) to develop new learning programmes needed in their sector. Another significant reform was the introduction of the Apprenticeship Levy in 2017, payable by all employers with an annual pay bill of more than £3 million at a rate of 0.5% of their total pay bill, and which can be used by these employers to fund apprenticeship training.

2.3 The Institute is responsible for advising the Secretary of State for Education on funding for individual apprenticeships. All apprenticeship standards are currently allocated to one of thirty funding bands, the upper limit represents the maximum contribution that the government will pay towards that standard. The Funding Team within the Institute recommends an appropriate funding band for each apprenticeship to the Department for Education (DfE), as well as reviewing existing funding bands to make sure they support high quality delivery and maximise value for money for employers and taxpayers. The Secretary of State ultimately makes the final decision on funding bands.

2.4 In its 2018/19 Business Plan[16], the Institute outlined that it is working with the DfE to improve its approach to pricing apprenticeships in the long-term. The research supported that aim by providing the Institute with up to date and granular data to enable consideration of the individual costs associated with training and assessment of apprenticeship standards. The project's overarching aim was to provide the Institute with robust evidence on the actual costs of training and end-point assessment (EPA) for apprenticeship standards. The data generated by the project serves three main objectives in relation to this aim:

[12] https://www.industryforum.co.uk/wp-content/uploads/sites/6/2012/11/richard-review-summary.pdf
[13] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/34731/12-891-making-apprenticeships-more-accessible-to-smes-holt-review.pdf
[14] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/180504/DFE-00031-2011.pdf
[15] https://www.gov.uk/government/publications/apprenticeships-in-england-vision-for-2020
[16] https://www.instituteforapprenticeships.org/media/1950/institute-business-plan-2018-2019.pdf

Form an input underpinning the Institute's process for making funding band recommendations for new apprenticeship standards and reviewing previously-allocated funding bands

Inform development work on how the process for making funding band recommendations could be improved in the future

Inform the DfE's approach to apprenticeship funding policy

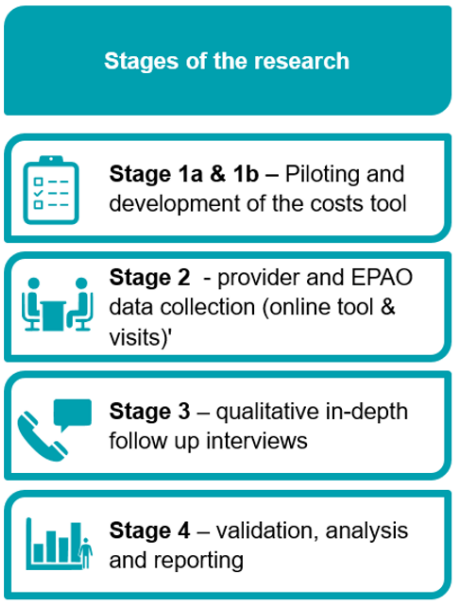
2.5 To achieve these objectives, this research sought to understand:

- The typical cost of delivering apprenticeship standards across different levels and sectors;
- The granular detail of how overall costs break down between different elements of training and assessment – for example tutor salaries, consumables, and administration;
- The key factors or variables that are associated with a significant difference in either the overall or granular costs – for example type of standard, level, provider characteristics, or cohort size; and
- Wider factors which may affect providers' commercial decisions around offering apprenticeships.

2.6 To meet these aims, cost data was collected from training providers delivering 54 different apprenticeship standards. Cost data has also been gathered from end-point assessment organisations (EPAOs) assessing 17 different apprenticeship standards. This data alongside qualitative insights gathered from in-depth interviews forms the basis of this report.

3 Methodology

3.1 The research spanned two audiences - apprenticeship training providers and EPAOs. The research was commissioned in October 2018, and undertaken in four stages using a qualitative and quantitative approach: piloting and testing; collecting costs from training providers and EPAOs; qualitative in-depth interviews; and validation, analysis and reporting. In the following sections we summarise the key features of these stages. A more detailed description is given in the Technical Report that accompanies this report.



3.2 The full methodology comprised:

- **Stage 1:** piloting and testing to develop the data collection tools.
- **Stage 2 training providers:** collection of cost data from training providers, covering:
  - ✓ An online tool to collect apprenticeship costs incurred by apprenticeship providers, completed by 138 training providers covering 204 data points;[17]
  - ✓ Follow-up in-depth interviews with all training providers completing the online data collection tool. These were conducted both in person and over the phone.
- **Stage 2 EPAOs**: collection of cost data from EPAOs, covering:
  - ✓ An Excel data collection sheet to collect costs incurred by EPAOs in delivering the EPA. This was completed by eight organisations covering 17 data points;
  - ✓ Follow-up in-depth interviews with these eight EPAOs to check the responses they had given and to ask additional questions. As with training providers, these were conducted through a mixture of in person and telephone interviewing; and
  - ✓ Supplementary data was collected from a further nine EPAOs, covering 23 standards. These EPAOs completed a shorter 'summary' Excel sheet providing headline costs for EPA delivery.
- **Stage 3:** a separate qualitative stage was then undertaken, with 30 in-depth interviews undertaken with finance leads or senior managers to discuss the costs of apprenticeship delivery at an overall strategic level (rather than at a specific standard level). Overall, 25 telephone interviews were undertaken with training providers, and five with EPAOs.
- **Stage 4:** this stage involved the data being checked, cleaned and validated.

3.3 More detailed information on each stage is provided in the following sections.

[17] A 'data point' refers to the number of responses received for costs of delivering apprenticeship standards. Some training providers were willing and able to provide data for more than one standard and hence have multiple data points in the final dataset.

Stage 1: Pilot

3.4 The pilot for the research was split into two distinct stages:

- **Stage 1a** involved cognitive testing of a draft questionnaire and datasheet with four training providers and one EPAO to inform the design and structure of the datasheet used to collect costs; and
- **Stage 1b** tested revised versions of the questionnaire and the datasheet, based on learnings from stage 1a, with nine interviews conducted with training providers in order to establish whether they were able to provide the required costs and to develop the methodology for the Stage 2 fieldwork.

3.5 Stage 1 interviews were conducted face-to-face between the 23rd of November 2018 and 16th of January 2019. The provider sample was provided by the Institute, and EPAO sample from the register of EPAOs. Potential respondents were sent an initial letter and then called to discuss the research and encourage participation.

3.6 Visits were undertaken across Independent Training Providers (ITPs), Higher Education Institutions (HEIs), Further Education (FE) Colleges, Employer Providers, and EPAOs to ensure the data collection tools were tested across all provider types in scope for the research. Overall 14 pilot interviews were undertaken across stages 1a and 1b, to refine the data collection tools used at Stage 2.

Stage 2: mainstage data collection with training providers

Selection of providers and advance contact

3.7 For the Stage 2 fieldwork, a set of 56 standards to focus on were agreed by IFF, the Institute and the Education and Skills Funding Agency (ESFA). The selection of standards was designed to provide a spread across routes and levels, further detail on the sampling process is given in the Technical Report. The training provider and EPAO sample was then drawn based upon those who offered or assessed one or more of the 56 standards.[18] The approach to recruiting training providers and EPAOs involved an advance letter providing information on the research jointly signed by the Institute and the ESFA, followed by calls by the IFF team to encourage and arrange participation.

[18] Interviews were not achieved for two of the 56 standards.

Table 3.1: Advance letters

	Mailout	Number of letters
March 2019	Training providers	403
March 2019	EPAOs	35
May 2019	Training providers - second send	114
August 2019	Training providers – third send	125

Data collection

3.8 An online data collection tool was used to enable training providers to enter the costs of providing an apprenticeship standard in a way that was standardised, completed at a time that suited, and could be completed in multiple sessions. The tool was designed to be clear, easy to read, and easy to navigate. Training providers had the option to save and continue later when necessary. The tool covered all key component cost elements and was broken down into the following eight sections: provider overview, standard overview, delivery of training, assessments and certification, administration and other fees, overheads, salaries, and income. Capital Investment costs were discussed in the follow-up discussion rather than being included as part of the online tool.

3.9 The tool enabled training providers to include all costs relating to the delivery of apprenticeship standards covering both eligible and ineligible costs. Not all activities relating to the delivery of an apprenticeship standard qualify for funding, the ESFA sets out the funding rules that detail the activities that are eligible or ineligible for funding:[19]

- **Eligible costs:** costs that are eligible for apprenticeship funding under the latest funding rules. The cost of any 'eligible' activities can be included in the price agreed between the employer and training provider, and the employer and the EPAO; and
- **Ineligible costs:** costs that are not eligible for funding under the funding rules and should not be included in the price agreed between the employer and training provider, and the employer and the EPAO organisation.

3.10 After completing the online data collection tool, an in-depth follow-up interview was conducted with each training provider discussing the standard or standards they had completed the online tool for.

3.11 Each data collection for each standard represents a 'data point' in the final data. For example, where a training provider provided costs for three different standards, this represents three 'data points' within the final analysis presented in the report. A total of 204 data points were collected.

3.12 Below is a breakdown of the 204 completed data points by training provider type (Table 3.2), apprenticeship route and level (Table 3.3 and Table 3.4), the Technical Report provides further detail on the number of providers contacted.

[19] Current and past funding rules can be found here: https://www.gov.uk/guidance/apprenticeship-funding-rules

Table 3.2: Completed data points by provider type

	Number of completed data points
Employer Provider	15
Further Education (FE) College	70
Higher Education Institution (HEI)	12
Independent Training Provider (ITP)	104
Other	3
Total	**204**

Table 3.3: Completed data points by level

	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	**Total**
Total	68	77	21	20	14	4	**204**

Table 3.4: Completed data points by route

	Total
Agriculture, Environmental and Animal Care	8
Business and Administration	24
Care Services	6
Catering and Hospitality	6
Construction	39
Creative and Design	<5
Digital	14
Education and Childcare	5
Engineering and Manufacturing	36
Hair and Beauty	9
Health and Science	19
Legal, Finance and Accounting	10
Protective Services	<5
Sales, Marketing and Procurement	15
Transport and Logistics	7
Total	**204**

3.13 At the recruitment stage providers that sub-contract the majority of provision were excluded. Any sub-contracting that was undertaken by providers that were interviewed was then dealt with by adding the value to the 'other' cost categories available within the data tool (so they were clearly differentiated from in-house costs).

3.14 Further detail on the fields that providers were asked to provide can be found in the accompanying Technical Report, which outlines step-by-step the detailed data providers were asked to complete.

Stage 4: Data Processing and Validation

3.15 Once data was collected from training providers it was processed and validated through a number of stages. These are summarised below, and further detail can be found in the Technical Report:

- **Live validation:** during the interview if any errors were uncovered in the costing tool data while discussing with the respondent, these would be corrected live or amends collated and made after the interview;
- **Salary and average working hours checks:** all job roles entered into the online tool were coded to Standard Occupational Classifications (SOC) at a four-digit level to allow the data to be checked against the ONS Annual Survey of Hours and Earnings (ASHE), to identify any unusually high or low salaries and impute any missing salary and average hours data by occupation;
- **Checks for missing data:** responses were reviewed to flag any records with missing data, for example where a cost was incurred but training providers were not able to give a precise figure and felt unable to estimate;
- **Cost calculations**: the data collected was converted into a set of cost variables that were used for validation, analysis and reporting, these cost calculations were used as a basis for deriving the figures presented later in this report. Hourly staff costs for example were derived by calculating employer tax and pension contributions on the typical annual salary for each role, divided by total working hours to create an hourly rate, and costs per learner relating to time spent by staff were derived by dividing the total hours spent by staff by the number of learners in the specified cohort; the resulting hours per learner were then multiplied by the hourly staff cost for each role. The full definitions and approach taken to the calculation of costs is given in the Technical Report;
- **Checking for unusually high or low figures**: this included comparing the calculated eligible cost per learner to the funding band; comparing the calculated eligible and ineligible cost against the training provider's own estimate of their cost per learner (where provided); and checking the minimum and maximum values for each cost element within each standard;
- **Academic peer review:** once data cleaning and validation had been completed, an overall peer review and check of the full dataset was undertaken, including checking salary upweights (e.g. National Insurance contributions) and calculations used for derived variables in cost calculations, as well as identifying and investigating any unusual data; and
- **ILR data checks:** after the full data processing had taken place, Total Negotiated Price (TNP) and EPA fees as entered into the online tool by training providers were checked against an anonymised ILR data request showing the equivalent data, to confirm the values reported in the research fell within the expected range.

3.16 Where unusually high or low figures or missing data were identified, the interview write up and comments left in the data tool by respondents were examined to check for any explanation or missing data, and/or respondents re-contacted to resolve the query. Where we were unable to find an explanation or confirm outliers to be correct, modelled data was used in place of that value. Data was modelled based upon averages for the standard, or for the route and level combination, the approach is outlined in the Technical Report.

3.17 The scale of data modelling required was limited, and there was a high degree of congruency within the data overall. In total, 107 values within the dataset were modelled; 42 of these were edits to salary data (3% of all salary data), covering 13 data points; 29 data points had at least one non-salary variable modelled, and modelled data was used for 65 individual 'data items' (data item refers to an individual value input for a variable). Across the variables requiring modelling this represented just 2% of all data items; a full breakdown of the percentage of data items modelled by variable, with the rationale, is given in the accompanying Technical Report.

Data limitations

3.18 We have endeavoured to ensure that the data presented in this report is as accurate and consistent as possible. Through the in-depth interviews (over half of which were conducted on-site with providers) to discuss and check training providers' costs in detail, we aimed to ensure that training time was fully recorded and split according to the training providers very best estimate. A robust validation process was then followed to further check the data and give confidence in the findings.

3.19 There are of course limitations to the data. Whilst the sample size of 204 data points at the overall level is reasonably robust, care should be taken with the interpretation of the findings once the data is split by some categories where there are smaller base sizes (e.g. by route/level), these instances where care needs to be taken are noted against the relevant data within the report. The extent to which the data is 'representative' of all standards also needs to be considered, the data refers to 54 standards spread across all routes and levels, however it does not cover the whole market. The data were not weighted due to small base sizes once the data is split by route, standard, level and region.

3.20 In addition, due to the complexity of the data, differences in costing and accounting approaches between training providers, and training providers not always having reached the end stages for certain standards (for example EPA), in some cases training providers needed to give estimates when reporting staff hours and costs for some constituent elements. By their own assessment, some of these estimates were well-informed and felt to be quite accurate, while a small number of others were more uncertain.

3.21 At the overall level however, we can be reassured that only a small proportion of data items required modelling, and by the findings presented in chapter four at Table 4.7 later in the report, that at the overall level the per learner costs collected were very similar to the costs that providers themselves estimated. Further details on data limitations are given in the accompanying Technical Report.

Stage 3/4: approach taken with EPAOs

Fieldwork methodology

3.22 Given the relatively early stage of the EPA market at the time of the research and the lower number of EPAOs compared to providers, the EPAO fieldwork was smaller in scale compared to the provider fieldwork and gives an early view on the costs of EPA.

3.23 The EPAO sampling and recruitment strategy was based on trying to achieve the best possible spread of routes, standards, levels and assessment methods. To achieve this, EPAOs were contacted in batches to ensure the best coverage possible. Where an EPAO was unable or unwilling to take part, a back-up EPAO was contacted that would give the 'next best' coverage, for example by being of a similar route or level to the previous EPAO. The Institute (with input from the Department) provided the sample of EPAOs that were contacted for this stage of the research.

3.24 Each EPAO that agreed to take part was sent an Excel spreadsheet which was separated into different worksheets which covered different elements of EPA delivery, including initial design and setup costs; assessor recruitment and initial training costs; assessor salary costs; travel and subsistence, room costs and other related costs; quality assurance costs; and administration costs.

3.25 The EPAO was asked to complete one spreadsheet per standard that they had agreed to cover, up to a maximum of three standards.

3.26 The follow-up interviews were conducted to validate the costs provided by the EPAO, as well as to gather contextual information and to ask some additional questions.

3.27 In addition, nine EPAOs agreed to complete a 'basic' costing sheet. This covered costs at an overall level, with one row per standard they agreed to complete this for. This covered a total of 23 standards.

Interviews achieved

3.28 Interviews covering 17 standards within the routes and levels shown in the table below were achieved (an additional five interviews were discarded due to insufficient data).[20]

Table 3.5 Routes and levels covered by the EPAO fieldwork

Route and level	
Business and Administration, Level 3	Health and Science, Level 3
Business and Administration, Level 5	Health and Science, Level 5
Care Services, Level 2	Legal, Finance and Accounting, Level 3
Catering and Hospitality, Level 2	Legal, Finance and Accounting, Level 4
Construction, Level 2	Legal, Finance and Accounting, Level 7
Engineering and Manufacturing, Level 3	Sales, Marketing and Procurement, Level 2
Health and Science, Level 2	Transport and Logistics, Level 2

[20] The names of specific standards were redacted to preserve anonymity, and instead the route and level provided; for one standard route and level was redacted due to the low number of standards in that category, however figures for this standard have been included in totals.

3.29 In addition to the 17 standards covered falling into these routes and levels, an additional five standards covered by two EPAOs were not included in the final dataset as the amount of data these EPAOs were able to provide was not sufficient to enable overall costs to be calculated.

Data validation

3.30 For EPAOs the data validation approach taken was as follows:

- During the follow-up interview, where an EPAO had entered a figure that looked unusual, for example a particularly high figure, this was queried and resolved as required;
- The raw EPAO data was reviewed and checked for any anomalous numbers, these were then investigated by looking at the write-ups from the follow-up interviews;
- An overall cost for delivery of an EPA based on the original data was then calculated;
- The calculated cost data was then further investigated for anomalous figures. Where the overall cost calculated was significantly higher or lower than the fee charged per EPA, this was investigated further; and
- In some cases, costs provided in the original costing sheet needed to be edited based on the information provided in the in-depth interview. An example of this was where EPAOs were asked to give a cost on a 'per EPA' basis, but had instead provided costs at an overall level, therefore driving the total cost calculated up significantly.

3.31 This validation process enabled us to produce a dataset which was as accurate as possible based on the information provided by each EPAO. However, the data provided on EPAOs should be treated with some care, and as we have outlined in the EPAO chapter, results treated tentatively. Only one dataset was collected for each standard, and in some cases EPAOs found completing the Excel sheets challenging and noted that some of the figures provided were their best estimates. In addition, whilst the Excel costing sheet went through piloting to ensure it could be populated by EPAOs, some indicated that it did not match the way they typically accounted for costs. This simply reflects that all EPAOs are run differently and are at different stages of development and scale of operation, and as such there was no one single approach to how they accounted for costs.

Stage 3: Qualitative fieldwork

3.32 This stage of the research sought to understand more about the drivers of the costs of providing apprenticeship standards, commercial decision-making, surpluses and funding bands, including:

- The key factors that produce a significant difference/influence the overall costs of apprenticeship training and assessment; and
- Wider factors which may affect providers' commercial decisions around offering apprenticeships or EPA.

Sampling

3.33 At the end of each Stage 2 interview, training providers and EPAOs were asked whether they would be happy to be contacted to take part in Stage 3 of the research, which would involve a

45-minute in-depth qualitative interview. This gave a total sample size of 99 training providers and nine EPAOs.

Fieldwork and interviews achieved

3.34 The training providers and EPAOs agreeing were then contacted to see if they would be willing to take part. Telephone interviews took place from mid-July to early September 2019.

3.35 A total of 25 interviews were achieved with training providers and five interviews with EPAOs, as shown in the table below:

Table 3.6 Qualitative interviews achieved by provider type

Type	Completed interviews
Independent Training Providers (ITPs)	13
Further Education (FE) Colleges	8
Higher Education Institutions (HEIs)	4
Total training providers	**25**
EPAOs	5
Total	**30**

Reporting conventions

3.36 When referring to percentages or base sizes, we refer to each record in the dataset as “data points collected”. This simply reflects the fact that one provider or EPAO can appear in the data set more than once if they answered for multiple standards.

3.37 Figures are rounded to the nearest pound with the exception of hourly pay figures which are rounded to the nearest pence.

3.38 Figures have not been reported at the level of individual standards to ensure the anonymity of participating training providers and EPAOs.

3.39 Where tables present the “Mean % of funding band” this is the mean overall cost shown as an average percentage of the funding band, it is important to note that EPA fees have not been included in these calculations. These percentages are indicative of how each average cost relates to the funding band levels of data points within that group.

4 Training provider costs: breakdown of average costs across apprenticeship elements

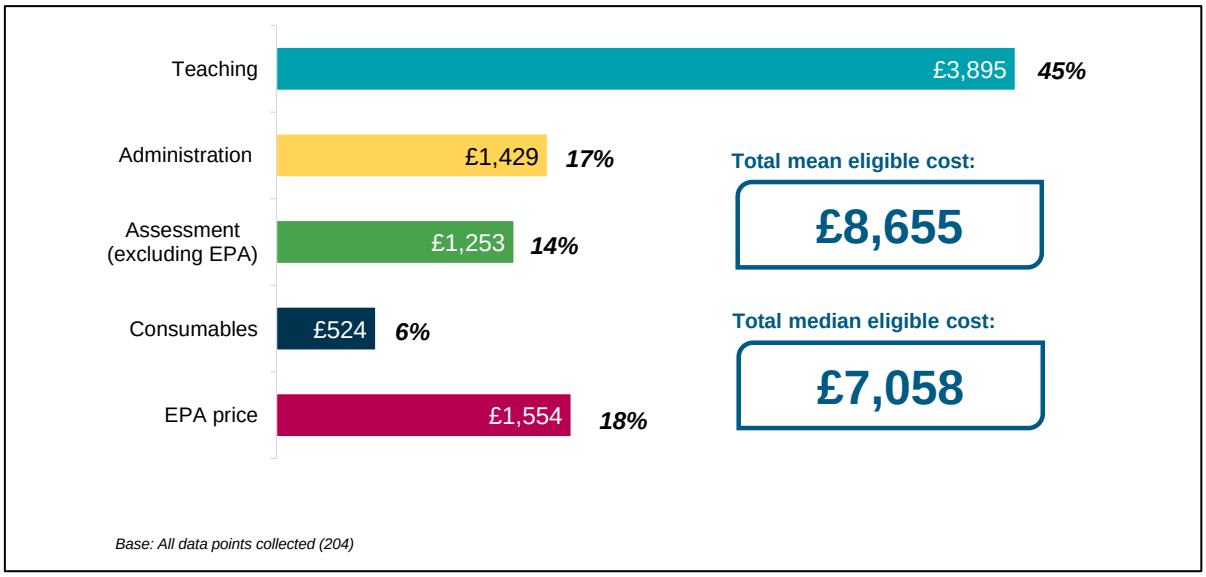
4.1 This section shows mean, median, lower and upper quartile costs across all 204 data points broken down by each of the individual eligible cost components. These are divided into tables showing costs of teaching; assessment and certification; administration; and consumables. Later in the chapter we also discuss ineligible costs, and examine provider estimates on costs with the calculated costs derived in this research.

4.2 **Across the 54 standards covered by the research, the overall mean cost per apprentice for delivering elements of the apprenticeship standard eligible for government funding was £8,655, and the median was £7,058.** The lower quartile was £4,378, and the upper quartile was £11,157.

4.3 The total eligible cost per apprentice, which includes the price paid for EPA (noting that this is inclusive of EPAO margin), represented 80% of the funding band maximum on average. Note that training providers will not necessarily charge at the maximum funding band level, as prices will be negotiated with individual employers; furthermore, individual costs will also vary depending on elements such as the number of retakes required among cohorts (which many training providers can only estimate at this point, due to the relatively early stage of many programmes).

4.4 As shown in Figure 4.1, teaching costs made up the largest share of mean eligible costs with the remainder split fairly evenly across the categories of assessment excluding EPA, administration, and the fee charged for EPA as reported by training providers (and thus including any surplus factored in by EPAOs), with consumables comprising the smallest share.

Figure 4.1 Total mean eligible costs per learner[21] [22]



4.5 In the following sections, we examine in more detail the costs that make up each of these figures.

Costs of teaching

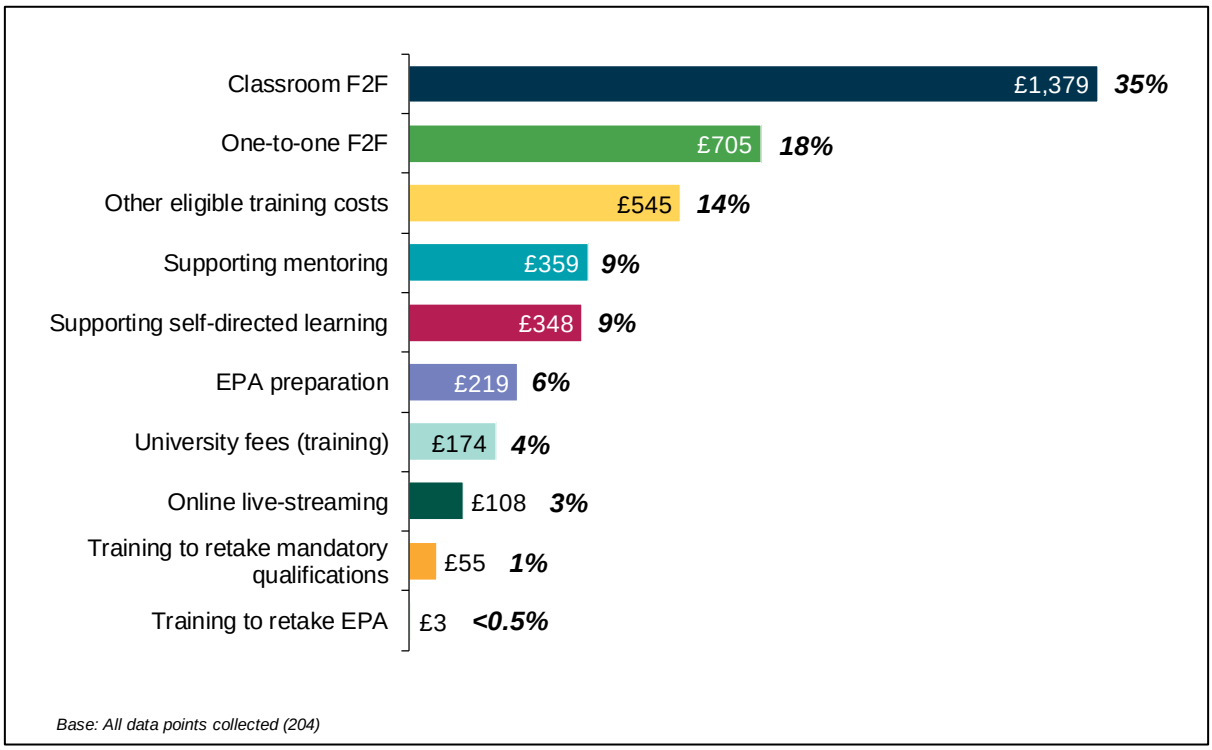
4.6 Overall, teaching costs, including time spent by training provider staff supporting self-directed learning, supporting mentoring, and preparing for EPA and mandatory qualifications, accounted for 45% of the average eligible delivery cost per apprentice.

4.7 The mean eligible teaching cost per learner was £3,895, and the median was £2,835. The lower quartile was £1,500, and the upper quartile was £5,135. The following chart shows the breakdown of total (mean) teaching costs by delivery method across all data points.

[21] The mean funding band across all 204 data points is £12,392.

[22] It should be noted that the EPA price is the price given by training providers and includes any surplus (or loss) that an EPAO is making on the EPA price being paid, whereas all the other costs included in Figure 4.1 do not include this, as such the EPA price is not directly comparable with the other costs. The costs of EPA given by EPAOs are presented in Chapter 11.

Figure 4.2 Breakdown of total mean teaching costs by teaching cost elements per learner



4.8 Face-to-face delivery (covering both classroom teaching and one-to-one delivery) contributed to over half of the mean teaching costs.

4.9 Table 4.1 shows the mean and median monthly costs for each training mode of delivery, among training providers delivering by each method, and the upper and lower quartiles. It also shows the total mean overall costs for each training mode (EPA prices were not included in these calculations), and what this figure represents as a percentage of the funding band. Among the small number of data points where some delivery was sub-contracted to a university, fees to the university represented the highest average monthly cost (£140 per learner). Aside from this, classroom training had the highest per learner training cost on average (a mean of £59 per learner per month), while training delivered to re-take the EPA had the lowest (equivalent to £3 per learner per month, when averaged across the full cohort, including those not needing to re-take).

4.10 While preparation for reaching EPA should be part of the curriculum for the standard, rather than an additional cost, some providers reported hours spent on EPA preparation in addition to other training hours; while this category was labelled 'EPA preparation' in the costings tool, these were assumed to be training hours required to get the apprentice to the overall attainment level expected by the course, rather than simply test preparation per se.

Table 4.1 Eligible teaching costs per learner

	Base	Monthly costs				Mean overall cost	Mean as a % of funding band[23]
		Mean	Median	Lower quartile	Upper quartile		
Classroom training	*182*	£59	£37	£19	£77	£1,546	13%
One-to-one training	*183*	£35	£19	£7	£48	£786	9%
Online livestreaming	*47*	£24	£7	£2	£23	£470	5%
Supporting self-directed learning	*138*	£25	£14	£4	£30	£514	6%
Supporting mentoring	*157*	£22	£9	£4	£27	£466	5%
Other eligible training costs	*111*	£43	£14	£6	£43	£1,001	10%
EPA preparation training	*158*	£11	£5	£2	£9	£282	2%
University fees (training)[24]	*5*	£140	£143	£98	£181	£7,080	31%
Training to re-take mandatory qualifications	*71*	£8	£2	£1	£7	£158	1%
Training to re-take EPA	*23*	£2	£1	<£1	£2	£30	<1%
Total teaching cost	***204***	**£162**	**£128**	**£71**	**£205**	**£3,895**	**38%**

Base: all data points collected with a cost for each element

4.11 The figures shown for teaching costs for preparing for EPA[25] and EPA re-take training time were often best estimates as many providers had not yet had anyone get to EPA stage yet. In some cases, the preparation time for EPA and for re-takes, and the proportion of apprentices likely to require re-takes, were based on previous cohorts on other apprenticeships. Some training providers estimated the amount of additional training they would deliver for EPA re-takes in the event of their apprentices needing to re-take, but most stated that they would not

[23] This column shows the average (mean) percentage that the teaching costs in that row represent of the funding band for each data point. These percentages are indicative of how each average cost relates to the funding band levels of data points within that group.
[24] A small number of training providers delivering degree apprenticeships paid fees to universities to cover the degree qualification, and, in some cases, training towards the degree level elements of the standard. However, training providers were generally only able to give a single figure for the total fee they pay to the university, to cover both training costs and assessment and qualification costs. As EPA eligible costs should not usually exceed 20% of the funding band maximum for the standard, the university fees were split so that 80% is included in training costs here, while 20% is included in costs of assessment and certification. https://www.gov.uk/guidance/conditions-for-being-on-the-register-of-end-point-assessment-organisations
[25] We have assumed costs associated with EPA preparation are eligible costs.

put apprentices through gateway unless they were confident that they were ready for EPA, which should limit the number actually requiring a re-take.

4.12 Other eligible training costs made up a significant proportion of average teaching costs (a mean total of £43 per month per learner for data points incurring these costs). Costs in this category included costs of sub-contracting, lesson preparation and marking, room hire, quality assurance and tracking and monitoring learners (outside of on-programme assessment, which is covered in the assessments and certification section below). Room hire accounted for £14 of the mean £43 per month spent on other training costs. A small number of cases also included staff teaching costs related to other training delivery modes which they did not feel fit in the categories provided in the costing tool (as listed in Table 4.1).

4.13 University fees for training were a very substantial cost for the small proportion of training providers incurring them, though as this only covered two per cent of data points collected, these fees made up a relatively small proportion of the overall average (4%).

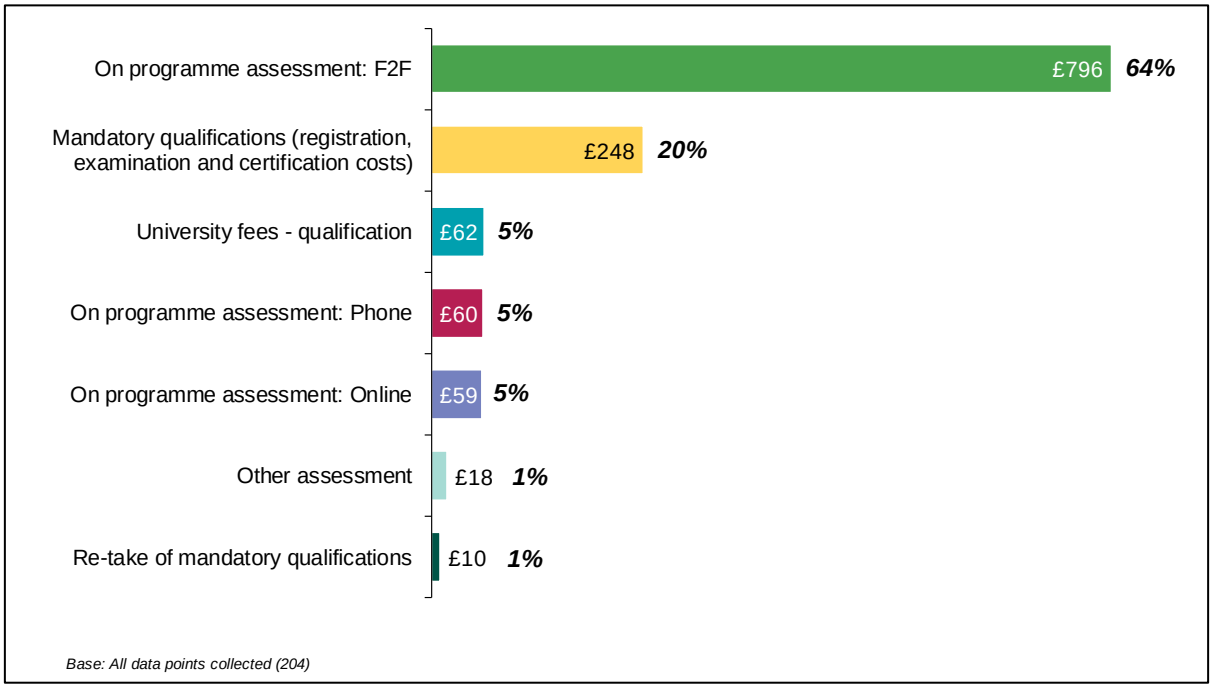
Costs related to assessment excluding EPA

4.14 Costs related to assessment (including the cost of on-programme assessment and mandatory qualifications, but excluding the price of EPA) accounted for 14% of the average eligible delivery cost per apprentice.

4.15 The overall mean eligible assessment cost was £1,253 per learner, and the median was £796. The lower quartile was £285, and the upper quartile was £1,820.

4.16 Figure 4.3 shows the breakdown of assessment costs per learner across the different elements within the category. Costs for on-programme assessment carried out face-to-face made up the largest proportion of the overall average cost, with an average of £796 per learner, followed by registration and certification costs for mandatory qualifications (£248). On-programme assessment includes assessment during the course of the standard of knowledge, skills and behaviour, prior to EPA; it can include activities such as performance reviews, developing a portfolio of evidence, and feedback from line managers and other colleagues. A qualification or other assessments may also be involved, such as carrying out assignments to demonstrate competence in the criteria set out by the standard.

Figure 4.3 Breakdown of assessment and certification costs, excluding end-point assessment, per learner



4.17 Table 4.2 shows the mean, median and the lower and upper quartile monthly figures for assessment costs related to staff time and other assessment costs, among data points collected for each element. It also shows the mean overall costs for each element and mean overall costs as an average percentage of the funding band (EPA fees were not included in these calculations). Other assessment costs included items such as certification costs, invigilation costs and e-portfolio costs.

Table 4.2 On-programme assessment and other assessment costs per learner

	Base	Monthly costs				Mean overall cost	Mean % of funding band
		Mean	Median	Lower quartile	Upper quartile		
Conducting on-programme assessments face-to-face	*185*	£35	£20	£8	£49	£878	9%
Conducting on-programme assessments by phone	*62*	£11	£5	£2	£11	£199	3%
Conducting on-programme assessments online	*28*	£23	£11	£3	£30	£430	4%
Other assessment costs	*28*	£7	£2	£1	£6	£129	2%
Total on-programme and other assessment costs	***195***	**£41**	**£26**	**£10**	**£56**	**£977**	**10%**

Base: all data points collected with a cost for each element

4.18 Table 4.3 shows the mean, median, lower and upper mean quartiles costs related to mandatory qualifications and the proportion of university fees allocated to the qualification, among data points collected for each element.

4.19 Re-sit figures per learner were calculated to take account of the proportion of learners within a cohort that training providers estimate would need to re-sit; the cost of re-sits for the cohort has been divided by all learners to give a 'per learner' cost. These estimates were based either on the proportions that had needed to re-sit in completed cohorts, or, where few apprentices had reached EPA so far, on the typical proportions of learners needing to re-take similar qualifications.

Table 4.3 Eligible qualification costs per learner

	Base	Mean cost	Median cost	Lower quartile	Upper quartile	Mean % of funding band
Mandatory qualification	*102*	£496	£278	£148	£560	5%
Re-sit of mandatory qualification	*43*	£47	£15	£7	£66	<1%
University fees – qualification	*6*	£2,100	£2,035	£1,245	£2,737	9%
Total qualification costs	***106***	**£615**	**£282**	**£157**	**£820**	**5%**

Base: all data points collected with a cost for each element

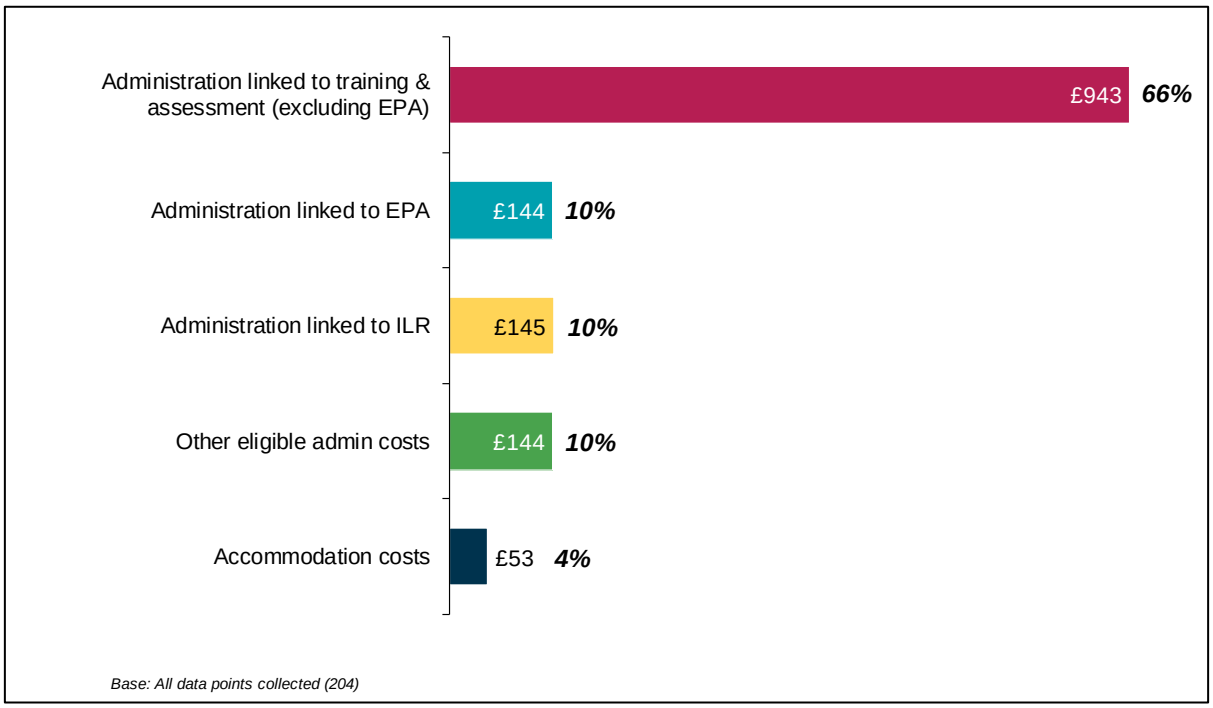
Costs related to administration

4.20 Overall, administration costs accounted for 17% of the average eligible delivery cost per apprentice.

4.21 The overall mean eligible administration cost was £1,429, and the median was £665. The lower quartile was £283, and the upper quartile was £1,976.

4.22 Figure 4.4 shows the breakdown of costs within administration. Administration linked to training and assessment (excluding administration related to EPA) made up two-thirds of the overall administration cost (£943). This included completing paperwork related to registration, audit paperwork and putting together programme timetables.

Figure 4.4 Breakdown of eligible administration costs per learner



4.23 Table 4.4 shows the mean, median, lower and upper quartile costs for each aspect of administration, including administration related to training and assessment, EPA and ILR, among data points collected for each element.

Table 4.4 Eligible administration costs per learner

	Base	Monthly costs				Mean overall cost	Mean % of funding band
		Mean	Median	Lower quartile	Upper quartile		
Administration linked to training & assessment	*190*	£39	£23	£9	£56	£1,012	9%
Administration linked to EPA	*174*	£8	£3	£1	£6	£169	2%
Administration linked to ILR	*179*	£7	£2	£1	£5	£166	2%
Other administration for required training not covered elsewhere	*19*	£43	£16	£6	£58	£1,545	10%
Accommodation for required training	*14*	£29	£13	£4	£25	£765	9%
Total eligible administration	***198***	**£57**	**£31**	**£15**	**£83**	**£1,472**	**13%**

Base: all data points collected with a cost for each element

4.24 As shown in the table above in the lower and upper quartile figures, administration costs varied quite widely between providers. While some of this variation is likely to be due to differences in apprenticeship standards and training provider types, it should also be noted that some training providers found it difficult to give accurate costs in this section, with around half of cases giving informed estimates for at least some hours or costs. Although in most cases

these estimates concerned the breakdown of time across staff roles and tasks rather than the total hours, many training providers had to estimate time needed for administration related to EPA due to not having reached this stage yet, and several mentioned that the amount of administration time can vary depending on the learner or cohort, hence averages were used here.

4.25 Relatively few data points (fewer than 10%) reported 'other administration' costs, but among these data points it had quite high mean per learner monthly (£43) and overall costs (£1,545). Specific costs described included general administration time (i.e. administration that they were unable to split between 'training and assessment', 'EPA' and 'ILR'), administration related specifically to Quality Assurance, and travel, subsistence and accommodation costs for staff.

4.26 As discussed in the previous section, many training providers had not yet reached the point of EPA, and therefore figures given for administration hours and costs associated with EPA were often estimates. While some training providers were confident in their estimates, others admitted that they were very unsure at this stage how much time would actually be needed.

4.27 While accommodation costs for apprentices undertaking required residential training made up a fairly small percentage of overall average costs, when looking only at data points where those costs were incurred, the amounts are more substantial, with an average £765 per apprentice for apprentice accommodation required for residential training.

Consumables costs

4.28 Overall costs of consumables, including materials and software costs, made up just 6% of the average cost of delivering an apprenticeship standard. The overall mean eligible consumable cost was £557, and the median was £220. Among those data points where consumables costs were incurred, the mean monthly cost per learner was £22, and the median was £11.

Table 4.5 Consumables costs per learner

	Base	Monthly costs				Mean overall cost	Mean % of funding band
		Mean	Median	Lower quartile	Upper quartile		
Materials	*174*	£17	£6	£2	£21	£449	4%
Software licences	*144*	£9	£3	£2	£10	£201	2%
Total consumables cost	***192***	**£22**	**£11**	**£4**	**£28**	**£557**	**5%**

Base: all data points collected with a cost for each element

4.29 Differences in costs for materials largely reflect the different requirements across standards, with some apprenticeships requiring a certain volume of practical elements such as construction materials or laboratory chemicals, while others only required lower cost materials such as paper, pens and photocopying.

Ineligible costs

4.30 Although the main focus of this report is the analysis of eligible costs incurred by training providers when delivering the 54 covered apprenticeship standards, we also considered wider ineligible costs reported by providers, noting that these may not be directly comparable to delivery of core content of the standard.

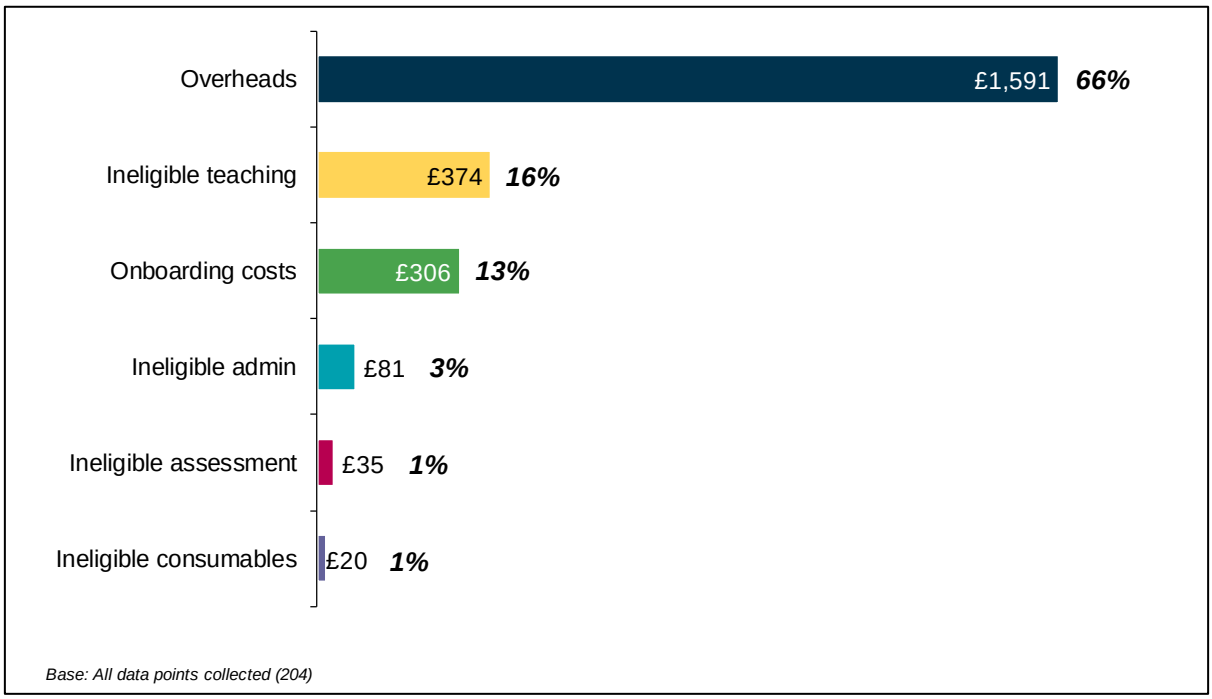
4.31 Some ineligible costs were considered by training providers when assessing the feasibility of delivering a standard, with the decision on whether to deliver a standard linked to whether they felt it would be able to make a sufficient contribution towards overheads; although, a number of providers indicated this consideration may be based across multiple apprenticeship standards as a group, rather than at the level of each individual standard.

4.32 The mean eligible cost reported by providers for the delivery of these 54 apprenticeship standards was £8,655, with additional ineligible costs of £2,407 per learner. Hence eligible costs comprised on average 78% of total costs, with the remainder (22%) ineligible costs.

4.33 As shown in Figure 4.5, around two-thirds of ineligible costs were made up of ineligible overheads (66%), with the remainder divided between ineligible teaching costs (including costs of delivering training in addition to that required by the standard), ineligible administration costs (including accommodation costs for additional training and room hire costs for additional training) and a smaller proportion made up of ineligible assessment costs.

4.34 Whilst not being directly related to cost components receiving government funding, costs related to onboarding (including costs for recruitment, advertising, negotiating with employers, conducting diagnostic tests, interviews and any other onboarding costs) were explored in order to provide wider context on delivery. Qualitatively, a number of training providers reported that it was difficult to calculate overall recruitment, advertising and onboarding costs due to the extent to which this varies on a learner by learner basis. This was influenced substantially by the nature of the training provider and their relationships with employers, and also by the standard. Where training providers were able to accurately provide these costs, calculations were based on the time taken from taking a candidate with no employment into employment, from attracting candidates in the first instance to onboarding. The route taken by learners was also a factor, and costs varied depending on whether learners went direct to a training provider who therefore needed to carry out screening interviews and the recruitment process was more comprehensive, compared to learners who came from an employer, which required less time and cost.

Figure 4.5 Ineligible costs per learner



4.35 Based only on providers incurring these costs, 'other overhead' costs had the highest mean per month (£93 per learner), although only a minority of cases (14) had costs in this category. Costs placed in this bracket included agency fees, legal fees, fuel costs, management meetings and utilities.

4.36 'Other ineligible training costs' among providers incurring them also had a high cost per learner per month among cases with a cost in that category (£54). Costs placed into this category included uniforms, attending line manager meetings, field trip costs, apprentice induction costs, staff training and catering.

Table 4.6 Ineligible costs per learner

	Base	Monthly costs				Mean overall cost	Mean % of funding band
		Mean	Median	Lower quartile	Upper quartile		
Additional classroom training	*50*	£9	£3	£1	£7	£176	2%
Additional 1-2-1 training	*45*	£12	£4	£1	£10	£234	3%
Additional live online streaming	*11*	£4	£1	<£1	£9	£85	1%
Other ineligible training costs	*48*	£54	£9	£2	£26	£1,167	12%
Other ineligible assessment and certification costs	*10*	£3	£3	<£1	£7	£70	1%
Other ineligible administration for training	*27*	£18	£9	£3	£18	£476	4%

	Base	Monthly costs				Mean overall cost	Mean % of funding band
		Mean	Median	Lower quartile	Upper quartile		
Materials for additional training	*21*	£4	£2	<£1	£7	£99	1%
Licence fees for software for additional training	*18*	£5	£3	<£1	£6	£113	1%
Room hire for additional training	*5*	£4	£3	£1	£7	£67	1%
Accommodation for additional residential training	*<5*	£46	£40	£11	£40	£1,073	18%
Administration for additional training	*<5*	£4	£4	£2	£4	£165	1%
Recruitment advertising	*136*	£6	£3	£1	£7	£118	1%
Contacting employers to advertise training	*131*	£6	£3	£1	£8	£133	1%
Negotiating with employers	*158*	£2	<£1	<£1	£1	£40	<1%
Diagnostic tests and assessment	*147*	£2	£1	£1	£3	£45	1%
Screening interviews	*123*	£5	£2	£1	£4	£101	1%
Other recruitment and onboarding	*29*	£4	£2	£1	£5	£125	1%
CPD related to delivery of standard	*182*	£44	£12	£6	£36	£1,019	10%
Rent of building	*76*	£44	£20	£7	£55	£1,001	8%
Maintenance of building	*71*	£13	£4	£2	£11	£298	2%
Maintenance of equipment	*71*	£10	£5	£2	£13	£211	2%
Other overheads	*14*	£93	£47	£21	£112	£1,917	18%
Total ineligible costs	***197***	**£111**	**£57**	**£22**	**£137**	**£2,493**	**24%**

Base: all data points collected with a cost for each element

4.37 The majority of data points (182) entered hours spent by training staff on continuing professional development (CPD) related to the delivery of the standard, at a mean monthly cost of £44 per learner across the length of the apprenticeship, equivalent to 10% of the funding band on average. Contributions towards the rent of buildings on behalf of the provider also had a mean monthly cost of £44 per learner, although this cost was reported by fewer data points (76).

4.38 In 42% of cases, training providers indicated that their delivery involved additional training requested by the employer, beyond the training required for the standard. This additional training could be delivered free of charge, or for an extra fee paid by the employer. The mean monthly cost for this additional training was relatively low, across the different modes of delivery, additional online livestreamed training had the cheapest mean cost (£4 per month), and additional one-to-one training had the highest mean (£12 per month).

4.39 Accommodation costs associated with additional training also carried a substantial cost per learner (£1,073 across the duration of the standard), however this element was reported by fewer than five data points, therefore it had a minimal impact on overall average ineligible costs.

Ineligible costs – overheads

4.40 Overhead costs made up the majority of ineligible costs (66%), and 14% of total costs overall (including both eligible and ineligible costs) with a mean cost of £1,591 per learner across all data points.

4.41 Figure 4.6 breaks down average overhead costs. The cost of CPD related to the delivery of an apprenticeship standard made up a significant proportion of overhead costs (57%). On average, this was a cost of £909 per learner. Other overhead costs included contributions to building rent (£373 per learner)[26], contributions to maintenance of buildings used for delivering the standard (£104), maintenance of equipment used for delivering the standard (£74) and other general overhead costs (£132).

4.42 One training provider reported that it was difficult to apportion CPD costs to a specific cohort as there was a minimum CPD requirement per member of staff, but this would be the same regardless of whether they were teaching one cohort or three cohorts across three different pathways so the cost per learner could vary significantly.

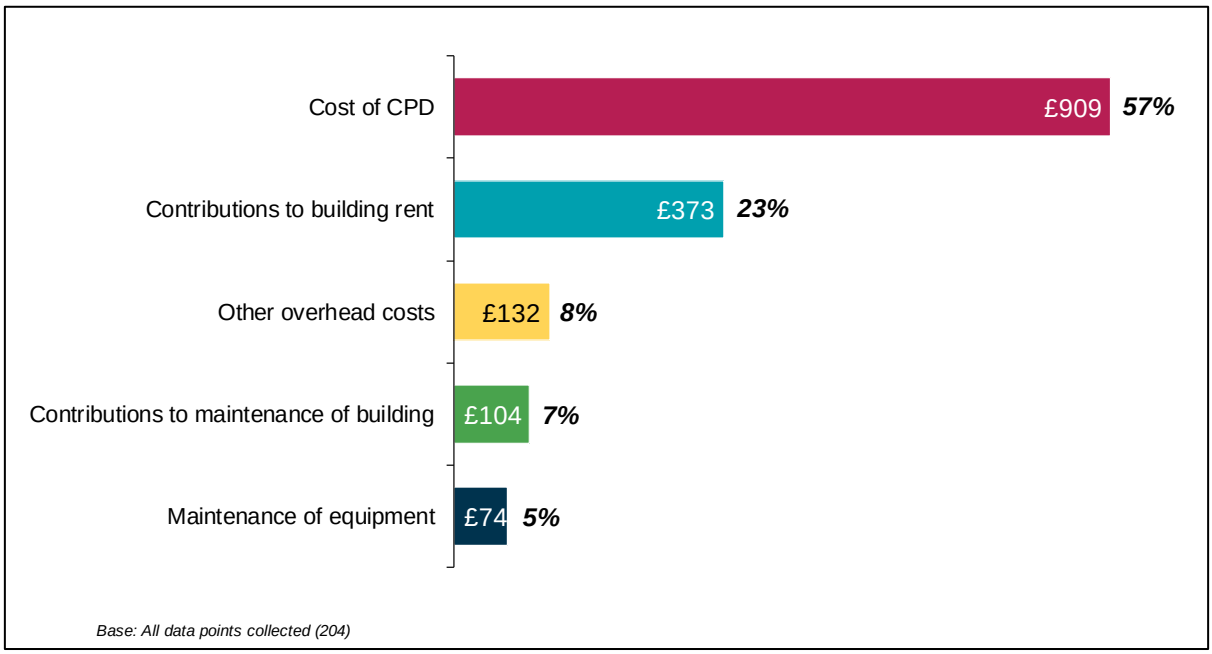
4.43 Multiple training providers reported that overheads were handled by being offset throughout the business:

"There is a 40% aimed for surplus which is used for covering fixed overheads. There is a degree of offsetting as some standards are above and some are below this 40%"[27]

FE College

[26] Note that in some situations contributions towards building rent could be considered eligible costs, if the cost could be attributed directly to the delivery of the standard in question; however, as it is not possible to differentiate this based on the data collected, all building rent costs were treated as ineligible. Costs for room hire directly related to delivery of the standard were collected elsewhere and were included within eligible costs.
[27] It should be noted that the surplus may be used to contribute to items that are actually eligible for funding.

Figure 4.6 Breakdown of total overhead costs per learner



Ineligible costs – capital costs

4.44 Although capital costs were not recorded as part of the overall data collection process, respondents were asked about capital expenditure during the qualitative part of the interview. The extent of information provided on capital expenditure was mixed depending on the respondent's understanding and awareness of capital costs associated with delivery of apprenticeships. There was wide variation between training providers in terms of the level of capital costs required for delivering the apprenticeships standards covered in this research, depending on the standard, provider type, and prior training coverage; in some cases, considerable investment in new equipment or premises was needed in order to begin delivery of the standard, while in other cases either specialist equipment or premises were not needed, or were already in place due to being used for existing provision.

4.45 Generally, capital costs, although ineligible for government funding, were considered a very important part of the initial decision-making process in deciding whether to deliver a new standard. Multiple training providers reported that they had previously decided against delivering certain standards based on the need for "whole new buildings," for example.

4.46 That said, a number of respondents were unable to identify any capital costs and a further group were unable to attribute these costs to a specific cohort or standard, only knowing how these would break down across the organisation more widely if the capital investment was used by multiple groups. IT software and equipment was one area mentioned by multiple training providers as a necessary investment, even if the standard in question was not IT related.

4.47 The extent to which capital investment impacted on a training provider's decision to deliver a standard varied between training providers with some reporting that it was not an issue and some reporting that it does impact on which standards they choose to offer, for example one ITP had chosen to move to standards with fewer technical qualifications that did not require investment in expensive equipment and technology.

4.48 Some providers chose to minimise the potential investment required by choosing to deliver new standards that mapped onto their existing programmes and could therefore use the same infrastructure. This was a particular consideration when deciding to offer standards with a high capital outlay cost, for example due to a need to provide industry-standard equipment and systems.

"What we've tried to do is look at what we currently offer and find a standard that matches that."

FE College

4.49 In addition to this, it was noted that the size of a training provider was an important factor in determining the extent and impact of capital investment on the decision-making process. Larger providers were perceived to have a greater capacity to mitigate for significant capital investment compared to smaller, leaner providers.

"We are a big college, it [the impact of capital costs on delivery] probably is mitigated by that... if we were a smaller provider it would probably have more of an effect."

FE College

4.50 Where training providers could give exact capital costs for a cohort, these were generally costs for new buildings or equipment, specifically required to deliver an apprenticeship and were purchased for an incoming or current cohort. In some instances, training providers had considered the possibility of outsourcing elements of delivery or hiring equipment instead of purchasing it in order to reduce costs, but generally noted they prefer not to do this.

"In the long run we know it's more economically beneficial to purchase equipment than hire it."

FE College

4.51 Capital investment was also influenced by a training provider's arrangement with an employer. In the instance that all learners were directly from employers and therefore based at the employer, the need for capital investment was greatly reduced.

4.52 There was some evidence that the scale of capital investment depends on the nature of the apprenticeship in question. One respondent reported that they had not needed to make any capital investment as the apprenticeship was 'office based' and therefore did not require any spending on expensive equipment.

"They don't require any equipment, there are [just] materials such as course notes and text books."

Independent Training Provider

4.53 In terms of how capital costs were accounted, this also varied between training providers. For equipment costs, those providers who were able to provide details stated that costs were written off after between three and five years.

Calculated costs vs. training provider estimates

4.54 Training providers were asked whether they knew the average delivery cost per apprentice for the standard at their organisation. Those that did were asked to provide the cost and an explanation of how this had been calculated.

4.55 Of the 204 data points collected, 167 provided an exact or estimated average delivery cost per apprentice. The level of detail provided in the explanation varied between training providers depending on whether they had completed a similar exercise to that used in this research project to calculate their costs. Results are shown in Table 4.7, these costs provide a useful point of comparison to the mean calculated costs and the funding band.

4.56 Among those who did not provide a cost or did not want to make an estimation, a number of reasons were given. One stated that "if we costed it on an individual basis then we would not deliver it". This was a new standard and their involvement was seen as an investment, but for the time being it was acknowledged as loss making and therefore the costs were not considered the priority in delivery. Another training provider simply felt that because it was a new standard, they did not have enough information to provide an accurate estimate, particularly as they had no EPA data as a reference point.

Table 4.7 Comparison of overall calculated costs against training provider estimates

	Base	Total eligible costs	Total ineligible costs	Total overall calculated cost	Provider estimate of cost	Funding band average
Mean cost	*167*	£9,062	£2,287	£11,348	£11,762	£12,554
Median cost	*167*	£7,404	£1,341	£9,331	£8,810	£9,000

Base: all data points collected with a cost for each element

4.57 As mentioned, 167 data points provided an exact or estimated cost - this did not separate eligible and ineligible costs, and which cost elements they included was left to the provider. Therefore, the table above presents the estimates given by training providers (in the penultimate column) alongside both the calculated eligible and total costs. However, due to the fact that the provider's estimates might include different cost elements and were generally calculated differently, the figures are not directly comparable. For example, some providers only included direct teaching and consumables costs in their own calculations, while others included wider costs such as contributions to overheads.

4.58 There was a significant degree of variation both for the calculated costs and the cost estimates given by providers when looking at the mean costs by route, as shown in Table 4.8. These differences are likely to be reflective of the different methods used to calculate the costs, and potentially the inclusion or exclusion of various cost elements; most providers stated that the approach taken in the costings tool for this research was considerably more detailed than their internal costings, particularly in terms of accounting for the time spent by all staff involved in the delivery. Additionally, the total calculated cost here contains elements that may not be associated with delivering the core content of the standard, and so in most cases was higher than the cost estimated by providers.

Table 4.8 Comparison of overall calculated costs against training provider estimates by route

	Base	Mean funding band	Mean total eligible costs	Mean total ineligible costs	Mean total overall calculated cost	Mean provider estimate of cost
Agriculture, Environmental and Animal Care	*5*	£5,400	£7,167	£2,474	£9,640	£4,225
Business and Administration	*17*	£5,323	£4,482	£1,041	£5,522	£5,110
Care Services	<5	£3,000	£4,001	£1,187	£5,188	£3,157
Catering and Hospitality	*5*	£8,000	£8,080	£1,725	£9,805	£7,842
Construction	*28*	£15,536	£9,821	£1,287	£11,108	£13,376
Creative and Design	*<5*	£12,000	£5,523	£1,724	£7,247	£9,468
Digital	*10*	£16,200	£12,385	£3,595	£15,981	£13,083
Education and Childcare	*5*	£6,000	£6,521	£3,188	£9,709	£5,416
Engineering and Manufacturing	*34*	£19,618	£13,176	£3,262	£16,437	£20,291
Hair and Beauty	*8*	£7,000	£8,103	£3,238	£11,341	£7,229
Health and Science	*17*	£15,647	£9,889	£1,888	£11,777	£14,336
Legal, Finance and Accounting	*9*	£12,778	£7,960	£2,591	£10,551	£8,684
Protective Services	*<5*	£12,000	£19,814	£8,923	£28,736	£27,599
Sales, Marketing and Procurement	*14*	£7,357	£5,480	£1,962	£7,442	£6,007
Transport and Logistics	*7*	£3,857	£4,350	£1,214	£5,564	£4,496

Base: all data points collected with an estimated cost

5 Summarising the drivers of the cost of apprenticeship standard training

5.1 The next four chapters look in more detail at the various elements of apprenticeship delivery and how they interact with costs. They consider:

- **Type of apprenticeship** (chapter six), including duration, route, level and funding band;
- **Apprenticeship delivery elements** (chapter seven), including delivery methods used, the existence of mandatory qualifications and licences to practice, and assessment methods;
- **Training providers** (chapter eight), including provider type (e.g. HEI, Employer Provider etc.), locality type (e.g. rural, urban etc.), region, and size of training provider; and
- **Cohort and learner characteristics** (chapter nine), including cohort size, class size, age of learners, and additional learning needs.

5.2 First, in this chapter we consider at an overall level what is driving the total cost of apprenticeship training, based on the cost data that training providers provided.

5.3 A 'key driver analysis' using linear regression was run on the provider costs data. Different measures of costs and models were explored, including the monthly cost, but we found that the model explaining the **total eligible cost per learner excluding EPA fees was the strongest;** that is, it was able to explain 56% of the variance in total costs, whereas the model using monthly cost per learner could only explain 39% of the variance in monthly costs.

5.4 The advantage of a multivariate approach, such as drivers' analysis, is that it looks at the impact of one variable, such as number of learners, on overall cost, while at the same time controlling for other variables, such as duration, method of delivery, average salary costs or region. Essentially, the model tests how total costs change as each of the independent variables change, while holding the others in place. Therefore, if the model finds a particular variable is statistically significant and has a positive effect on cost, we know this relationship exists having taken into account other cost variables.

5.5 Although interaction effects were not explored as part of this analysis, and it is likely that there was some interaction between the explanatory variables, if the independent variables were too highly correlated the model would not be able to return any meaningful results; therefore, we can be confident that the variables found to be significant are having an effect separately to the other variables included in the model.[28] However, it is important to recognise the limitations of the model, as although it explains 56% of the variance in cost, that still leaves 44% of the variance unexplained. Wider underlying variables may have impacted on the differences, for example differences in costs between provider types may have been influenced by the types of standards those providers deliver.

5.6 We excluded from this final analysis the drivers of EPA costs that were incurred by EPAOs. A discussion of EPAO costs is given in later chapters, and a combination of insufficient data

[28] It is worth noting however a regression model can only be a simplified representation of real life, therefore care needs to be taken not to make simple extrapolations based on the findings.

points and the early stage of market development means that analysis of drivers would not be robust.

5.7 The analysis started by including a long list of variables in order to narrow down which costs were having an effect on total eligible costs excluding EPA. Table 5.1 shows all the variables that were initially explored. Route was not included in this list as the large number of categories means that base sizes would not be sufficient for the analysis; any routes with a base size below the minimum required level would need to be excluded, which would increase the likelihood of errors as the model would not be able to control for route fully. Similarly, Sector Subject Area (SSA) was not included due to insufficient bases in some of the categories.

5.8 Various regression methods were employed to identify the optimum model to help explain overall costs.[29] The final model used the 'backward elimination' method, which begins by including all variables to begin with and then sequentially removing those with no effect followed by those that where no statistically significant effect can be identified.

Table 5.1 Initial list of explanatory variables included in the key driver analysis

Initial explanatory variables included
Provider characteristics
Overall number of learners at the training provider
Number of apprenticeship standards offered
Number of apprenticeship frameworks offered
Overall number of apprentices on standards
Number of apprentices enrolled in the last 12 months
Mean salaries (management, training, on-programme assessment, administration)
Type of provider (FE College, HEI, ITP, Employer Provider*)
Region of provider
Locality of provider (rural, semi-rural, suburban, urban*)
Standard characteristics
Whether delivery included mandatory qualifications
Average duration
Cohort size
Average class size
Level
Delivery methods
Methods of delivery (face-to-face, one-to-one, online, distance / self-directed)
Total hours spent on method of delivery (face-to-face, one-to-one, online, distance / self-directed hours)
Proportion of staff time spent on method of delivery (face-to-face, one-to-one, online, self-directed hours)

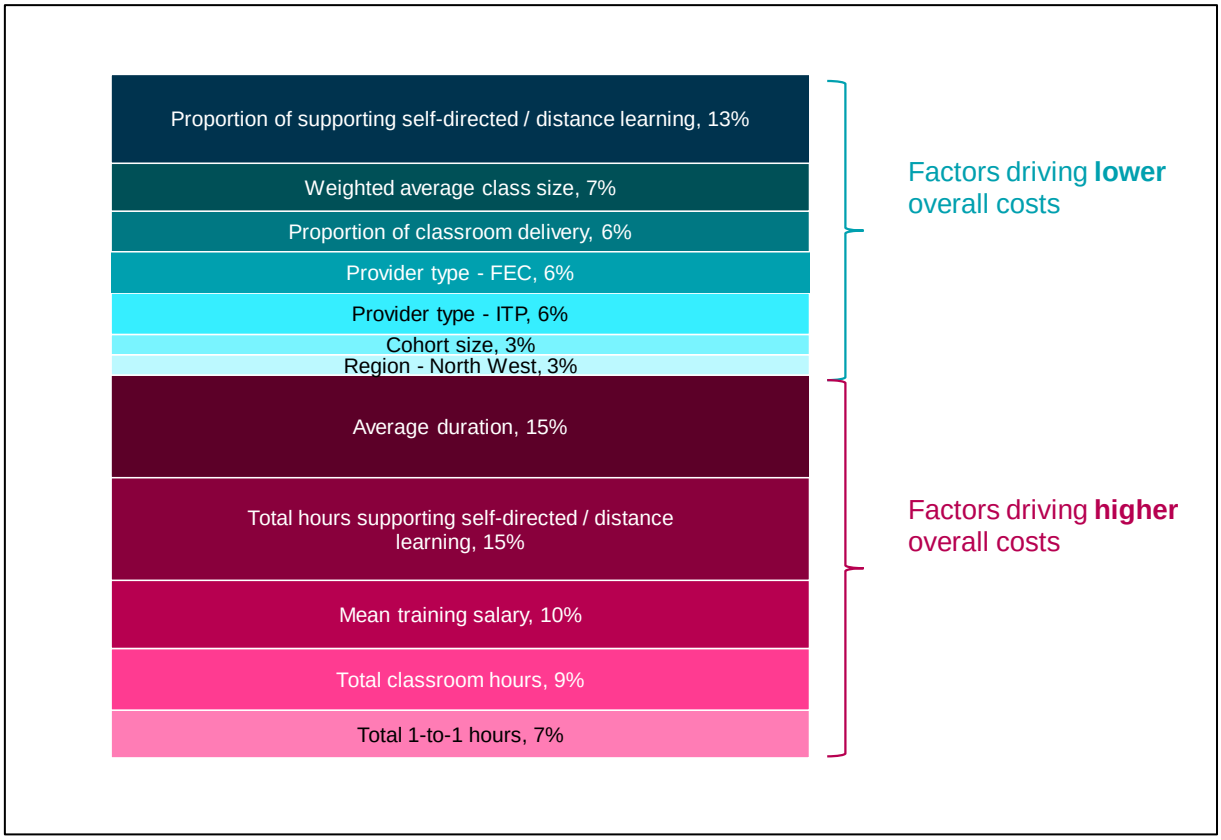
** Note: with categorical variables one category needs to be excluded from the model and used as the reference category against which to interpret the results. Items with an asterisk against them were used as the reference category in this model.*

[29] Methods explored were: 'enter' which includes all variables at the same time and 'forward' which looks at the relationship between each variable and the dependent variable (total costs) and adds them cumulatively to build a model consisting of those with a significant effect that creates the optimum model for explaining as much of the dependent variable as possible.

5.9 The final model (summarised in Figure 5.1) explains around 56% of the variance in the data; this means that if we were trying to predict overall cost using the information that we have gathered our prediction of cost per learner would be improved by 56% compared with not having that information. The percentages shown in the chart are the proportion of variance explained by each factor, rounded to zero decimal places.

5.10 Any variables included in the long list above which do not appear in Figure 5.1 were not found to be statistically significant at either the 95% or 90% level.

Figure 5.1 Results of key driver analysis



All variables significant at 95% confidence level.

5.11 As expected, average duration was found to have a significant correlation with higher costs per learner, accounting for 15% of the impact. This impact score is relative to the other drivers in the model found to be statistically significant.

5.12 Alongside duration, the model also found that as the overall amount of teaching time goes up, overall costs per learner increased; and at the same time, the proportion of training time being more strongly weighted towards supporting self-directed or distance learning and classroom delivery was correlated with lower costs. Similarly, as average cohort size and average class size went up, the overall cost fell.

5.13 The total number of teaching hours spent on supporting self-directed or distance learning, classroom teaching, and face-to-face one-to-one teaching were all correlated with higher costs, and together accounted for 30% of the impact on total eligible cost per learner.

Combined with duration, which is necessarily linked to total training hours, this shows that the *quantity* of training delivered accounts for nearly half of the impact on cost.

5.14 The correlation between the time spent by staff supporting self-directed or distance learning and cost may at first appear counter-intuitive for a mode of delivery that is likely to also involve apprentices learning independently. However, later analysis in chapter seven shows that the cost per learner per hour of supporting self-directed or distance learning is one of the most expensive forms of delivery, after face-to-face one-to-one delivery (Table 7.4).

5.15 Of all the salary measures tested, the only one found to be statistically significant was salary relating to training**. As the mean training salary increased, the overall cost, also, tended to be higher**. Given that the cost of delivery of training was the single highest cost feeding into the overall cost of delivery this is perhaps unsurprising. It does however highlight the importance of the difficulties and pressures that some training providers reported in having to pay higher salary costs to attract and retain trainers where they could be earning a higher wage 'doing the job' rather than 'training'.

5.16 Looking at factors correlated with lower costs, the proportion of staff time spent supporting self-directed or distance learning had the biggest impact (13%), followed by the proportion of staff time delivering classroom training (6%). Although each of these delivery methods were expensive in terms of the staff cost per hour, each also brings about possibilities to increase efficiency. For example time spent supporting self-directed or distance learning was balanced by apprentices then being able to undertake some parts of the training without supervision, thus saving staff time. Similarly, the cost of classroom delivery could be spread across the number of learners in the class, making it the most cost-effective delivery method in terms of cost per learner per hour.

5.17 Linked to this, the average classroom class size and the cohort size reported by training providers together accounted for around 10% of the impact on total costs per learner. As the number of learners in the class and the number of learners in the cohort increased, the total cost per learner decreased, showing that greater efficiencies in training could counterbalance the cost impact of the overall number of hours spent delivering training.

5.18 The type and location of the training provider also had an impact, with both FE Colleges and ITPs found to have significantly lower costs than Employer Providers, the reference category. Costs were also significantly lower among training providers operating in the North West of England.

5.19 As outlined above, the model when examining monthly costs was only able to explain 39% of the variance in monthly cost; in this model, the same factors were found to be significant as in the total costs model, with the exception of duration, and in similar proportions in terms of the relative impact of each variable. The model also identified two further variables as having a significant impact on costs at the 90% level; the total number of staff hours spent delivering online livestreaming correlated with higher monthly costs, while provision delivered in rural localities was also associated with higher costs (each accounted for 3% of the impact, relative to the other significant variables).

6 Training provider costs: impact of type of apprenticeship

Introduction

6.1 This chapter looks at a number of factors relating to the type of apprenticeship in terms of level, apprenticeship route, duration of apprenticeship and funding band. It considers the costs relating to each of these elements and the extent to which they vary.

6.2 The regression model presented in chapter five considered two aspects of apprenticeship type – duration and level (base sizes for route and funding band meant these were excluded). As might be expected, apprenticeship duration was highly correlated with costs, with the longer the apprenticeship, the greater the cost of delivery. Throughout the subsequent chapters, where relevant, standardised monthly cost are presented to help identify how other factors (in this chapter - level, route and funding band) relate to costs. This analysis found that at a monthly level, longer apprenticeships had lower monthly costs than shorter apprenticeships, with apprenticeships lasting 18-23 months having the highest monthly costs. Whilst duration naturally drives the overall cost, longer apprenticeships might be expected to have lower monthly costs as the pace of delivery may be more spread out around, and driven by, occupational requirements and the nature of progression in the roles.

6.3 Although level was found not to be a significant driver of costs in the regression model, the analysis below shows that variations could be seen by level; for example, total monthly eligible costs at Level 4 were greater than Level 5, 6 and 7. As with different durations, these trends may also reflect differences in how standards at different levels need to fit around different occupational requirements, and the potential impact of progression routes through the levels.

6.4 The analysis also found that, as might be expected, as the funding band increased so too did the total eligible monthly cost. This is unsurprising given that the original funding bands were, among other factors, set on the basis of provider quotes relating to their expected costs of delivery.[30] Finally, by route (not included in the regression model due to low base sizes) the monthly cost of delivery did differ substantially. The nature of delivery of the apprenticeship impacted here, with an interplay between the type of delivery (e.g. one-to-one vs. classroom based), the average class size, and the hourly salary costs. For example, a high hourly salary cost may not have resulted in high overall teaching costs if there was a large average class size and a high proportion of classroom delivery. There were also very different assessment costs by route depending on whether mandatory qualifications were included.

Duration

6.5 The duration of an apprenticeship is a key factor impacting on costs to training providers. As outlined earlier, as duration increased overall costs increased. In this section we look at how *monthly* costs vary by duration.

6.6 Table 6.1 shows mean eligible total and monthly costs broken down by duration. Providers reported the average actual duration in months for a typical cohort to complete the standard, and these figures were banded for the analysis. Actual duration sometimes differed from the

[30] https://www.instituteforapprenticeships.org/developing-new-apprenticeships/allocating-a-funding-band/

planned duration due to learners needing slightly more or less time to complete the apprenticeship.

6.7 When looking at both mean and median monthly costs, shorter apprenticeships (less than two years) were the most expensive, with apprenticeships lasting between 18-23 months having the highest overall monthly cost per apprentice (£352). The lowest monthly costs were seen among apprenticeships lasting 36 plus months (£254). Monthly costs might be lower on apprenticeships with longer durations due to the delivery being less intensive across a longer time period, which, as mentioned previously, might be driven by the nature of the attached job roles; we can also see later in this chapter at Figure 6.1 that on average, apprenticeships with longer durations had larger mean class sizes than shorter apprenticeships. Apprenticeships with longer durations also had total costs equivalent to a smaller proportion of the maximum funding band on average, suggesting that the lower monthly costs were not a result of the maximum funding available needing to be spread across a larger number of months, as the overall costs could increase while still falling within the funding band limit.

Table 6.1 Total eligible training costs per learner (excluding EPA) by duration

	Base	Monthly costs		Mean overall cost	Mean % of funding band[31]
		Mean	Median		
12 to 17 months	*47*	£276	£255	£3,881	73%
18 to 23 months	*59*	£352	£324	£6,723	76%
24 to 35 months	*56*	£262	£195	£6,545	64%
36 to 47 months	*22*	£254	£223	£9,867	45%
48 months and over	*20*	£254	£253	£14,295	56%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

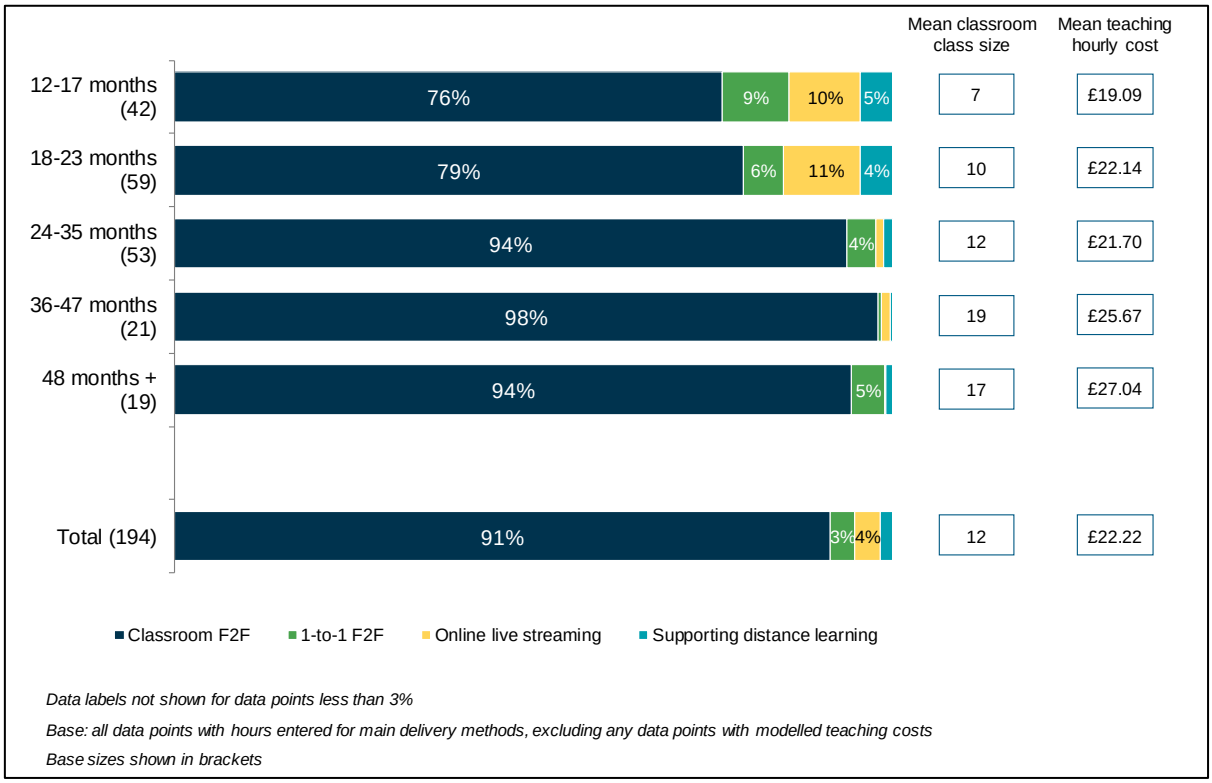
Base: all data points collected with a cost for each element

6.8 Teaching costs were a significant proportion of overall eligible costs (see Figure 4.1). When looking specifically at teaching costs, apprenticeships with a duration of less than two years had among the highest mean and median monthly costs. Apprenticeships lasting between 12-17 months and those lasting 18-23 months each had teaching costs equal to 42% of the funding band on average. Comparatively, apprenticeships lasting 36-47 months had teaching costs which made up on average 26% of the funding band.

6.9 Duration is also related to delivery method which could have a knock-on effect on delivery costs. Figure 6.1 suggests overall that multiple modes of delivery tended to be concentrated among shorter apprenticeships between 12-17 months, and 18-23 months. The vast majority of delivery for apprenticeships over 24 months was classroom based.

[31] This column shows the average (mean) percentage that the teaching costs in that row represent of the funding band for each data point. These percentages are indicative of how each average cost relates to the funding band levels of data points within that group.

Figure 6.1 Proportion of staff teaching time spent on each delivery mode by duration



6.10 However, contrary to this, one training provider reported that for longer apprenticeships (18 months or over), they chose to deliver in multiple formats compared to shorter apprenticeships. This was due to the training provider seeing cost savings from delivering training through live online streaming but feeling that the saving was reduced due to the extra monitoring time required as it was difficult to see what the learner had done. Therefore, they felt they could implement more online learning towards the end of longer apprenticeships but not on those with shorter durations.

6.11 The highest monthly assessment costs (on-programme assessment, mandatory qualifications and university qualification fees, but excluding the price of EPA) were for apprenticeships lasting between 18 and 23 months (£70 per learner). However overall assessment costs as a percentage of the average funding band for apprenticeships of this duration (16%) was in line with other durations.

6.12 Similarly, administration costs varied by duration of apprenticeship – with monthly administration costs rising as duration increased. Apprenticeships lasting 48 months or more had the highest monthly eligible administration costs (£70 per learner). If duration and total administration cost had a linear relationship, one would expect monthly costs not to vary by apprenticeship duration. However, as longer durations had higher monthly costs, it seems that other factors were driving this. Apprenticeships lasting 48 months or over were more likely to be offered by HEIs than other training providers, and as HEIs had higher administration costs on average (as discussed in chapter eight of this report), it is possible that higher monthly administration costs for longer apprenticeships were related to higher staff costs incurred by HEIs. It is also worth highlighting that 15 of the data points with a duration of 48 months and over included mandatory qualifications, and therefore were likely to have higher administration costs linked to training and assessment (excluding the EPA).

6.13 Consumables costs made up a very small percentage of the overall costs and so variations were unlikely to impact on overall costs in a significant way. Unsurprisingly, longer apprenticeships had higher total consumable costs, but there was also some evidence that longer apprenticeships incur higher monthly consumables costs: apprenticeships lasting 12-17 months had the lowest monthly consumables cost (£10 per learner) compared to apprenticeships lasting four years or over which had the highest mean monthly cost for consumables (£21 per learner).

Route

6.14 Costs were provided by training providers across the apprenticeship routes shown in Table 6.2. Where there are only a small number of data collection points, it is worth keeping this in mind from an analysis standpoint, as outliers have a large impact where the base size is low.

6.15 Apprenticeship route is a factor which could have a significant impact on the costs of delivery due to the extent to which delivery models vary depending on the nature of the apprenticeship. For example, some routes will require a more intensive teaching approach with higher numbers of hours and closer staff supervision, or others may require a greater investment in materials.

6.16 Focusing on routes with at least 10 data points, the highest mean monthly cost was among Digital (£503 per learner) and the lowest was among Business and Administration (£216), as shown in Table 6.2. Mean total eligible cost was highest among Engineering and Manufacturing (£10,656) and Digital (£9,975). Both of these apprenticeship routes had high teaching costs, assessment costs excluding EPA and administration costs, relative to other routes. Engineering and Manufacturing had the highest cost recorded for EPA and consumables (£5,400 and £6,200 respectively).

Table 6.2 Total eligible training costs per learner (excluding EPA) by route

	Base	Monthly costs		Mean total eligible cost	Mean % of funding band
		Mean	Median		
Agriculture, Environmental and Animal Care	*8*	£211	£166	£4,821	92%
Business and Administration	*24*	£216	£199	£3,597	66%
Care Services	*6*	£238	£242	£3,405	114%
Catering and Hospitality	*6*	£351	£267	£5,832	73%
Construction	*39*	£264	£233	£7,538	51%
Creative and Design	*<5*	£284	£258	£4,027	34%
Digital	*14*	£503	£531	£9,975	61%
Education and Childcare	*5*	£267	£253	£5,761	96%
Engineering and Manufacturing	*36*	£296	£257	£10,656	60%
Hair and Beauty	*9*	£310	£212	£6,540	93%
Health and Science	*19*	£286	£293	£8,100	62%
Legal, Finance and Accounting	*10*	£230	£196	£6,401	48%
Protective Services	*<5*	£816	£816	£17,814	148%
Sales, Marketing and Procurement	*15*	£287	£239	£4,527	67%
Transport and Logistics	*7*	£241	£209	£3,683	111%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

6.17 Delivery of training comprises a substantial proportion of the total eligible costs, so it is helpful to identify if any differences in teaching costs by route were driving overall variations in eligible costs. Focusing on routes with more than 10 data points, monthly mean eligible teaching costs varied from £118 for Business and Administration and £134 for the Health and Science route, to £290 for Digital and £174 for Engineering and Manufacturing routes.

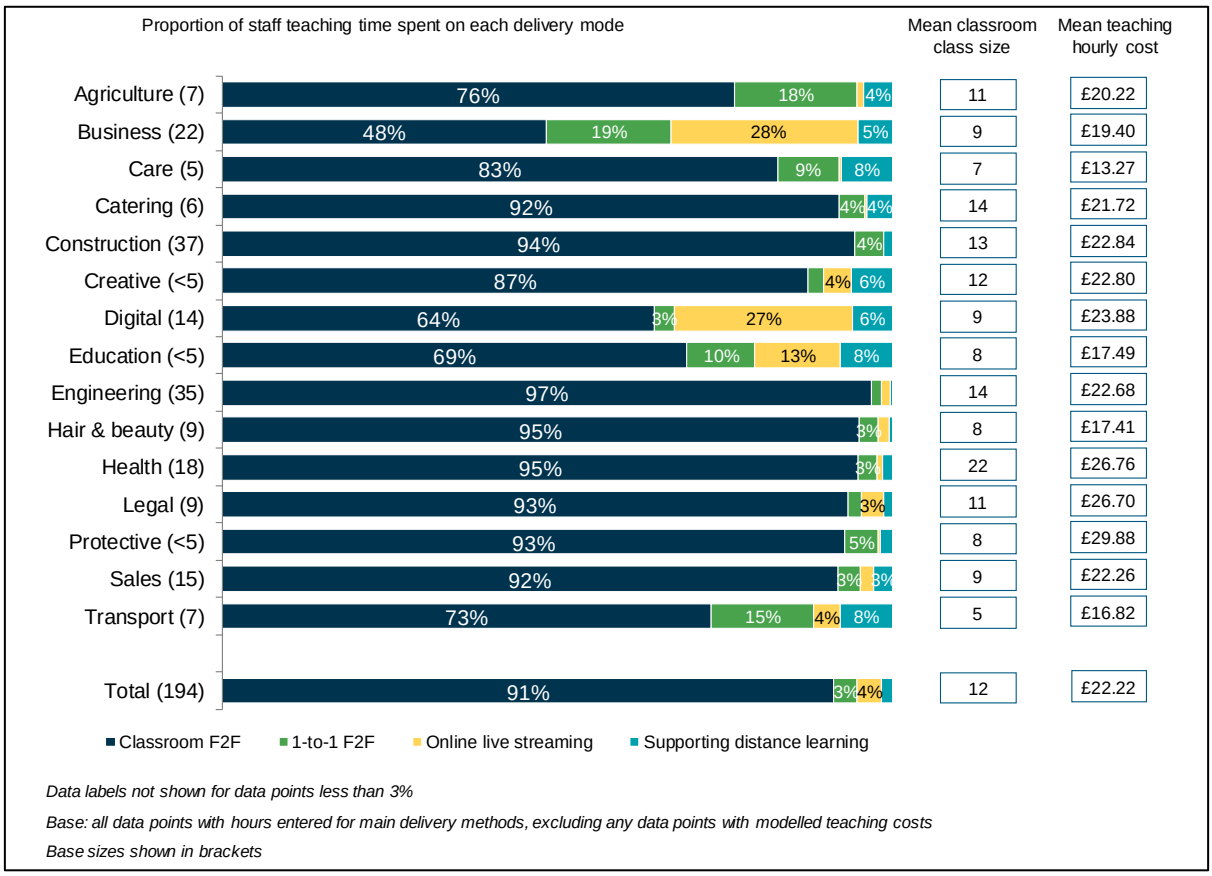
6.18 Differences in monthly teaching costs per learner will be driven by a number of factors, including the number of hours of teaching each month, the mean hourly teaching cost and the mean classroom size, and the type of delivery (e.g. classroom vs. one-to-one delivery). It can be seen in Figure 6.2 for the Health and Science route for example, that while this route had

one of the highest mean hourly teaching costs (£26.70), it also had the largest mean classroom size (22), and one of the highest proportions of classroom delivery (95%) – as a result the mean monthly teaching cost for this route (£134 per learner) was below the monthly average across all routes (£162) despite high hourly teaching costs due to the large class sizes. As a counterpoint, Protective Services, while caveating it is based on fewer than five data points, is a good example that shows how a high hourly teaching cost (the highest at £29.88, Figure 6.2) and a lower than average mean class size (nine) combine to give high overall monthly teaching costs per learner.

6.19 Qualitatively, training providers in almost every route commented that the issue of increasing staff costs was putting pressure on costs. There was competition for skilled staff between providers and industry jobs leaving little option other than to pay a premium for the quality staff needed to deliver an apprenticeship.

6.20 Figure 6.2 shows the differences between modes of delivery between routes. Online livestreaming made up a higher proportion of teaching in Business and Administration, Digital, and Education; these routes might be expected to involve a greater use of computers and technology than other routes, therefore making online livestreaming a particularly appropriate mode of delivery. In the Business and Administration and Education and Childcare routes, this was accompanied by an above average proportion of face-to-face one-to-one delivery, which may reflect the additional time that several providers mentioned could be needed to support learners alongside online delivery, and the importance of maintaining face-to-face contact. The Agriculture, Environmental and Animal Care and Transport and Logistics routes also had high levels of one-to-one face-to-face training, likely related to the form of instruction most suited to operating machinery or vehicles.

Figure 6.2 Proportion of staff teaching time spent on each delivery mode by route



Data labels not shown for data points less than 3%

Base: all data points with hours entered for main delivery methods, excluding any data points with modelled teaching costs

Base sizes shown in brackets

Level

6.21 Eligible costs by level are shown in Table 6.3. The most interviews were achieved at Level 3 (77 data points) and the fewest interviews by level were achieved with Level 7 standards (four data points). It is worth keeping in mind that the higher levels were based on fewer data collection points when drawing conclusions by level.

6.22 Overall, Level 5 apprenticeship standards had the lowest total eligible mean monthly costs per learner (£237), while Level 4 had the highest costs with the mean monthly cost per learner calculated at £371. The lower costs at Level 5 could be attributed to a higher prevalence of Business and Administration data, which was identified as having lower costs than average.

Table 6.3 Total eligible training costs per learner (excluding EPA) by level

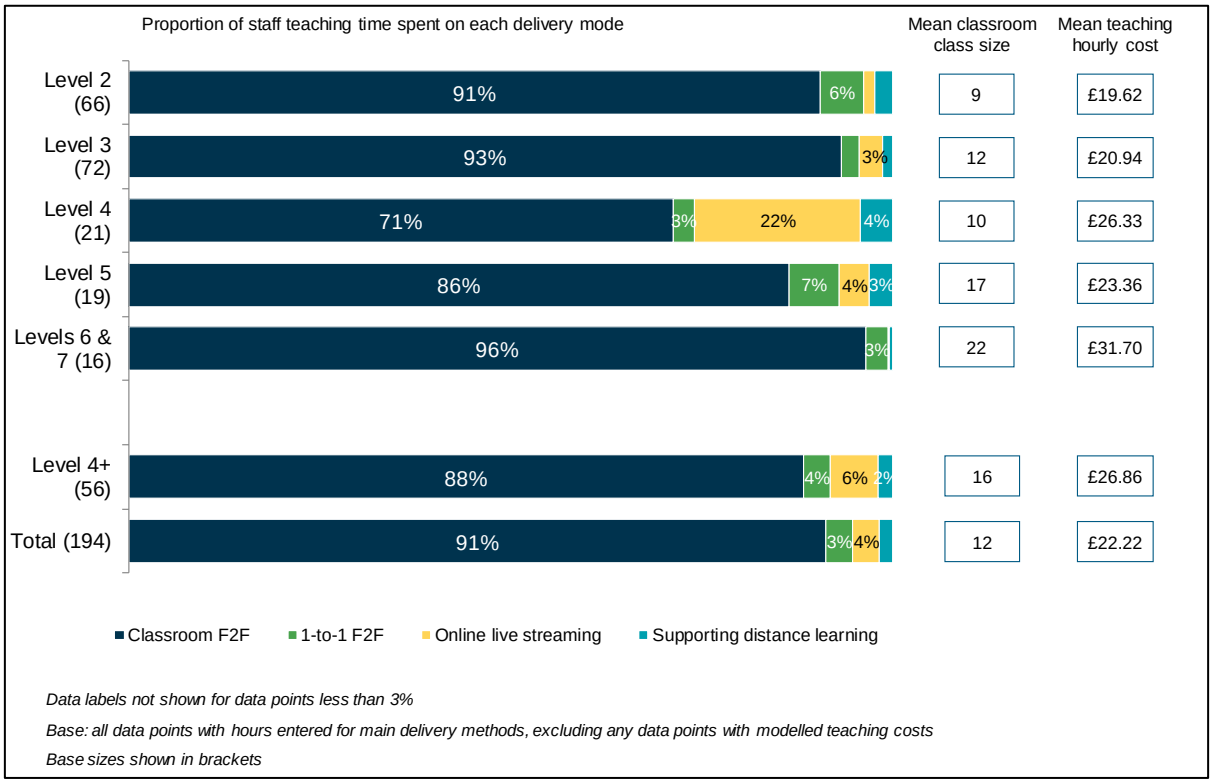
	Base	Monthly costs		Mean overall cost	Mean % of funding band
		Mean	Median		
Level 2	*68*	£274	£231	£5,371	87%
Level 3	*77*	£291	£246	£6,815	53%
Level 4	*21*	£371	£268	£7,735	57%
Level 5	*20*	£237	£236	£5,443	66%
Level 6	*14*	£312	£329	£17,466	65%
Level 7	*4*	£278	£206	£10,684	50%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

6.23 The mean monthly teaching costs across all data points was £162 per learner (38% of the mean funding band). There was less variation by level for monthly teaching costs than seen for total eligible costs, with a range of £98 between the highest and lowest monthly mean. Level 4 standards had the highest mean and median monthly teaching costs. However, Level 2 standards had the highest eligible teaching costs when considering these costs as a percentage of the funding band (52%).

6.24 Looking at the proportion of staff teaching time spent on each delivery mode by level there was no linear relationship (Figure 6.3). Standards at Level 2, 3, 6 and 7 all had over 90% of teaching time delivered face-to-face in the classroom. Level 4 again stands out, having the highest proportion of delivery via online streaming (22%) and the lowest proportion of classroom teaching (71%); the standards at this level also had a lower mean classroom size and higher average hourly teaching costs – which is likely to be driving the higher monthly teaching costs outlined above. Level 4 data points largely consisted of Digital; Sales, Marketing and Procurement; and Legal, Finance and Accounting apprenticeship routes, where there could be less need for face-to-face delivery at the training provider site. Level 6 and 7 had the highest mean hourly teaching cost (£31.70), however they also had the largest mean class sizes (22), suggesting some economies of scale at this level. Nearly all (99%) teaching for Levels 6 and 7 was conducted face-to-face, likely to be due to the type of teaching required for some apprenticeship routes. At this level, 11 of the 16 data points were for Construction and Engineering and Manufacturing apprenticeships.

Figure 6.3 Proportion of staff teaching time spent on each delivery mode by level



6.25 Eligible assessment costs also varied by level, though did not increase incrementally as the level of apprenticeship increased.

6.26 Overall administration costs did rise by level; Level 6 apprenticeships had the highest overall costs within the eligible administration category (£3,889), compared to £894 for Level 2. Level 7 was the exception with lower overall administration costs compared to Level 6 (£2,351), however, there were only four Level 7 data points, and these were all in the Legal, Finance and Accounting apprenticeship route. The differences in these overall figures seem to be largely driven by the longer mean duration of higher-level apprenticeships; when considering monthly costs per learner, the range between the highest and lowest figure was just £26, suggesting that level itself did not impact on the cost.

6.27 Monthly eligible consumables costs generally made up a relatively small proportion of delivery costs and showed very little variation by level.

6.28 Similarly, hourly training costs per learner were relatively consistent across levels. Qualitatively it was mentioned that Level 4 and above incurred higher staff costs, particularly in specialist subjects, adding to competition for skilled staff. It was also observed by one provider that among Level 4 standards and above, higher staff costs were driven by the fact that tutors in HEI settings had higher salaries than tutors in FE:

"Particularly with the higher-level apprenticeships from Level 4 upwards… The fees that Tutors will command in a university setting are much higher than in a FE College."

FE College

Funding band

6.29 As shown in Table 6.4, funding bands for the 54 apprenticeship standards covered by the research ranged from £3,000 to £27,000.

6.30 When comparing total eligible costs to the funding band, as might be expected, there was a clear trend of total eligible costs increasing as the funding band increased. Among standards with a funding band of £3,000, the mean eligible cost was £3,538, equating to 118% of the funding band. (It is worth noting some high costs within this funding band; one data point in Transport and Logistics reported administration costs of £2,539 per learner, driven by high hours spent on administration related to training and assessment, and three had costs of over £3,000 per learner for teaching alone (one Care Services and two Transport and Logistics data points)). For the highest funding band of £27,000, the mean eligible cost was £13,880, which equated to a much lower proportion of the funding band at 51%, there were a handful of providers with particularly low costs in this funding band reducing the mean eligible cost.

6.31 When looking at *monthly* eligible costs, there was however no clear pattern by funding band. The lowest mean monthly per learner costs were among standards with a funding band of £3,500 (£202 per month), while the highest costs (£423) were among standards receiving £17,000, although this finding should be treated with caution as this funding band contains only four data points. This indicates that the correlation between higher mean total costs against higher funding bands was likely to be driven by factors such as duration rather than the funding band per se.

Table 6.4 Total eligible training costs per learner (excluding EPA) by funding band

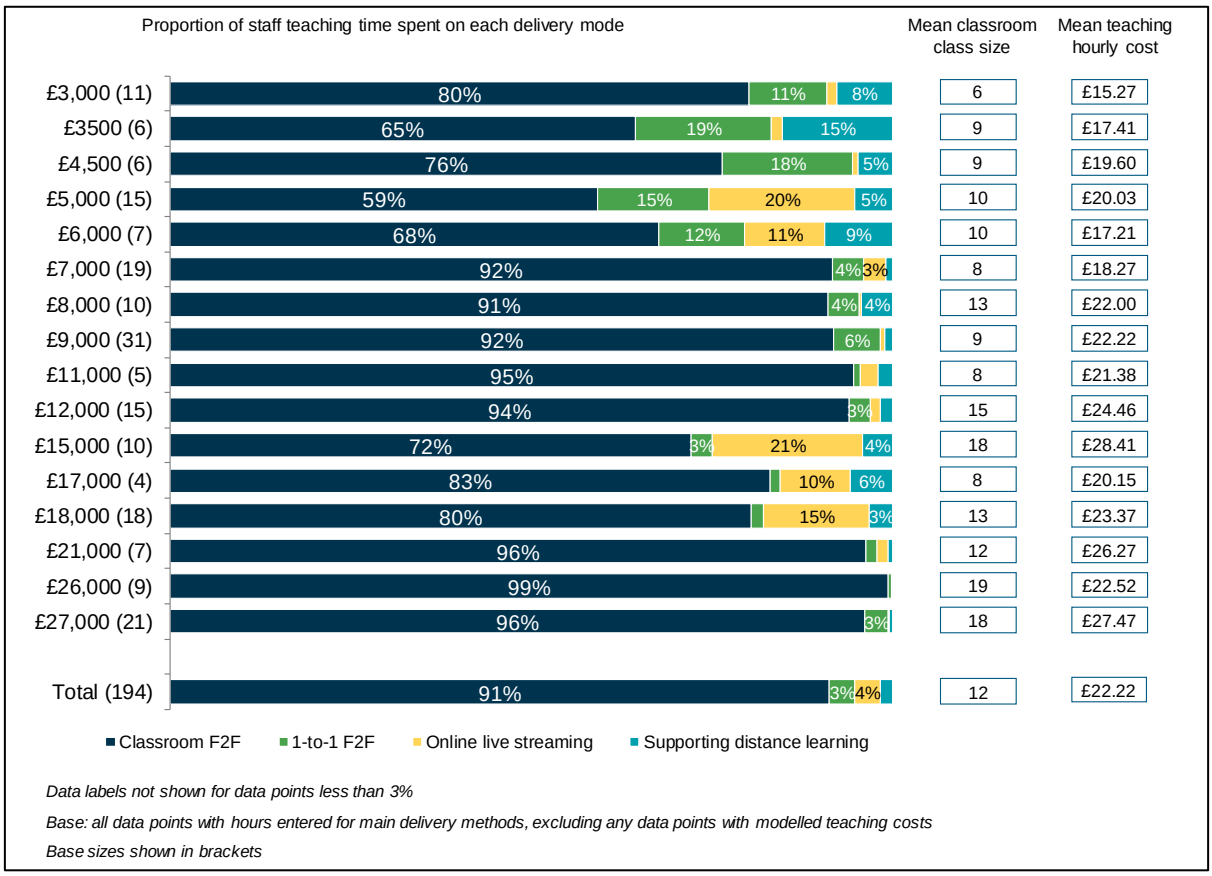
	Base	Monthly eligible costs		Mean overall eligible cost	Mean eligible cost as a % of funding band
		Mean	Median		
£3,000	*12*	£242	£231	£3,538	118%
£3,500	*6*	£202	£198	£2,877	82%
£4,500	*6*	£225	£254	£3,399	76%
£5,000	*19*	£253	£224	£4,398	88%
£6,000	*8*	£231	£245	£5,013	84%
£7,000	*19*	£257	£212	£5,343	76%
£8,000	*10*	£276	£217	£4,649	58%
£9,000	*32*	£300	£253	£6,216	69%
£11,000	*5*	£371	£253	£5,002	45%
£12,000	*15*	£368	£295	£8,051	67%
£15,000	*10*	£372	£301	£7,543	50%
£17,000	*4*	£423	£455	£9,291	55%
£18,000	*18*	£269	£195	£8,256	46%
£21,000	*8*	£288	£252	£9,086	43%
£26,000	*9*	£278	£310	£10,998	42%
£27,000	*23*	£317	£289	£13,880	51%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

6.32 As is the case with total eligible costs, total eligible teaching costs increased in line with higher funding bands. The lowest funding band of £3,000 had a mean teaching cost of £2,068 and the £27,000 funding band had a mean teaching cost of £6,922. For the £3,000 funding band, these teaching costs represent on average 69% of the funding band, compared to 26% within the £27,000 funding band.

6.33 In line with mean monthly total costs, there was no clear pattern in the mean monthly teaching costs by funding band, which range from £111 per learner for standards in the £3,500 funding band (six data points), to £281 for standards in the £17,000 funding band (four data points).

Figure 6.4 Proportion of staff teaching time spent on each delivery mode by funding band



Data labels not shown for data points less than 3%

Base: all data points with hours entered for main delivery methods, excluding any data points with modelled teaching costs

Base sizes shown in brackets

6.34 As shown in Figure 6.4, mean hourly teaching costs tended to be higher for standards in higher funding bands, and the proportion of teaching time delivered face-to-face in the classroom was highest for the funding bands at £21,000 or higher (over 95%).

6.35 However, staff teaching costs *per learner* tended to be higher in the lower funding bands (the £6,000 funding band had the highest mean hourly teaching cost of £8.48), compared to higher funding bands (the £26,000 funding band had a mean hourly teaching cost per learner of £2.19, based on seven data points). As the delivery among the higher funding bands involved greater proportions of classroom teaching and higher than average class sizes than the lower funding bands, their staff costs were divided across more learners, resulting in the lower hourly cost on a *per learner basis.*

6.36 Assessment costs (on-programme assessment, mandatory qualifications and university qualification fees, but excluding the price of EPA) made up a smaller proportion of total eligible costs than teaching costs (ranging from 6% to 23% by funding band). Again, there was no clear correlation between funding band and monthly assessment costs. The lowest mean monthly cost was for the £8,000 funding band (£31 per learner) and the highest monthly cost was £108 (for the £11,000 funding band, based on five data points).

6.37 Although there was not an exact linear correlation, total eligible administration costs generally increased the higher the funding bands, both for the mean and median monthly cost and also for the mean overall cost. The monthly mean was highest for the £15,000 funding band (£77) and lowest for the £4,500 funding band (£19, based on six data points).

7 Training provider costs: impact of apprenticeship elements

Introduction

7.1 In this section, we examine the impact of different elements of each apprenticeship standard on the overall cost of delivery, this includes the delivery methods used (such as classroom training versus one-to-one delivery), the inclusion of mandatory qualifications and the methods of assessment used (such as face-to-face versus online). Some elements that are ineligible for government funding were also investigated in terms of their impact, including the provision of additional training requested by employers, and licences to practice.

7.2 As shown in the regression model presented in chapter five, the higher the proportion of teaching time spent supporting self-directed learning compared to other modes of delivery, the lower the overall cost of delivering the standard. However, as the total number of hours spent supporting self-directed learning increased so too did the cost. Analysis later in this chapter highlights that the staff cost of supporting self-directed learning per hour made it one of the most expensive forms of delivery.

7.3 A similar relationship can be seen for classroom teaching as for self-directed learning. The higher the proportion of classroom teaching within a programme the lower the cost, however, as the number of hours of classroom teaching rose so too did the overall cost of delivery. The analysis discussed in this chapter shows that classroom teaching comprises a larger proportion of training and overall costs than other delivery methods in absolute terms but was the least expensive when considered as a cost per hour per learner.

7.4 The total number of one-to-one hours was also correlated with higher costs; as shown in the regression analysis, as the total number of one-to-one hours increased on a programme so too did the cost. Although apprentices received relatively few hours of one-to-one training, it was substantially more expensive per hour than classroom teaching as the staff cost was not divided across a number of learners as with group delivery.

7.5 Where training providers delivered additional training beyond the minimum requirements for the standard, although this extra training is not itself eligible for government funding, there appears to be a knock-on effect on the delivery of eligible elements of training within this group, with these providers experiencing slightly higher average teaching, assessment and administration costs compared with the average among cases where no additional training was delivered.

7.6 Though this was not flagged as a key cost driver in the regression model, where a mandatory qualification was included the average overall eligible cost was higher, driven by higher monthly costs in teaching and assessment. However, the correlation between the inclusion of licenses to practice (fees for which are not eligible for government funding) and costs was less clear; average teaching and assessment costs were lower when licenses were included than among the cases without, while the average monthly administration cost was slightly higher when licenses to practice were included.

Delivery methods

7.7 Within the 204 data points, the vast majority used face-to-face delivery either on a one-to-one basis (93%) or via classroom delivery to a group (91%). More than three-quarters (78%) required staff time to support apprentices in self-directed or distance learning, while over a quarter (28%) involved live online streaming.

7.8 Two-fifths (41%) of data points included the delivery of additional training requested by the employer, on top of the minimum training required for the standard.

7.9 Fewer than five data points used a single delivery method – either classroom delivery only, or one-to-one only. Nobody delivered training solely through live online streaming or distance learning. Among those using two or more delivery methods, one of those methods was always classroom or one-to-one training (only 17 of the 200 data points using two or more delivery methods did not use classroom training, and they all used one-to-one training in combination with live online streaming and/or distance learning).

7.10 There appears to be a clear correlation between the number of teaching delivery methods used and monthly costs. As shown in Table 7.1, total eligible monthly costs per learner increased with the number of delivery methods used, with this most marked for teaching elements. A possible explanation for this, as reported during the qualitative interviews, is that each delivery method had additional 'fixed' costs which increased costs per learner. For example, online delivery required the cost of licenses, while face-to-face delivery often incurred travel costs. It is also possible that other factors interlink with the number of delivery methods to produce this correlation. For example, providers with national coverage had the highest monthly teaching cost compared to other regions, and almost all of them used three or four delivery methods.[32]

Table 7.1: Total eligible training costs per learner (excluding EPA), by number of teaching delivery methods used

		Monthly eligible costs				Mean overall eligible cost	Mean % of funding band[33]
	Base	Teaching	Assess-ment	Admin-istration	Total		
One delivery method	*4*	£74	£20	£47	£160	£5,097	33%
Two delivery methods	*53*	£139	£41	£51	£251	£7,993	58%
Three delivery methods	*106*	£159	£56	£50	£289	£6,483	70%
Four delivery methods	*41*	£208	£60	£74	£355	£7,740	73%
Overall	***204***	**£162**	**£52**	**£57**	**£290**	**£7,101**	**67%**

Base: all data points collected

7.11 Table 7.2 shows the monthly cost of each element as a percentage of total monthly training cost, and of total overall cost. It shows that where providers use classroom teaching this

[32] The impact of provider characteristics such as region are discussed in full detail in chapter eight.
[33] This column shows the average (mean) percentage that the teaching costs in that row represent of the funding band for each data point. These percentages are indicative of how each average cost relates to the funding band levels of data points within that group.

delivery method comprises a larger proportion of monthly training costs (41%) and overall costs (22%) than other delivery methods.

Table 7.2 Average monthly delivery costs per learner across different teaching delivery methods

	Base	Mean monthly cost (for teaching element)	% of total monthly teaching cost	% of monthly total cost
Classroom training	*175*	£59	41%	22%
One-to-one training	*174*	£35	23%	13%
Live online streaming	*43*	£24	11%	6%
Supporting self-directed or distance learning	*131*	£25	14%	8%

Base: all data points collected with a cost for each element

7.12 Table 7.3 shows the average monthly staff delivery hours spent on each delivery type per learner. This indicates that apprentices received substantially more classroom training hours than any other type, with an average of 42 hours per month. This was 86% of the total teaching hours for those receiving this type of training, explaining why this type of training had the highest mean total monthly cost. An average of under two hours per month per learner were spent on one-to-one training and supporting self-directed or distance learning (among those receiving each type of training). Despite this, one-to-one face-to-face training had a relatively high mean total monthly cost (£35 per recipient), demonstrating the expensive nature of this training.

Table 7.3: Average monthly delivery hours per learner across different delivery methods

	Base	Mean monthly cost per learner	Mean monthly hours per learner	% of total monthly training hours among those delivering each type of training*
Classroom training	*175*	£59	42	86%
One-to-one training	*174*	£35	1.8	12%
Live online streaming	*43*	£24	9.7	28%
Supporting self-directed or distance learning	*131*	£25	1.3	8%

** Training providers also spent time delivering other eligible training, mentoring apprentices and supporting them in preparation for EPA, EPA re-takes and re-takes of mandatory qualifications, but the majority of training is covered by the categories listed in this table*

7.13 A few training providers mentioned that costs for face-to-face classroom or workshop delivery increased where multiple members of staff were required to be present at one time. An Employer Provider stated that their programme manager and tutors were often in the same place at the same time, and an ITP explained that due to the number of students they had in their workshop, regulations mean they need at least two instructors, and sometimes three, in the room at one time. This meant that the mean number of classroom training hours delivered

by staff per learner, as shown in Table 7.3, exceeded the number of hours of classroom training actually received by each apprentice.

7.14 Table 7.4 shows the mean and median cost per apprentice per hour for each type of training. This shows that, on average, the staff costs per learner associated with delivering one-to-one training were highest, closely followed by the cost of supporting self-directed or distance learning, which was also usually delivered on a one-to-one basis. Because these were delivered on a one-to-one basis rather than being split across a class, the staff cost per hour was equal to the staff cost per learner per hour. This explains why one-to-one training incurs the second highest total monthly cost, despite only involving an average of 1.8 hours of teaching time per learner.

7.15 Staff costs per apprentice per hour were much lower for classroom training and live online streaming, as these were usually delivered to a group, hence the hourly cost of the staff member was spread across multiple learners.

Table 7.4 Eligible teaching costs per learner per hour

	Base	Mean	Median
Classroom training	*175*	£2.46	£1.90
One-to-one training	*174*	£21.36	£19.74
Live online streaming	*186*	£3.50	£2.22
Supporting self-directed or distance learning	*131*	£21.27	£19.26

Base: all data points collected with a cost for each element

7.16 In the qualitative discussions, most training providers pointed to classroom training as their biggest cost, although they also often emphasised that in many cases it was essential from a quality perspective:

"Face-to-face obviously increases cost but I also think it has a significant impact on progress and apprentices' motivation… that impact is a positive one and it means that problems can be identified earlier... there is a huge value to it but there is also a huge cost."

FE College

7.17 The costs for classroom training covered both the cost of employing teaching staff, and the costs related to the classroom or workshop space itself:

"[Classroom delivery] is quite a heavy influence [on costs] because we have our building and whatever, but you have to have the classroom space, lighting, heating, cooling and having a tutor there…"

Independent Training Provider

7.18 An HEI explained that delivery method was one of the biggest impacts on cost. From their perspective face-to-face classroom delivery on site at the university was more economically viable, whereas sending relatively specialised academics long distances to deliver training face-to-face in the workplace increased their costs; however, for the Engineering-related standards they offered, they stated there was almost no other way of meeting the

requirements of the apprenticeship standard aside from one-to-one coaching and observation while the apprentices were working.

7.19 There were differences between training providers over the extent to which live online streaming could deliver cost savings. Some were confident that it could bring about savings, particularly in cases where it could replace tutors making face-to-face visits to the workplace, thereby saving travel and possible accommodation costs. However, these training providers all agreed that online delivery could not replace face-to-face delivery entirely, both in cases where practical training was required (such as for trades, for example mechanics), and as it could be hard to ensure quality with an online-only method:

"We could potentially save costs without face-to-face visits, [but] we tested this in one region and saw a lack of progression."

Independent Training Provider

7.20 However, some training providers felt that online training did not bring any cost reduction, or only a minimal reduction, when compared to face-to-face delivery. Reasons for this included the fact that some face-to-face visits would still be necessary, that staff would need to spend more time checking in with learners and employers to ensure adequate progress was being made, the time needed to ensure the online element was running correctly, and the cost of the equipment needed to deliver the online elements offset any savings in staff time:

"Where we introduce online delivery, we like to make sure that it is a good quality online delivery programme, and generally to do that you have to buy it in, the cost of that is usually similar to the costs of you teaching face-to-face."

FE College

7.21 Overall, while many providers identified the delivery method as a driver of cost, when asked about how their costs might change in the future, few mentioned any potential changes to delivery methods, aside from a small number who were considering reducing face-to-face teaching in favour of supporting more self-directed or distance learning. Training providers often mentioned particular circumstances constraining their delivery method options, such as learners being geographically spread out, or spread across multiple employers, precluding classroom delivery, or requirements of the standard, such as operating specialist equipment or vehicles which necessitated a face-to-face one-to-one delivery method.

Methods of assessment excluding EPA

On-programme assessment

7.22 Apprentices undertake ongoing assessment throughout their apprenticeship, in order to monitor their progress. These on-programme assessments take various forms, and can take place face-to-face, over the telephone or online, and could include activities such as progress reviews and portfolio development.

7.23 On average, face-to-face on-programme assessment made up over two-thirds (70%) of the total monthly assessment cost among training providers using that method, with a mean monthly cost of £36 per learner. On-programme assessment conducted online had the next highest mean monthly cost, at £24 per learner, but this was used in only a minority of cases

(14%). On-programme assessment by telephone, used in 30% of cases, had the lowest monthly cost of £11 per learner, comprising an average of 22% of total assessment costs among those using this method of on-programme assessment.

Table 7.5 On-programme assessment cost per learner by method, and as a proportion of overall assessment and total costs

	Base	Mean monthly cost per learner	% of total monthly assessment cost among those using each method	% of monthly total cost	Mean monthly hours per learner	Hourly cost of conducting each method
On-programme assessment – face-to-face	*179*	£36	70%	12%	2.07	£19.90
On-programme assessment - telephone	*61*	£11	22%	3.7%	0.62	£18.31
On-programme assessment - online	*27*	£24	32%	6.4%	1.19	£19.50

Base: all data points collected with a cost for each element. Data points with modelled assessment costs excluded.

7.24 While face-to-face on-programme assessment made up the largest proportion of assessment costs, this reflects a greater number of hours spent on face-to-face assessment: the mean hourly cost of conducting face-to-face assessment (£19.90) was only marginally higher than the mean hourly costs for conducting telephone (£18.31) or online (£19.50) assessment.

7.25 Training providers mentioned that on-programme assessment costs had a significant impact when the assessment needed to be conducted face-to-face; for example, an FE College delivering a Hair and Beauty standard mentioned the considerable impact of assessments, due to a large number of face-to-face observations.

7.26 An ITP mentioned that they would turn away potential learners if they were based too far away, as it would be too difficult to conduct face-to-face assessments; their assessors were assigned to local patches, and the training provider cited this as the costliest element of delivery. However, they were looking at moving more reviews online as a follow up to an initial face-to-face assessment.

7.27 One training provider also mentioned that changes made by their awarding body had increased their costs considerably, including requiring them to recruit and hire new staff:

"[The changes] created a much more demanding assessment process. We've had to increase the number of visits, and therefore increase the number of assessors in the team, which means the number of assessment days per apprentice has gone up. Each individual needs to be assessed separately, I get it, but that change has had an impact."

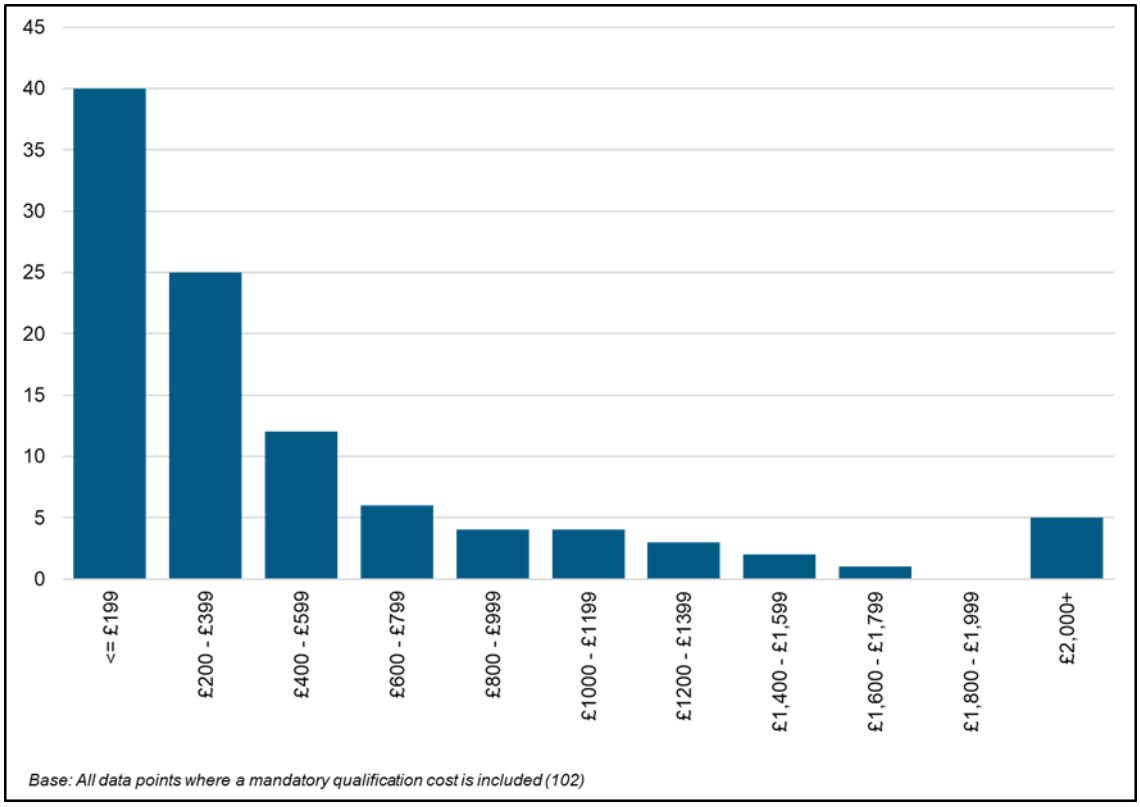
Independent Training Provider

Mandatory Qualifications

7.28 Just over half (55%) of data points collected included a mandatory qualification as part of the standard. Where mandatory qualifications were included, the mean cost, including registration, examination and certification, was £496 per apprentice, and the median cost was £278 per apprentice.

7.29 As shown in Figure 7.1, the majority of fees for mandatory qualifications were less than £400 per learner. Only five data points had costs above £2,000, four of which were under £2,500. Three of these five were Construction standards with the highest funding band of £27,000.

Figure 7.1 Mandatory qualification fees - banded



7.30 Table 7.6 shows the difference in overall average costs between cases where a mandatory qualification was included, and those without. Where a mandatory qualification was included, the average overall eligible monthly cost per apprentice was slightly higher (£166 vs. £157), driven by higher monthly costs in teaching and assessment; average monthly administration costs were in line between the two groups. Those including a mandatory qualification had a higher mean employment cost for training staff of £25.16 compared to £21.64 for those who did not.

Table 7.6: Average training delivery costs per learner (excluding EPA) split by inclusion of mandatory qualification

	Base	Monthly costs				Mean overall eligible cost	Mean % of funding band
		Teaching	Assessment	Administration	Total eligible cost		
Includes mandatory qualification	*113*	£166	£67	£59	£308	£7,896	67%
Does not include mandatory qualifications	*91*	£157	£34	£54	£267	£6,114	67%
Overall	***204***	**£162**	**£52**	**£57**	**£290**	**£7,101**	**67%**

Base: all data points collected

7.31 Some training providers mentioned that the inclusion of mandatory qualifications in standards they deliver could have an impact on costs. This could be due to a larger amount of content required, or content that was more intensive or higher level, which would require more teaching time and supporting of apprentices, which adds to costs. One ITP discussed the large impact that the mandatory qualification within a childcare standard had on their delivery:

"There is a lot you need to teach within [the mandatory qualification]… it is quite a big meaty qualification and the employers have high expectation of the learners in terms of knowledge of child development in quite some depth… it is a big credit qualification in there and the awarding bodies expect an observation for each unit of that."

Independent Training Provider

7.32 Another provider discussed the impact of the mandatory qualification requirements on assessment hours:

"With [this standard] you have a mandatory qualification and it is pure one to one assessment and observation… 30-40 assessments through the apprenticeship for the [qualification] let alone mock EPAs"

FE College

7.33 While several training providers felt that the inclusion of mandatory qualifications had an impact on overall costs, some did emphasise that they felt qualifications add value: one ITP said they had a vision of including a qualification in every standard (whether or not it was mandatory) even though this increased costs, and another said that a standard with a mandatory qualification constitutes 'high quality', and made the apprenticeship an easier sell to employers. Conversely, one ITP felt that mandatory qualifications had taken away from the flexibility of their delivery.

Additional training requested by employers

7.34 Two-fifths (41%) of data points collected included additional training requested by the employer. This could be training beyond the minimum requirements for the standard or be entirely unrelated to standard requirements. By training provider type, Employer Providers and ITPs were more likely to include additional training (53% and 52% respectively), compared with 30% of cases offered by FE Colleges, and 17% of cases offered by HEIs.

7.35 Overall, there was some disparity in whether training providers charged employers for these additional requirements; while some would negotiate the cost of the extra training with the employer, in other cases it would be offered at no extra cost to the employer and seen as added value.

7.36 Where training providers delivered additional training beyond the minimum requirements for the standard, although this extra training was not itself eligible for government funding, there appears to be a correlation between delivering additional training and training providers experiencing slightly higher average eligible teaching, assessment and administration costs compared with the average among cases where no additional training was delivered, as shown in Table 7.7.

Table 7.7 Average eligible training costs per learner (excluding EPA), by inclusion or of additional training

		Monthly costs					
	Base	Teaching	On-programme assessment	Adminis-tration	Total eligible cost	Mean total cost	Mean % of funding band
Additional training included	*85*	£176	£56	£59	£307	£7,131	70%
Additional training not included	*105*	£156	£48	£53	£281	£6,998	64%
Overall	***204***	**£162**	**£52**	**£57**	**£290**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

7.37 These higher costs for eligible teaching and assessment in cases where additional training was provided were driven by spending a mean 67 hours per month on eligible teaching, compared with a mean 38 hours per month among cases where additional training was not provided (the hours spent delivering the additional training itself were collected separately).

7.38 The staff costs incurred for delivering this additional training averaged at £11.80 per month per learner, with additional classroom and one-to-one training costing an average of £5.48 and £6.26 per learner per month and additional training delivered through online livestreaming costing an average of £1.26 per month per learner. The cost of this staff time was reflected in a higher average total ineligible cost among the cases where additional training was included.

7.39 Training providers who charged employers for additional training generally said that this would be negotiated with the employer and agreed at the outset on a case by case basis. In some cases, training providers mentioned having specific additional modules or elements that employers could choose from, including more generic subjects such as health and safety or

business letter writing; one ITP mentioned running a series of workshops that employers could choose from, charged on a per learner per day rate.

7.40 Some training providers stated that the decision of whether to charge an employer for additional training could be quite ad-hoc and depend on other circumstances: one ITP explained that if an employer had a large number of apprentices the costs of additional training could often be offset, but if extra professionals or trainers were required then this additional cost would be agreed with the employer.

7.41 An FE College mentioned that when additional training was agreed at the sign-up stage, they would negotiate with the employer as to whether an additional charge would be needed; if the additional training would only require "an additional couple of hours" then this could be offered for free as a 'value added' element, whereas if an external trainer was required then an additional fee would be charged.

7.42 Another ITP said they often did additional training for employers covering areas not directly related to the standard, and often did not charge, particularly where they could in-fill apprentices into courses that would be running anyway; this allowed them to offer this additional training as a bonus for employers.

7.43 One FE College since they started offering the standard, they had spent around two additional working days per month preparing learning materials to cover employer requests, which they had not charged employers for, though they may begin charging in the future depending on the volume of demand. So far, the extra learning had been delivered within the existing timeframe for delivery, and covers areas that, although not required for the standard, apprentices needed to know from a context perspective.

7.44 Some of the training providers that had not charged for additional training considered this to be 'added value' and something that helps them to stay competitive in the market; generally, additional training was on a fairly small scale, such as an extra workshop.

Licences to practice

7.45 A fifth (19%) of data points collected included a mandatory licence to practice as part of the standard. Within this group, the mean cost of the licence to practice was £293 per learner, and the median cost was £112 per learner.[34]

7.46 Although registration, examination and certification costs for licenses to practice are not included in eligible costs, as the employer would be expected to fund them rather than the government, we explored the impact of their inclusion on eligible costs. Whilst they were not identified as a statistically significant driver in the regression analysis, Table 7.8 shows the difference in overall average costs between cases where a mandatory licence to practice was included, and where it was not. Among cases where a mandatory licence to practice was included, average teaching and assessment costs were lower than among the cases without, while the average monthly administration cost was slightly higher. This may partly be down to

[34] A small number of data points stated a mandatory license to practice was included as part of the standard but did not provide a cost. These were excluded from the cost calculations.

a higher proportion of those including a mandatory license to practice being based in the North of England (34% of these data points were in the North East, North West and Yorkshire and the Humber, compared to 19% of those which did not include a license to practice). In addition, a higher proportion of data points not including a mandatory license to practice were based in the South (London, the South East, South West and East of England) where costs were generally higher; 42% of data points with no mandatory license to practice were based in the South, compared to 21% of those that did include a mandatory licence to practice.

Table 7.8 Average training delivery costs (excluding EPA) split by inclusion of mandatory licence to practice

	Base	Monthly costs				Mean total cost	Mean % of funding band
		Teaching	Assess-ment	Admin-istration	Total eligible cost		
Includes mandatory license to practice	*38*	£139	£39	£65	£266	£7,703	58%
Does not include mandatory license to practice	*166*	£167	£55	£55	£295	£6,963	69%
Overall	***204***	**£162**	**£52**	**£57**	**£290**	**£7,101**	**67%**

Base: all data points collected

8 Training provider costs: impact of training provider characteristics on costs

Introduction

8.1 This chapter presents costs by the type of training provider, the locality and region where they delivered training, their size, and their staff costs (which are discussed throughout as they interlink with the other provider characteristics). The chapter considers the costs relating to these elements, all of which are presented with a standardised monthly cost to allow comparison.

8.2 The regression model presented earlier in the report considered the above categories and found that as the mean salary of training staff increased, overall costs also increased.

8.3 By provider type, FE Colleges and ITPs had significantly lower costs compared with Employer Providers, the reference category (while HEI costs were not significantly different to the Employer Provider costs).

8.4 Training providers delivering training in the North West were also found to have lower overall costs, while the model examining monthly costs found that rural based provision was associated with higher costs, significant at the 90% level.

8.5 Although provider size was not found to have a significant impact on costs in the regression model, analysis shows a clear difference in costs between training providers with over 5,000 learners, and those with fewer than 5,000 learners, with those in the largest category having a lower mean monthly cost; this was likely to be due to economies of scale, though was also linked to the different provider profiles within each group, with most Employer Providers and ITPs falling into the sub-5,000 learner group, and most HEIs falling into the group with 5,000 learners or more.

Type of training provider characteristics

8.6 At the beginning of the survey, training providers were asked whether they were an Employer Provider, Further Education (FE) College, Higher Education Institution (HEI) or Independent Training Provider (ITP). For three data points, training providers indicated they did not fit into the above categories; due to the low base size they have not been included.[35]

8.7 HEIs had the highest mean eligible cost at £13,665, however this reflects the nature of the apprenticeships they offered, all of which were at Levels 5 or 6 and had a higher funding band on average (£22,750, compared with £11,745 across all other provider types). All standards provided by HEIs lasted at least two years, with a mean duration of 44 months, compared to the next highest of 29 months at FE Colleges.

8.8 Using the more comparable monthly eligible cost per apprentice, the highest average was reported by Employer Providers at £405 per month, followed by HEIs at £301. The lowest average was that of FE Colleges at £258.

[35] One of these stated they were a Local Authority; the other two data points were from a provider who stated they operated both as an ITP and state secondary school.

Table 8.1: Total eligible training costs per learner (excluding EPA) by provider type

	Base	Monthly costs		Mean overall cost	Mean % of funding band[36]
		Mean	Median		
Employer Provider	*15*	£405	£334	£8,276	114%
FE College	*70*	£258	£221	£7,403	60%
HEI	*12*	£301	£335	£13,665	58%
ITP	*104*	£300	£253	£6,137	67%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

8.9 The high average for Employer Providers was partly driven by an outlier, delivering a less common standard for which fewer than five data points could be collected, and which involves a substantial number of practical workshops involving specialist equipment. Excluding this outlier, Employer Providers still have the highest mean (at £360). Excluding this outlier would also result in a mean percentage of the funding band of 107%, showing that on average costs for Employer Providers were exceeding the maximum amount of government funding available for the standard.[37]

8.10 A high proportion of Level 2 standards within the Employer Provider group could be a partial cause of this; nearly half (47%) of cases offered by participating Employer Providers were at Level 2, compared with around a third of cases among participating FE Colleges (36%) and ITPs (34%).[38] As seen earlier in this report (see chapter six), total eligible costs for Level 2 standards tended to be equivalent to a higher proportion of the funding band on average than other levels. Linked with this, Employer Providers had the lowest mean funding band of all provider types (£8,100, compared with £12,733 across all other types). This means that even relatively small increases in costs could result in the total cost exceeding the funding band. However, excluding all Level 2 cases results in a mean percentage of the funding band of 113% among Employer Providers, suggesting other factors are also at play.

8.11 As a further explanation, it is also possible that systematic differences in how Employer Providers operate could account for them recording higher costs on average, and calculated costs above the funding band. While the other provider types operate primarily as training providers, and need to achieve certain margins in their delivery in order to remain operational, this was not necessarily the case for Employer Providers, where the training arm was part of a larger business; therefore, they may not have the same need to keep costs down, particularly

[36] This column shows the average (mean) percentage that the teaching costs in that row represent of the funding band for each data point. These percentages are indicative of how each average cost relates to the funding band levels of data points within that group.
[37] Note that these costs were derived from the number of staff hours and other costs reported by each training provider, and do not represent the actual costs that training providers would claim as eligible costs; only costs up to the funding band maximum could be claimed as eligible.
[38] Note that this proportion is not representative of the wider Employer Provider market; in the original sample file, only 24% of cases offered by Employer Providers were at Level 2, compared with 39% among FE Colleges and 32% among ITPs.

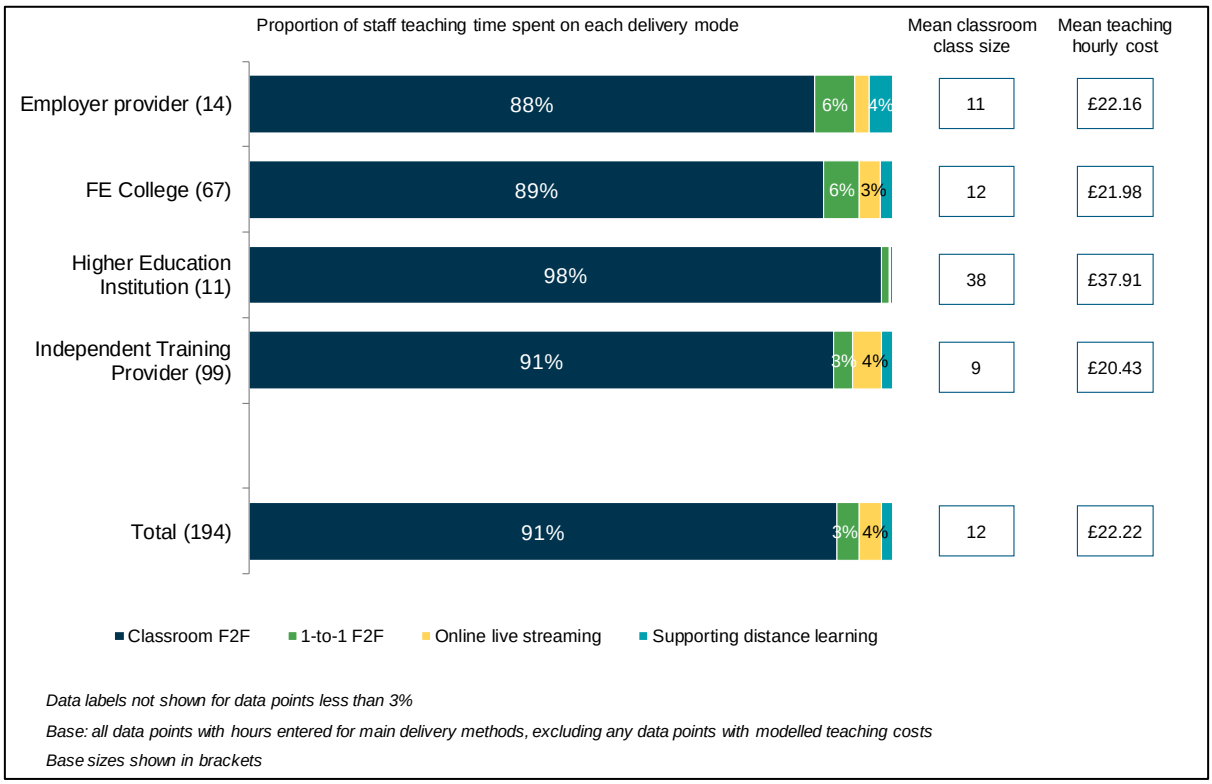
as they benefit in other ways due to training their own apprentices, who should also be productive members of the workforce.

8.12 HEIs had the highest total teaching cost average of £6,013, but when this is analysed on a per month basis, they actually had the lowest total teaching cost at £136 per apprentice per month, showing the high overall cost was driven by the above average duration of HEI-led apprenticeships. This longer average duration was due to the fact that the HEI group exclusively offered standards at Level 5 and above, within complex subject areas such as Engineering and Manufacturing and Health and Science. As mentioned previously, longer durations may well be linked with lower monthly costs due to the different nature of the delivery and related occupations.

8.13 The mean HEI teaching cost was also equivalent to just 25% of the funding band on average, compared with 34% among FE Colleges, 39% among ITPs, and 63% among Employer Providers, who had the highest average monthly per learner teaching cost at £227. Excluding the outlier mentioned previously, this group still had the highest mean teaching cost at £190 per month, equivalent to 56% of the funding band average. HEIs' teaching costs also made up a lower proportion of their total costs excluding EPA (43%, compared with 56% across other provider types), despite the fact that HEI staff spent almost twice as many hours delivering teaching per month as staff at other types of provider (83 hours vs. 49 hours). The low cost for teaching was achieved through greater efficiencies in delivery, with the number of teaching hours balanced out by large class sizes and a high proportion of classroom delivery.

8.14 As shown in Figure 8.1, the vast majority of teaching at HEIs was done face-to-face in the classroom, with a much larger average class size than any other provider type. This means that although teaching salaries were highest at HEIs, and although staff teaching hours were high, this cost was spread across more apprentices, leading to lower costs per apprentice per month.

Figure 8.1: Proportion of staff teaching time spent on each delivery mode by provider type



8.15 This pattern for teaching costs was replicated for assessment costs, with HEIs reporting the highest overall cost but the lowest cost on a monthly basis; however, for administration HEIs had the highest average cost both for the full duration of the apprenticeship and on a monthly basis. Administration made up 35% of the total delivery cost on average among HEIs, compared with 18% across other provider types. This high cost was a result of higher salary levels within HEIs; although staff at HEIs spent less time on administration than staff at other providers (a mean 2.1 hours per learner per month, compared with a mean 3.4 hours per month within other provider types), the mean hourly employment cost for HEI staff carrying out administrative duties was £23.87, compared with a mean of £16.99 across all other training provider types. This could also be a reflection of different administrative requirements across different standards; the Health and Science route, which covers more than half of the HEI data points in this research, also had above average administration costs, equivalent to 29% of total costs on average. Where the two groups overlap, administration costs were particularly high, making up an average 46% of total costs; although caution should be taken due to the low base size, of the seven data points covering the Health and Science route and HEI provider type, five cases had administration costs equivalent to more than 45% of their total cost.

8.16 FE Colleges had somewhat lower administration costs than other provider types. This was likely due to established administration infrastructure and resource covering numerous different qualification types and apprenticeships leading to economies of scale. On average FE Colleges had 1,035 apprentices, the highest of all provider types, and offered the most standards, with 94% offering 10 or more standards. Meanwhile administration costs for HEIs and Employer Providers were equivalent to 20% and 24% of the funding band respectively, compared with 9% among FE Colleges and 14% among ITPs, seemingly reflecting that apprenticeship delivery was not a core organisational function of HEIs and Employer Providers.

8.17 The outlier mentioned previously does have a notable effect on average consumables costs, resulting in a mean monthly cost for consumables of £31 for Employer Providers, the highest of any training provider type; excluding the outlier drops this to £21, compared with mean monthly costs of £26 among HEIs, £18 among FE Colleges, and £13 among ITPs.

Type of locality

8.18 At the beginning of the survey, training providers were asked about the typical locality where they delivered training, covering the whole of their provision. They could select any combination of rural, urban, semi-rural and suburban. For the purposes of analysis, training providers were broken down into those operating only in one locality type, those operating in all types of locality, and those who operate in mixed locality types.

8.19 Training providers offering provision only in rural areas had the highest average total eligible cost, at £8,461 and highest average monthly total eligible cost, at £345. Training providers delivering only in urban areas had the second highest overall eligible cost at £8,112, due in part to offering longer apprenticeships. The rural only and urban only groups each contain an outlier with particularly high monthly costs; removing these two records gives rural only delivery the second highest mean monthly cost at £310, and urban only delivery moves closer to the overall average, with a mean of £294.

Table 8.2 Total eligible training costs per learner (excluding EPA) by locality

	Base	Monthly costs		Mean overall cost	Mean % of funding band
		Mean	Median		
Rural only	*20*	£345	£279	£8,461	83%
Urban only	*81*	£304	£251	£8,112	65%
Semi-rural only	*28*	£222	£191	£5,979	52%
Suburban only	*20*	£205	£177	£5,471	54%
Mixed localities	*28*	£323	£254	£6,467	73%
All localities	*27*	£305	£268	£6,090	79%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

8.20 Teaching and assessment costs were highest in rural areas, with a mean monthly teaching cost of £208 (or £183 excluding the outlier), compared with £154 across all other localities, and a mean monthly assessment cost of £66 (or £59 excluding the outlier), compared with £51 across all other localities.

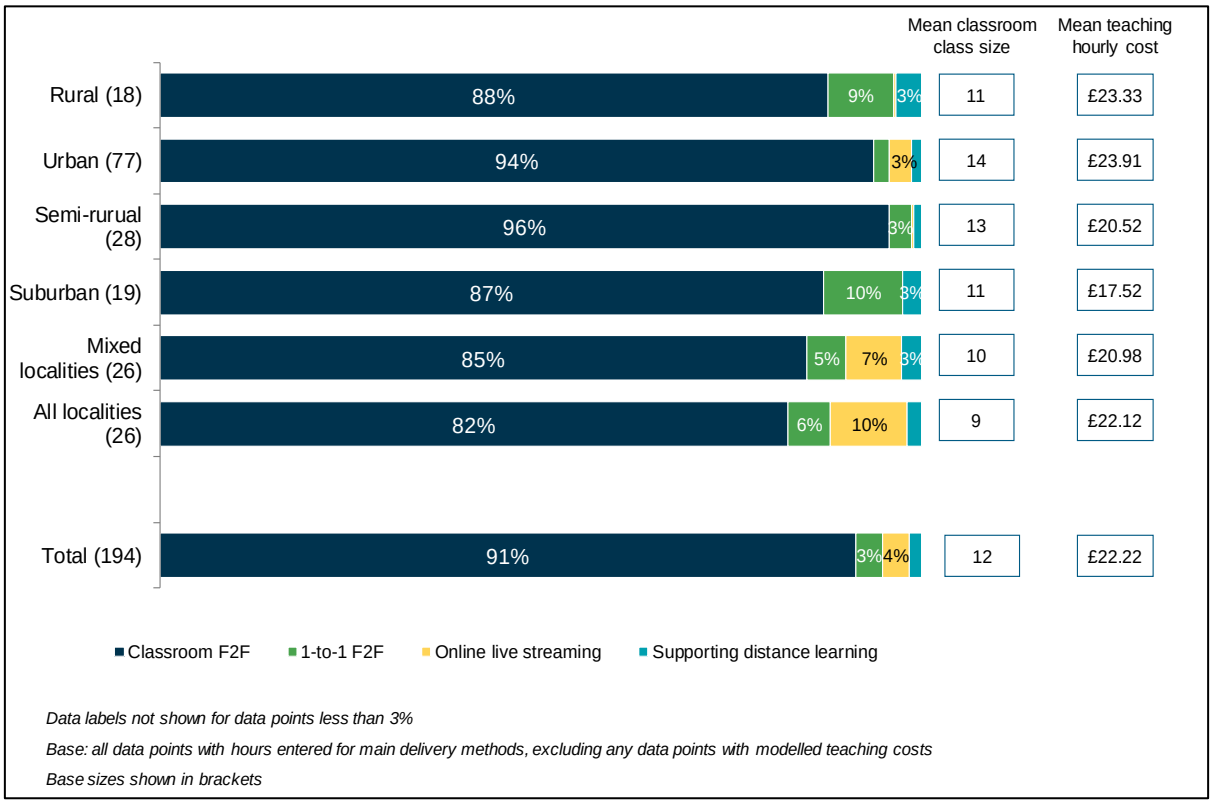
8.21 The majority of cases with rural-only delivery (95%) were FE Colleges, a group with lower costs than average overall, suggesting there was something about rural delivery in particular that tended to be more expensive.

8.22 Half of provision among those only operating in rural areas was in the Construction (30%) or Agriculture Environmental and Animal Care (20%) routes. However, as neither of these routes were associated with particularly high costs (see chapter six), this was unlikely to be driving

the higher costs found in rural-only provision. A higher proportion of provision among those operating in rural areas was at Level 2 than in other locality types (aside from those operating across all locality types), while a lower proportion was at Level 3; as these two Levels had mean monthly costs either below or in line with the overall average (at £274 and £291 respectively), again this indicates that high costs for rural provision were not being driven by the level of course being offered.

8.23 A contributing factor to higher teaching costs in rural areas was the higher than average proportion of time spent on face-to-face teaching on a one-to-one basis (9% vs. the 3% average), as shown in Figure 8.2. However, suburban areas had a similar proportion of one-to-one teaching, but do not report higher teaching costs; this was due to the fact that rural areas had higher average salaries, making the delivery more costly in comparison. Rural areas had the highest average hourly teaching staff cost, of £23.33, and the highest average hourly assessment staff cost, of £23.05.

Figure 8.2: Proportion of staff teaching time spent on each delivery method by locality



8.24 A number of training providers did discuss facing challenges due to being based in a rural area, particularly around transport and travelling further distances, both on the part of the apprentice and their staff, and the associated cost of this:

"We are very rural so it would be different [compared to] a city provider. Transport can be pretty sparse, so it tends to be our training assessors delivering in the workplace - but it's about fifty-fifty at the moment."

FE College

8.25 Some had taken measures to try and limit the impact of this, such as restricting which areas they delivered to, or changing staffing arrangements:

"We do have to set a radius from where our staff are based."

Independent Training Provider

"We've built up a freelance team of coaches, which is actually getting coaches in the areas that they're [apprentices] based."

Independent Training Provider

8.26 A couple of training providers mentioned making a loss on certain courses when delivering in rural areas.

8.27 Data points in mixed localities had the second highest total monthly cost at £323 per apprentice, driven by the highest monthly administration cost of £89, presumably due to increased administration needs of delivering across larger or more diverse areas, with those covering all localities having the next highest administration cost of £75. This was reflected in the mean number of hours spent on administration, with those in mixed localities spending four hours per month per learner, and those operating across localities spending three hours per month, compared with a mean of two hours across those operating exclusively in a rural, urban, semi-rural or suburban locality. Perhaps surprisingly, there was quite a difference between costs in urban and suburban areas. Urban areas had a high average monthly cost of £304 per learner (falling to £294 if the highest value is excluded), whereas suburban areas had the lowest at £205. Though this difference was observed to some extent in assessment and administration costs, the greatest difference was observed in teaching costs, which were £175 per month on average in urban areas (£168 excluding the outlier), and £101 in suburban areas. This was again as a result of staff salary costs, with the average hourly staff cost for teaching being £23.91 in urban areas, compared to £17.52 in suburban areas.

Region

8.28 Training providers were also asked to select the regions where their provision was delivered. For the purposes of analysis, training providers were broken down into those operating only in a single region, those operating in a mix of regions and those operating nationally (across all regions). To ensure robust base sizes, regions were grouped into North (covering the North East, North West, and Yorkshire and the Humber), Central (covering East Midlands, West Midlands, and East of England), South West, and London & the South East.

8.29 The highest average eligible costs per learner were reported by providers operating exclusively in the Central region, at £367 per month and £8,706 over the course of the apprenticeship. However, when taken as a percentage of the funding band, the Central region did not stand out as having particularly high cost levels; the total eligible cost for data points operating in the Central region only was equivalent to 69% of the funding band on average, in line with providers operating in a mix of regions but not nationally (69%) and in the North only (66%), and lower than those operating nationally (82%). The Central and North regions also each contain a case with a very high monthly cost; with these two outliers removed, the mean monthly cost for the Central region drops to £338, slightly lower than the mean monthly cost for national training providers, and to £250 for the North region.

Table 8.3: Total eligible training costs per learner (excluding EPA) by region

	Base	Monthly costs		Mean overall cost	Mean % of funding band
		Mean	Median		
North only	*44*	£267	£228	£7,742	66%
Central only	*24*	£367	£340	£8,706	69%
South West only	*25*	£234	£237	£5,925	51%
London & South East only	*20*	£247	£238	£7,518	53%
Mix of regions (but not all)	*56*	£281	£224	£6,549	69%
National	*35*	£343	£302	£6,678	82%
Summary: single region	*113*	£278	£244	£7,505	61%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

8.30 While costs for the North region as a whole were slightly above average, the regression analysis found that providers operating in the North West specifically had significantly lower costs. Although other specific regions had costs at or below the North West, they were not found to have a significant impact in the regression model, likely due to low base sizes, or due to the interaction between region and other factors meaning that the region could not be identified as impacting the cost.

8.31 To tell if some of the apparent regional cost differences emerging from the research truly reflect differences in delivery costs across different regions (rather than it reflecting differences in the regional profile of providers and standards covered in this research study), more research would be needed, particularly a) to assess how the profile of the apprenticeship standards delivered differs region by region, for example by duration, provider, level etc., and b) to compare costs of delivering like for like standards (i.e. of very similar duration and delivery method) across region.

8.32 Other than a small number of training providers noting costs being higher in London, training providers tended not to mention specific regions when taking geography into account, more the size and variety of the area they covered, which may explain the high costs for national providers in particular. This tended to be in relation to costs for staff travel to areas away from the training provider's main site, particularly tutors and assessors:

"With Civil Engineering we have quite a few a distance away… travel costs, we average out the costs… normally in a cohort we know the geographical location of the employers… we average that [cost] out."

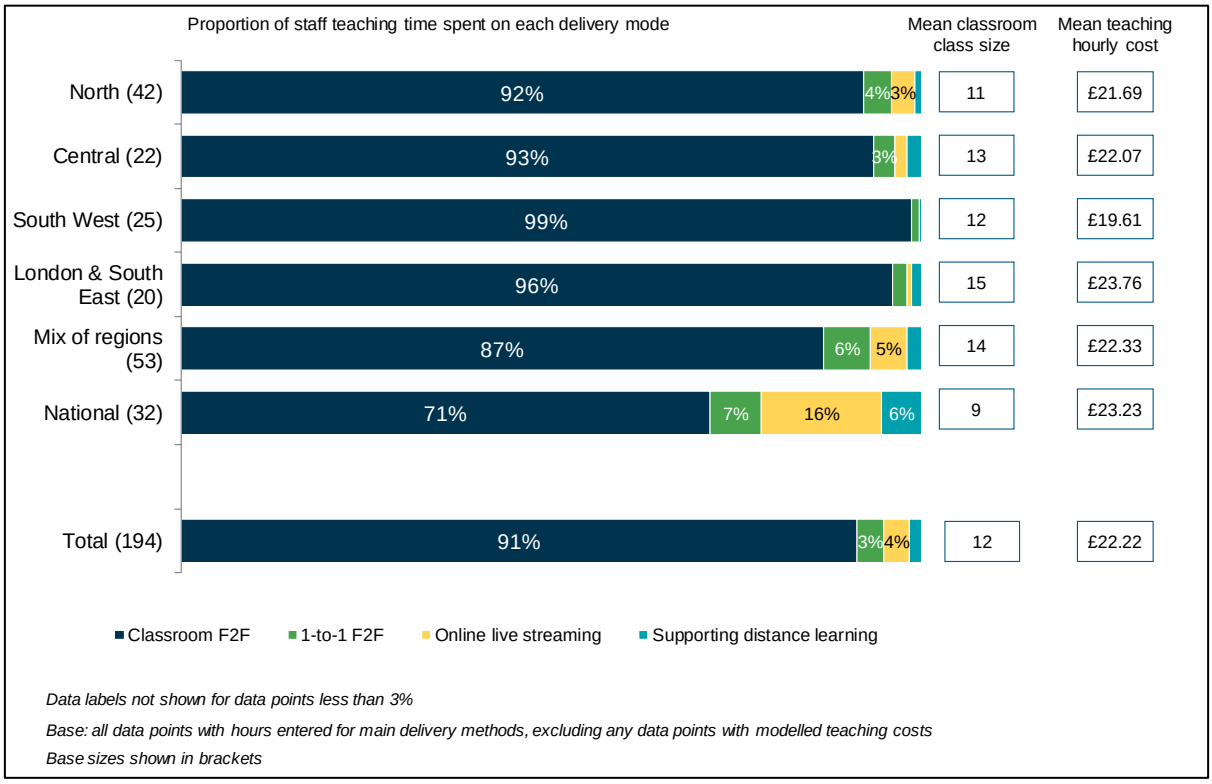
FE College

"The nearer it is, the cheaper it is for us… If learners are travelling to us, then we incur no travel time or travel expenses. If we go out, then those two things click in."

Independent Training Provider

8.33 The highest average monthly teaching cost per learner was experienced by providers with national coverage, at £196 per month, contributing to their high overall monthly cost. As shown in Figure 8.3, this was due to the higher proportion of staff teaching time spent on one to one face to face training, and supporting distance learning, both of which were more expensive per hour per apprentice.[39] National providers also had the lowest average classroom class size, making this more expensive per apprentice than for other providers.

Figure 8.3: proportion of staff teaching time spent on each delivery mode by region



8.34 The lowest monthly teaching costs were experienced by providers in the South West, followed by London and the South East. For the South West, this was explained by their lower average hourly staff cost for teaching, of £19.61, compared to the overall average of £22.22.

8.35 London and the South East however had the highest average hourly staff cost for teaching, at £23.76. The lower monthly teaching cost was due to the average class size for classroom teaching of 15, the highest of any region, meaning the staff cost was spread across more learners. Learners in London and the South East also had a lower average number of hours of classroom teaching per month compared to the South West and Central regions.

8.36 The highest average monthly eligible costs for assessment were reported in the Central region, at £95 per month, compared to the overall average of £53, with the West Midlands in particular having the highest assessment cost. Cases in this region had a higher mean number of on-programme assessment hours than other regions (4.1 hours per month compared with 1.9 hours across all other regions); although this difference was partly driven by a single outlier; even with that figure removed, mean on-programme assessment hours in the Central region were still higher than average (2.8 hours per month). These higher hours, combined

[39] Previously shown in Table 7.2

with above average employment costs for staff involved in assessment (£21.39 per hour compared with £19.97 across all other regions), lead to overall higher assessment costs in the region. These higher costs span a range of different levels, routes and provider types, suggesting that this difference was due to specifics of the participating Central region training providers, rather than any trends in the type of delivery in that area.

8.37 The slightly lower average hourly staff costs for assessment in the South West, combined with the lowest number of hours spent on on-programme assessment, lead to the South West having the lowest average monthly assessment cost of £34 per apprentice.

8.38 Administration costs were highest for national providers, at £82, compared to the overall average of £57, and accounted for an average of 22% of the funding band for these providers. This was primarily driven by higher administration costs relating to teaching and assessment, likely due to the additional administrative needs of co-ordinating across the country. This contrasts with the average proportion of funding band spent on administration by providers in a single region (10%).

8.39 Whilst average consumables costs varied slightly between different regions, they took up a similar proportion of the funding band in all areas, with the mean percentage of funding band 3-4% across the board. This indicates the cost of consumables did not affect cost differences by region.

Size of training provider

8.40 In order to analyse the impact of training provider size on costs, a number of measures were used to extrapolate overall size, including the overall income of the training provider, the total number of learners, the total number of apprentices, and the number of apprenticeship standards on offer. In this section we will focus on the total number of learners at the training provider, however all the size variables reveal a similar pattern.

8.41 Overall, the very largest providers seem able to achieve lower costs on a monthly basis, with total costs for training providers with 5,000 or more learners lower than for those with fewer than 5,000 learners (a mean £226 per month compared with £309), and equivalent to a smaller proportion of the funding band on average (47% compared with 73%).

8.42 The highest average monthly total eligible cost was reported by those with less than 100 learners (£338), followed by those with 250-499 learners (£325). Monthly costs were lowest for those with 5,000-9,999 learners (£212) and then those with 10,000+ learners (£235).

Table 8.4: Total eligible training costs per learner (excluding EPA) by number of learners

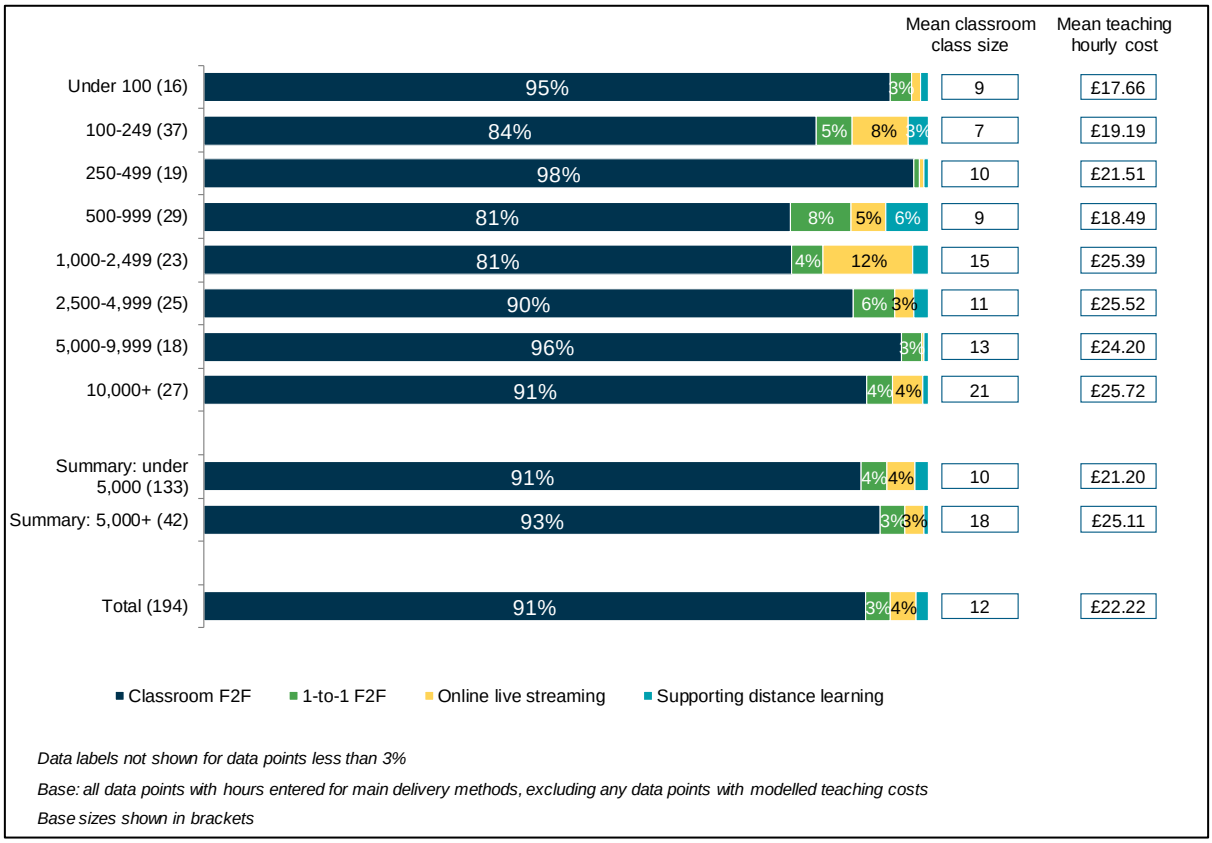
	Base	Monthly costs		Mean overall cost	Mean % of funding band
		Mean	Median		
Less than 100	*17*	£338	£283	£7,052	76%
100-249	*37*	£317	£288	£5,846	86%
250-499	*20*	£325	£254	£7,600	65%
500-999	*33*	£276	£236	£5,506	66%
1,000-2,499	*23*	£295	£229	£8,152	57%
2,500-4,999	*27*	£320	£278	£8,195	81%
5,000-9,999	*19*	£212	£176	£6,260	41%
10,000+	*28*	£235	£235	£8,963	50%
Summary: less than 5,000	*157*	£309	£255	£6,870	73%
Summary: 5,000+	*47*	£226	£201	£7,870	47%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

8.43 As the mean administration and consumables costs were similar across those with fewer or more than 5,000 learners, the difference in overall monthly costs between the two groups was largely driven by higher mean teaching costs among those with fewer than 5,000 learners (£178 per learner) compared with those with 5,000 or more learners (£109).

8.44 While both size groups spent similar proportions of staff time on classroom training (91% among those with fewer than 5,000 learners and 93% among those with 5,000 or more learners), the mean class size was considerably higher for those with 5,000 or more (18, compared with a mean of 10 among those with under 5,000 learners). Although the mean hourly teaching cost was higher for those in the larger size band (£25.11, compared with £21.20 among those with fewer than 5,000 learners), this was offset by the larger class sizes to reduce the cost of teaching per learner.

Figure 8.4: Proportion of staff teaching time spent on each delivery mode by total number of learners



Data labels not shown for data points less than 3%

Base: all data points with hours entered for main delivery methods, excluding any data points with modelled teaching costs

Base sizes shown in brackets

8.45 Assessment costs were also higher among smaller providers, with a mean of £56 per learner per month for those with fewer than 5,000 learners, compared with £39 for those with 5,000 or more learners. Although hourly employment costs were higher for staff carrying out assessments at the largest institutions (a mean £23.68 an hour, compared with £19.08 among those with fewer than 5,000 learners), this was balanced out by staff spending half as much time on assessment (a mean one hour per month per learner, compared with two hours among cases with fewer than 5,000 learners).

8.46 As would be expected, there was a clear relationship between size and training provider type. While FE Colleges were fairly evenly divided between those with fewer than 5,000 learners and those with more, the vast majority of Employer Provider data points (93%) and ITPs (96%) had fewer than 5,000 learners. Conversely, most HEI data points (92%) had 5,000 or more learners. As the correlation between size and provider type is so strong, it is difficult to separate the impact of size from the impact of provider type on costs; however, focusing just on FE Colleges, the only type with a considerable number of cases in each broad size category, the same pattern of lower costs for larger providers can be seen. The largest FE Colleges, with 5,000 or more learners, had a mean monthly cost of £198 per learner, compared with a mean monthly cost of £305 among FE Colleges with fewer than 5,000 learners.

8.47 There were some differences in terms of the routes covered by the largest training providers compared with the rest. Training providers with 5,000 or more learners had lower proportions of Business and Administration (2% vs 15% among those with fewer than 5,000 learners) and Digital (2% vs 8%). They had a higher proportion of Health and Science (28% vs 4% among

those with fewer than 5,000 learners) and Engineering and Manufacturing (23% vs 16%). However, the latter two standards had mean costs in line with the overall average, while Business and Administration was associated with lower costs on average. The Digital route had higher costs on average, however, even with this route excluded, the mean monthly cost for cases with fewer than 5,000 learners is still high, at £289, compared with £228 among those with 5,000 or more learners.

8.48 Both groups contained delivery across the full range of levels, however among training providers with fewer than 5,000 learners there was a higher proportion of Level 2 courses (37%, compared with 21% among those with 5,000 or more learners), and a lower proportion of Level 6 courses (3%, compared with 21%). As shown in chapter six, Level 2 had mean monthly and overall costs below the overall average, whereas Level 6 had mean monthly and overall costs above the overall average. As with route, this suggests that differences in levels were not contributing to the lower per learner costs reported by the largest providers; instead, it is likely that per learner costs for training and assessment were lower among the largest providers due to the economies of scale they can achieve through the larger class sizes shown in Figure 8.4 above.

8.49 Further economies of scale could be achieved through larger institutions being able to deploy staff across a number of different courses, allowing salary costs to be shared across standards and potentially other non-apprenticeship training; in some cases, training providers also mentioned that larger class sizes could be achieved by combining learners from different standards within the same route into single groups for some delivery, and by combining learners across multiple cohorts on the same standard into single groups for some training.

Recruitment and Retention

8.50 In addition to the cost driver analysis discussed in chapter five, which showed that mean training salary accounted for 10% of the impact on overall costs, chapter eight has discussed the impact of average hourly salaries in a number of instances. Whilst we did not ask training providers about staff recruitment specifically, they frequently raised recruitment and retention issues when discussing salary levels in qualitative discussions, often explaining that these issues led to them paying higher salary costs than they would prefer:

"As far as I'm aware it's a problem recruiting any staff at the moment, particularly in our area."

Independent Training Provider

"The single biggest cost is staff, teaching staff, assessing staff, but also the team we have put in underneath this."

FE College

8.51 Most training providers who experienced difficulties in finding and recruiting staff had struggled to recruit staff with the right specialist knowledge in the subject matter, often due to higher wages in those sectors being more attractive. This was particularly prevalent in Construction, Engineering, Healthcare and Scientific courses, and not necessarily limited to apprenticeship standards. Training providers often had to pay a higher rate in order to be competitive with industry and attract staff into training roles, which is shown in higher average salaries amongst groupings with a high proportion of data points in these subjects:

"The one area, where I suppose the whole country is facing difficulty with, is Engineering."

FE College

"Definitely recruitment within Construction… [the rate] doesn't even attract because other colleges have higher market forces… probably all [roles within Construction] if I am honest."

FE College

"These individuals [Skilled Trainers/Assessors] now, can earn more in the workplace now than they can in [an FE setting]."

FE College

8.52 One HEI raised the issue of recruitment difficulties, but otherwise HEIs rarely discussed recruitment or salary issues, suggesting they may not have experienced these difficulties to the same extent as other provider types. This could be due to the fact that salary levels at HEIs were typically higher than at other provider types, something that may have been more feasible for this group due to being able to balance out high staff costs with larger class sizes.

8.53 A few training providers mentioned other skill or qualification requirements for particular standards as difficult to find when recruiting staff and had to offer higher salaries in order to recruit:

"The difficulty is the occupational competency because the longer you have been out doing the training and teaching side [the more distant you are from industry]. I make my staff go back into the workplace for two days a year to professionally update… staff training is one of our biggest outlays in the year because it is a 'got to do' thing."

Independent Training Provider

8.54 One training provider gave the example of a Healthcare-related standard, whereby the member of staff delivering teaching had to have an assessor's award and three years' experience working in a particular role in the NHS:

"How many people like that can I find? Well, not many is the answer… The way that standard is written makes it very hard for me to recruit, and if I do find someone like that, they are only going to be able to deliver those standards; they can't then go away and deliver another standard for me because they won't have the experience or the knowledge."

Independent Training Provider

8.55 Difficulty in filling positions had led to some using agency, contractors or other temporary staff, which was usually expensive, and sometimes involved extra work to get them to the required level:

"Sometimes we have to get agency and that is a huge cost because we don't cost for agency [employees]… for [the standard], because we are training someone up to do quality assurance, we have an agency guy being paid to do the IQA, but he is hugely expensive and the whole funding band will be gone this year because of his costs… four times a lecturer's monthly rate."

FE College

“I need to make sure they [contractors] know our procedures, our policies, is Safeguard trained, is current, has a DBS [Disclosure and Barring Service check], the ability to go airside - which means security vetting.”

Independent Training Provider

8.56 One training provider had recruited staff at a lower level and trained them up in order to get the staff they needed, resulting in higher costs in other areas:

"We have to train them up ourselves; which is costly and timely…sometimes recruit them to a lesser standard and then train them up."

Independent Training Provider

9 Training provider costs: impact of cohort and learner characteristics on costs

Introduction

9.1 In this section, we examine the impact of cohort size, class size, age of learners and additional learning needs on the cost of delivery. Using findings from the qualitative interviews, we also explore the impact employers had on costs.

9.2 The regression model presented in chapter five highlighted that as the average class size increased the overall cost of delivery fell. Analysis in this chapter supports this finding, with delivery to class sizes of less than five learners incurring a mean cost of £6.28 per learner per hour, compared to less than £1 per hour for class sizes of 20 or more learners. Similarly, larger cohort sizes were also associated with lower overall costs.

9.3 The age of learners was found to have no influence on the cost of delivery. Similarly, whether or not the cohort included any learners with learning disabilities and difficulties had little impact on the cost of delivery.

9.4 Turning to the impact of employers, qualitative findings revealed that some providers found that the size and location of employers, the level of support provided by the employer, and employer demands impacted on costs.

Size of cohort

9.5 This section looks at how costs vary by cohort size, with cohort size banded into four groups of one learner, 2-9 learners, 10-19 learners, and 20 or more learners.[40]

9.6 As shown in Table 9.1, mean monthly per apprentice costs were higher for the two smaller cohort groups than for the two larger cohort groups. The total cost also made up a larger proportion of the funding band on average among the two smaller cohort size groups (89% for a single cohort and 78% for cohorts of one to nine learners, compared with 67% overall).

9.7 Average monthly teaching costs were higher among single learner cohorts and cohort sizes between two and nine, with a mean cost of £208 and £180 respectively. Monthly teaching costs made up a far higher average proportion of the funding band for single learner cohorts, at 58%, nearly twice as high as those with a cohort size of 10 or more (31%). Higher teaching costs for single learner cohorts are likely to be driven by training providers that delivered “roll on, roll off” programmes, that often deliver training on a one-to-one basis either online or by visiting the learner at their place of work.

[40] Single learner cohorts were reported by providers operating a ‘roll-on, roll-off’ programme; these learners were often taught on a one-to-one basis but would also be merged into larger groups for classroom taught sessions. Similarly, larger cohorts might be split into smaller groups for all or some classroom teaching.

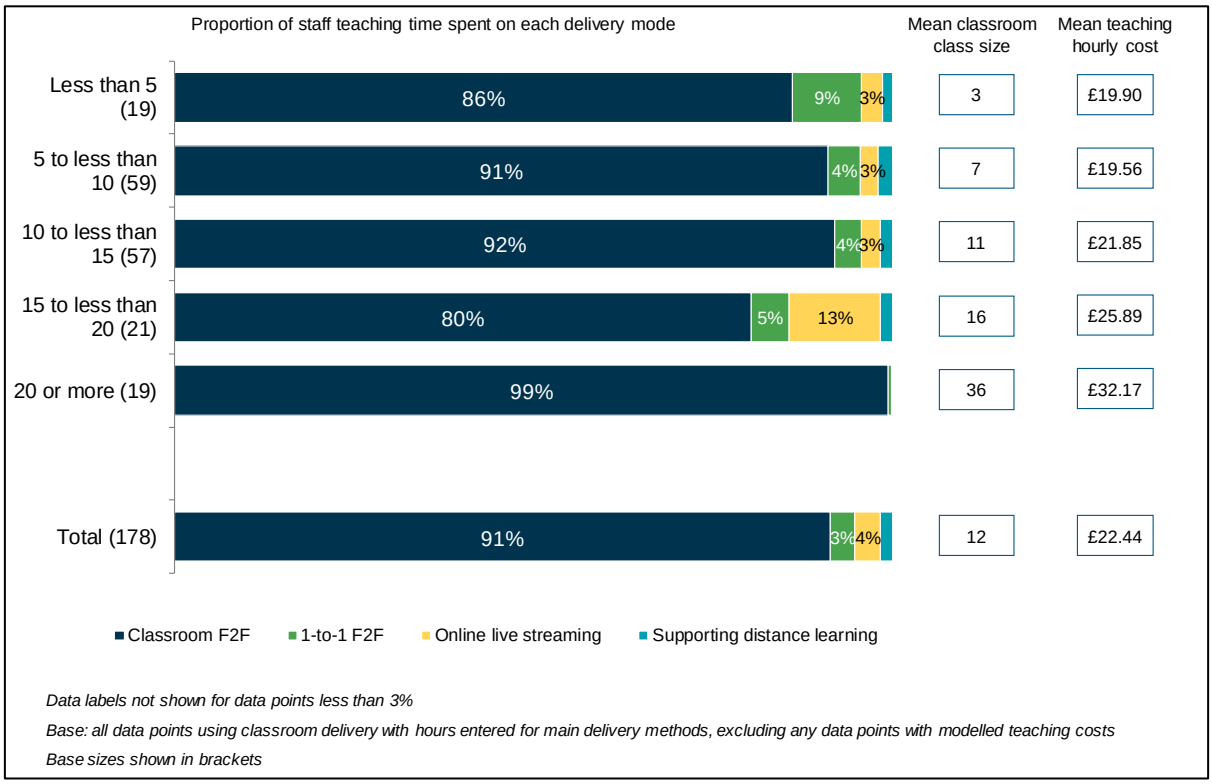
Table 9.1 Total eligible training costs per learner (excluding EPA) by cohort size

Cohort size	*Base*	Monthly costs		Mean overall cost	Mean % of funding band[41]
		Mean	Median		
1	*20*	£312	£296	£6,615	89%
2 - 9	*65*	£323	£289	£6,814	78%
10 - 19	*81*	£264	£219	£7,195	56%
20+	*37*	£280	£237	£7,679	60%
Overall	***204***	**£290**	**£249**	**£7,101**	**67%**

Base: all data points collected with a cost for each element

9.8 As shown in Figure 9.1, the vast majority of teaching was done face-to-face in the classroom, however, single-learner cohorts also had substantial amount of face-to-face training on a one-to-one basis; the average class size for single-learner cohort was six, as training providers would often bring together individual learners based with different employers together for group workshops or sessions, on a regular or occasional basis.

Figure 9.1 Proportion of staff teaching time spent on each delivery mode by cohort size



[41] This column shows the average (mean) percentage that the teaching costs in that row represent of the funding band for each data point. These percentages are indicative of how each average cost relates to the funding band levels of data points within that group.

9.9 There was no clear correlation between assessment costs per learner and cohort size, however mean monthly administration costs per learner were highest among cases with a cohort size of 20 or more (£67 compared with an overall average of £57), although these costs made up a similar average proportion of the funding band compared to other cohort sizes (15% compared with an overall average of 13%).

9.10 Average monthly costs for consumables per learner were slightly lower in the single learner cohort group, and broadly similar across the rest (£6 compared with an average of £17 overall). Consumables costs were also equivalent to a smaller proportion of the funding band on average among single cohort cases (2% compared with 4% in all other cohort size bands).

9.11 Training providers generally felt that having more learners and larger cohort sizes would bring economies of scale, and that costs per learner would decrease; with assessment and training, training providers felt that larger group sizes would reduce costs due to an individual tutor being able to work with more learners at one time:

"Teaching a class of 15 would be more efficient than teaching a class of 10, and labour is a high part of the cost."

FE College

9.12 Some training providers also felt that administration and overheads cost would reduce:

"Our support services would immediately look more efficient if we had higher numbers."

Higher Education Institution

9.13 Software licencing costs were also mentioned by some training providers as an area where costs per learner could reduce if cohort sizes were larger, where the licence worked on the basis of a fixed cost for a group (as opposed to a fee per user).

9.14 Others also mentioned that materials costs could reduce if cohort sizes increased, as they would be able to buy in bulk at a cheaper price, thus reducing the cost per apprentice.

9.15 However, some training providers believed that increasing their learner numbers or cohort sizes would increase costs per learner. This was in cases where training providers were already at capacity in terms of staff levels or premises, and increasing cohort sizes or taking on more learners would require hiring more staff and/or expanding their premises, which would lead to an increase in costs. Some mentioned that an increase in numbers would need to be considerable in order to offset the increase in costs, for example, if they needed to hire an additional tutor, this would increase the cost per learner unless the new tutor was also delivering to the maximum class size, as the salary cost for the tutor would be divided among fewer learners.

Class sizes for group delivery

9.16 Where delivery of teaching was group based, providers gave figures for the number of learners in a single class; in some cases this would be equal to the number in the cohort, but in others the number could be smaller, where a large cohort might be split into smaller groups for classroom delivery, or larger, if learners from the cohort might in-fill into a larger group.

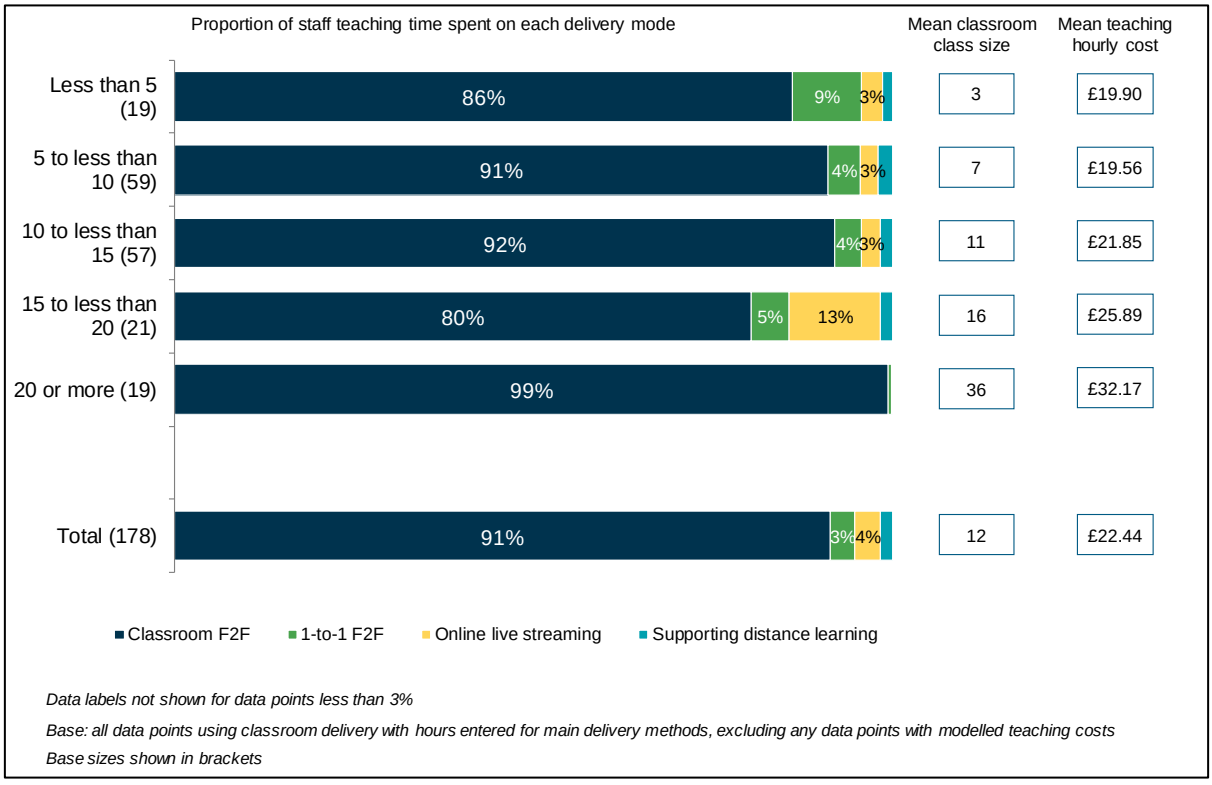
9.17 As shown in Figure 9.2, the vast majority of teaching time was spent on face-to-face classroom delivery whatever the class size, and the mean hourly teaching cost generally increased in line with the mean class size.[42]

9.18 Although the mean hourly teaching cost was higher in cases with larger class sizes, these higher salary levels were offset by the larger groups, as the cost of teaching was spread across more apprentices, with the mean monthly classroom teaching cost per learner broadly decreasing as class sizes increased, and the mean teaching hourly cost *per learner* falling from £6.28 for groups fewer than five to less than £1 for groups of 20 or more.

9.19 Turning to group teaching delivered through online livestreaming, there was a clear drop in monthly teaching staff costs as the group size increased, with costs falling from a mean £51 per learner per month for classes of fewer than five to £8 per learner per month for classes with 10 or more learners. Looking at overall costs, teaching costs for delivering online live streamed teaching to groups of fewer than five learners made up a greater proportion of each standard's maximum funding band (8%) compared with class sizes of between five and 10 learners (2%) or 10 or more learners (1%).

9.20 As with face-to-face delivery, the mean staff costs per learner per hour for online live streamed delivery were substantially higher where the group size was fewer than five learners (£6.17) than for groups of between five and nine (£2.57) and 10 and above (£1.66).

Figure 9.2 Proportion of staff teaching time spent on each delivery mode by class size



Data labels not shown for data points less than 3%

Base: all data points using classroom delivery with hours entered for main delivery methods, excluding any data points with modelled teaching costs

Base sizes shown in brackets

[42] Mean classroom class size was calculated by multiplying individual class sizes by the number of hours spent on classroom teaching for each, divided by the total number of classroom teaching hours.

Age of learners within cohort

9.21 Training providers reported the number of learners within their typical or specific cohort who were aged 16-18, 19-24 and 25 and over. In this section we look at whether the age of learners within the cohort had an impact on overall delivery cost. Providers training apprentices aged 16-18, or those 19-24 who were either a care leaver or had a Local Authority Education, Health and Care Plan, received an additional payment of £1,000 to cover additional costs that were associated with training these learners, such as additional recruitment activity and additional support to transition into the world of work;[43] however, the costs discussed here are only those related to the delivery of the core requirements of the framework, rather than any additional activities that might be required to support younger learners.

9.22 As shown in Table 9.2 two-fifths (41%) of data points had no learners aged 16-18 within the cohort for the standard being discussed, a fifth (20%) had no learners aged 19-24, and a third (33%) had no learners aged 25 and over. It was more unusual for cohorts to be entirely formed of one age group: just 6% of cases had cohorts entirely composed of learners aged 16-18 and 5% had cohorts aged 19-24, while 10% of cases had cohorts entirely aged 25 and over.

9.23 There was no correlation between the proportion of learners in any of the age groups and the overall monthly cost of the standard. Similarly, there was no correlation between the cost of teaching and the proportion of learners in each age band.

Table 9.2 Proportions of age groups within cohorts

	Age 16-18	Age 19-24	Age 25+
0%	41%	20%	33%
1-49%	27%	45%	37%
50% - 74%	20%	25%	13%
75% - 99%	6%	5%	6%
100%	6%	5%	10%

Base: all data points collected (204)

9.24 A number of training providers confirmed that the age of learners did not influence the cost of delivery, and several said that the level of prior experience had more of an impact, but that this did not necessarily correlate with age:

"It is about experience… and if someone has a low GCSE profile… it really has to be bespoke… you can't do the same for every learner because every learner is different and comes with a different experience."

FE College

9.25 One ITP mentioned a perception that older learners would incur lower delivery costs, as they would learn more quickly, but this had not been borne out in their experience.

9.26 Another ITP said that the age of learners did not influence costs, as both older and younger learners tended to have specific support needs – older learners may need more academic

43 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/788312/Apprenticeship_funding_in_England_from_April_2019.pdf

support, due to being out of education for longer, while younger learners needed more pastoral support.

9.27 A number of other training providers gave similar views, explaining that different age groups often had different issues and needs, but that one was not inherently more cost-effective in terms of delivery. Some training providers also pointed out that any additional experience and qualifications of older learners would be offset by a reduction in funding:

"It's a bit of a mixed bag really... the older they are at sign-up we anticipate more of a reduction because of the accreditation of prior learning... but the younger they are the more we expect to have to give that support."

FE College

9.28 Another training provider mentioned that while 16 to 18 year olds might require more pastoral care, there could be extra costs involved in training older existing employees, for example if their managers don't give them enough time for training as they need them to do their jobs.

9.29 However, some training providers did feel that the age of learners would influence the cost of delivery. These training providers usually felt that younger learners would incur higher costs, mainly because they require considerably more pastoral support and mentoring, and they need more coaching while adjusting to the workplace, and training in basic employability skills:

"There is a significant difference in the resilience of the younger generation than the more experienced people that enrol, and they just require an enormous amount of pastoral support. It is very expensive to keep any learner where it's their first proper job."

Independent Training Provider

9.30 A relatively small number of providers believed that older learners would incur higher delivery costs; one HEI mentioned that they would need additional support with English and maths, and would need more support from student services, impacting costs for the university overall. An ITP agreed that older learners would require more support due to their age and having been out of education for longer:

"Learners in their twenties who have been out of education for longer probably require more support… Younger learners have come straight from school and are in that mode of training and teaching… things like using e-portfolios and those sorts of things – [older learners] need quite a lot of support from the assessor and may be a few more visits… [the cost] is support time."

Independent Training Provider

Additional learning needs

9.31 This section examines costs of delivery split by whether the cohort included any learners with learning disabilities and difficulties. Learning support was available for apprentices with learning difficulties or disabilities, set at a fixed monthly rate of £150 per month.[44] In some

[44] Where costs to support additional learning needs exceed £150 per month but are less than £19,000 per year, training providers can claim via the earnings adjustment statement (EAS). Where apprentices have support costs in excess of £19,000 per year, training providers can submit a claim for exceptional learning support (ELS). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/821581/1920_Provider_Rules_Version_1.0_FINAL.pdf pages 17-18

cases training providers reported that some learners on the standard had learning disabilities and difficulties but were not receiving additional funding, usually as they were only identified as having learning disabilities and difficulties later on in the programme.

9.32 In nearly half of cases (48%) the typical or specific cohort contained at least one learner with learning disabilities and difficulties.

9.33 Table 9.3 shows that the mean monthly eligible cost was similar between cohorts which did or did not include any learners with learning disabilities and difficulties.

Table 9.3 Total eligible training costs per learner (excluding EPA), by the any of the cohort/group having additional learning needs

Any LDD learners in cohort?	*Base*	Monthly eligible costs		Mean overall cost	Mean % of funding band
		Mean	Median		
Yes	*98*	£289	£243	£7,173	65%
No	*106*	£290	£253	£7,034	69%
Overall	***204***	**£290**	**£249**	**£7,101**	**68%**

Base: all data points collected with a cost for each element

9.34 Average teaching, assessment, administration and consumables costs were also similar between each group.

9.35 Some training providers mentioned it could be difficult to identify all learners with learning disabilities or difficulties at the beginning of the course, and this could lead to a lack of extra funding to provide additional support. If an apprentice was identified as having a need for additional support later in the course, that could mean that additional funding was not claimed for the whole programme.

9.36 One Employer Provider explained that they have needed to provide additional support in some cases which they are unsure whether to class as a learning disability or difficulty, such as having an undiagnosed learning disability. It would seem this training provider did not fully understand the rules on additional support, which state that a learning need does not need to be a formally diagnosed learning disability in order to qualify for the additional £150 per month allowance for additional support.[45] This reflects previous research showing that providers demonstrated uncertainty around the rules and what could, or should, be eligible for additional funding.[46]

[45] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/821581/1920_Provider_Rules_Version_1.0_FINAL.pdf

[46] Previous research has shown that some providers are put off from applying for Additional Learning Support for all apprentices they believe would benefit from it due to concerns around evidencing the learning need without a formal diagnosis of an LDD: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/697649/Exploring_the_funding_and_support_for_apprentices_with_additional_support_needs.pdf

Impact of employers on costs

9.37 This section explores how employers can impact the cost of delivery of the apprenticeship. The findings here are from the qualitative interviews rather than data collected through the online tool, and can be broadly broken down into the following themes:

- The level of support provided by the employer;
- Employer demands; and
- The size and location of the employer.

Level of support provided

9.38 Several training providers explained the cost of apprenticeship delivery was dependent on the level of support provided by the employer, which could vary quite widely. The more supportive an employer was, the fewer visits the training provider had to conduct.

9.39 It was felt that employers could also have a major impact on cost with respect to mentoring, support and making sure skills were used in practice. One training provider noted that dealing with 16 to 18 year olds was easier as they tended to be regarded as trainees and therefore received more support from the employer. In contrast, when dealing with older existing employees undertaking an apprenticeship, providers reported often line managers did not make time available for learning because they had to do their regular job. This needed to be carefully managed with the employer and meant that training providers not only had to deal with the HR manager but also the apprentice's line manager.

9.40 Another training provider explained that when the employer offered more support, their apprentices tended to have better portfolios. The cost saving comes from less administration, for example not having to chase employers for documentation, however this was noted as being a minimal cost.

Employer demands

9.41 Several training providers reported that employer demands had increased, with some employers expecting extra delivery at no extra cost. One ITP explained that in order to keep their employers happy, they sometimes delivered extra training without renegotiating the price:

"Some units they like us to deliver first and some, like in [childcare standard] there is a unit about special needs, and we have some employers who will say can you do that as an extra… we do it as an extra and do not renegotiate a price… a little bit of extra assessor time… Our employers have high expectation of the classroom teaching from us… We are a private training provider and try to keep our employers happy, if we didn't do that we wouldn't be here."

Independent Training Provider

9.42 A couple of FE Colleges also felt that employer expectations had increased, meaning that planning and agreeing the content and delivery of the standard could be an extra cost. Again, in order to remain competitive, they felt pressured to deliver any extra training free of charge:

"If we do ask for a contribution, then it can have an impact… for example one employer we were talking to last week where we notified them for a contribution to an apprenticeship, should they want to go ahead with it, was telling us that other apprenticeship providers had offered it for free."

FE College

"In terms of maintaining business we are finding certainly at the moment that we are slicing a bit off [the fee] for some of those employers to keep their business."

FE College

9.43 Another provider highlighted that the demands from some employers' impact on the administration time required. This might involve weekly or monthly reports, not otherwise provided, and which might require more face to face time which involves increased travel for tutors.

Size and location of the employer

9.44 A couple of ITPs explained that the size of the employer could have an impact on the cost of delivery, in that larger employers with many apprentices could bring economies of scale. For example, when the training provider carried out direct observations, it was far more cost effective being able to visit several apprentices at the same employer. It also meant that the assessor could assess more learners on one day, bringing the assessment cost per learner down. The location of the employer could also impact on the cost of delivery as the more remote the location the more time needs to be spent on travel.

Impact of prior learning on costs

9.45 This final section considers how prior learning can impact on the costs of delivery of apprenticeship standards. The findings here are from the qualitative interviews rather than data collected through the online tool.

9.46 An assessment must be undertaken before an apprentice begins their course to assess their 'starting point' and the prior learning they have undertaken. This assessment checks the apprenticeship is appropriate for the individual, and funding cannot be used to pay for or accredit existing skills, knowledge or behaviours. Prior learning can include previous work experience; previous training, education or qualifications; and any previous apprenticeship.[47]

9.47 Providers expressed a range of views on the impact of prior learning on costs. A small minority indicated prior learning increased their costs, but most suggested prior learning either had no impact or decreased costs.

9.48 Among those who indicated prior learning had no impact, providers suggested there would only be an impact if there was a great deal of prior learning:

"It doesn't have any impact on the cost of delivery…unless there is significant prior learning which maps directly, I would say that there is no reduction in anything other than the funding."

Independent Training Provider

[47] https://www.gov.uk/government/publications/apprenticeships-recognition-of-prior-learning/apprenticeships-initial-assessment-to-recognise-prior-learning

9.49 Some providers felt rather than having little impact, the costs of delivery decreased with prior learning, for example because it could mean tutors making fewer visits or spending less time on teaching:

"We bespoke based on prior learning. We do an average across a cohort and then we would have bespoke costings … [if] he had a little bit of experience and multi skills so we will look into that and it may take the duration down by a couple of months which might bring the costing down a little bit."

FE College

"If they have the academic or technical knowledge they don't need to do any of the coursework, so we don't have that burden of having to send a teacher to see that person… which means that there is a good 30 to 40% of that cost which we don't need to pass on... there is a reduced cost to us as a business we don't have to send someone to see them face-to-face. A lot of the costs for us are travelling out to see the apprentice."

Independent Training Provider

9.50 However, a small number of the providers who suggested prior learning may lead to a reduction in costs, also highlighted that whilst costs were lowered, the savings did not always amount to very much. These providers noted for example that there were still a number of fixed costs, and necessary teaching that had to take place to gain the qualification:

"You have a statutory qualification in our standard… if they have got significant prior learning that really helps…they might have done another qualification you can map against it and say they have covered off and have a lot of the skills so we could reduce down the cost, but in actual fact, the reality is in terms of delivery, they are probably still going to take part in all the delivery so it doesn't cost us any less; maybe 5%. They will probably still come to all those teaching sessions because they have to get the qualification in that standard."

Independent Training Provider

9.51 Finally, a small number of providers felt that prior learning actually increased their costs of delivery. This was usually down either to the complexity of evidencing prior learning, or because the prior learning was not up to the level of the standard. For example, one provider noted that having students with prior learning increased their costs because it took an 'enormous' amount of time per individual to find out their history.

9.52 Similar to the view expressed by those suggesting the decrease in costs may be minimal, the reality for some providers was that even though an apprentice had prior learning they would probably still require all the training in the standard (despite the provider not receiving the funding) 'to make sure they are completely up-to-date':

"The problem we have is the quality of that previous achievement... that could have been four or five years ago, so then you get to the 'how is that current?' and how much updating are we going to have to do."

FE College

"In reality, the declaration [of prior learning], may either be incorrect, forgotten or inappropriate for now as time has moved on."

Independent Training Provider

10 Training provider costs: calculated costs compared to reported income

Introduction

10.1 This chapter looks at the difference between calculated eligible costs incurred by training providers against their reported income, focusing, in particular, on income up to the funding band maximum as reported during fieldwork. Overall, 77% of data points had calculated eligible costs that were within the reported income they had received up to the funding band maximum. However, it should be noted that these figures do not necessarily represent true surplus or loss as such, and extrapolations around profit cannot be made from this data due to multiple factors (discussed below) including the nature of the figures reported and the calculations involved.[48]

10.2 Overall, across all data points, calculated eligible costs were a mean 20% lower than reported income (median 30% lower), although as stated above this figure does not represent the margins that training providers may or may not be making, for reasons discussed in paragraph 10.7 below. This difference between calculated eligible costs and reported income was lower for:

- Short duration apprenticeships of less than 18 months (a mean difference of 11%);
- Level 2 standards (a mean difference of 0%, i.e. here, on average calculated costs were broadly equal to reported income); and
- Where no classroom teaching was provided (a mean difference of -4%, i.e. here, on average calculated costs were slightly higher than reported income).

10.3 During the qualitative research, around half of providers felt that they were able to deliver the standard within the income they received. Many providers noted that as apprenticeship standards are still fairly new, they would expect to make cost savings as time progresses. This was due to likely increases in the number of apprentices they could expect to deliver the standard to, and to being able to achieve greater efficiency once they had more experience of delivering the course. It should be noted that many providers did not consider income and costs at the level of individual standards, and instead worked on the basis of achieving sufficient contributions to overheads and re-investment across the department or organisation as a whole.

Comparison of calculated costs and reported income

10.4 Training providers were asked to report both the income they received for each standard up to the maximum funding band, and also the full price including any additional fees they charged employers. When looking at differences between calculated eligible costs and reported income in this section we focus on comparing calculated eligible costs with income received up to the

[48] The EPA fee was included in total eligible costs here as the EPA fee will be paid from the income received by the provider up to the funding band maximum.

funding band maximum. However, first we present the mean reported income both up to the funding band maximum and the full price for context.

10.5 Table 10.1 shows mean income received per learner up to the funding band maximum and mean price, as reported by the provider for each data point, within each funding band (note that for some funding bands, figures are based on fewer than 10 data points). In most cases, the mean income received up to the funding band maximum was at or slightly below the funding band maximum level, presumably due to price negotiation and reflecting any additional payments. In a few cases training providers reported an income above the stated funding band for the standard, this was likely to be where the funding band had been reduced since they started delivery (for each funding band where the mean reported income exceeds the funding band, there had been funding band reductions for at least one standard within that funding band level).[49]

Table 10.1 Mean reported income received per learner up to the funding band maximum and mean reported price, by funding band maximum

Funding band	*Base*	Mean reported income received to funding band max.	Mean reported price
£3,000	*10*	£2,938	£3,037
£3,500	*6*	£3,467	£3,825
£4,500	*6*	£4,583	£4,942
£5,000	*15*	£5,000	£5,027
£6,000	*7*	£5,857	£5,821
£7,000	*18*	£7,417	£7,528
£8,000	*8*	£8,018	£8,046
£9,000	*27*	£8,752	£8,869
£11,000	*<5*	£11,750	£11,666
£12,000	*13*	£11,846	£13,205
£15,000	*9*	£14,889	£15,000
£17,000	*<5*	£17,500	£17,500
£18,000	*17*	£17,704	£18,106
£21,000	*7*	£20,459	£20,525
£26,000	*8*	£26,025	£26,475
£27,000	*16*	£27,000	£28,315

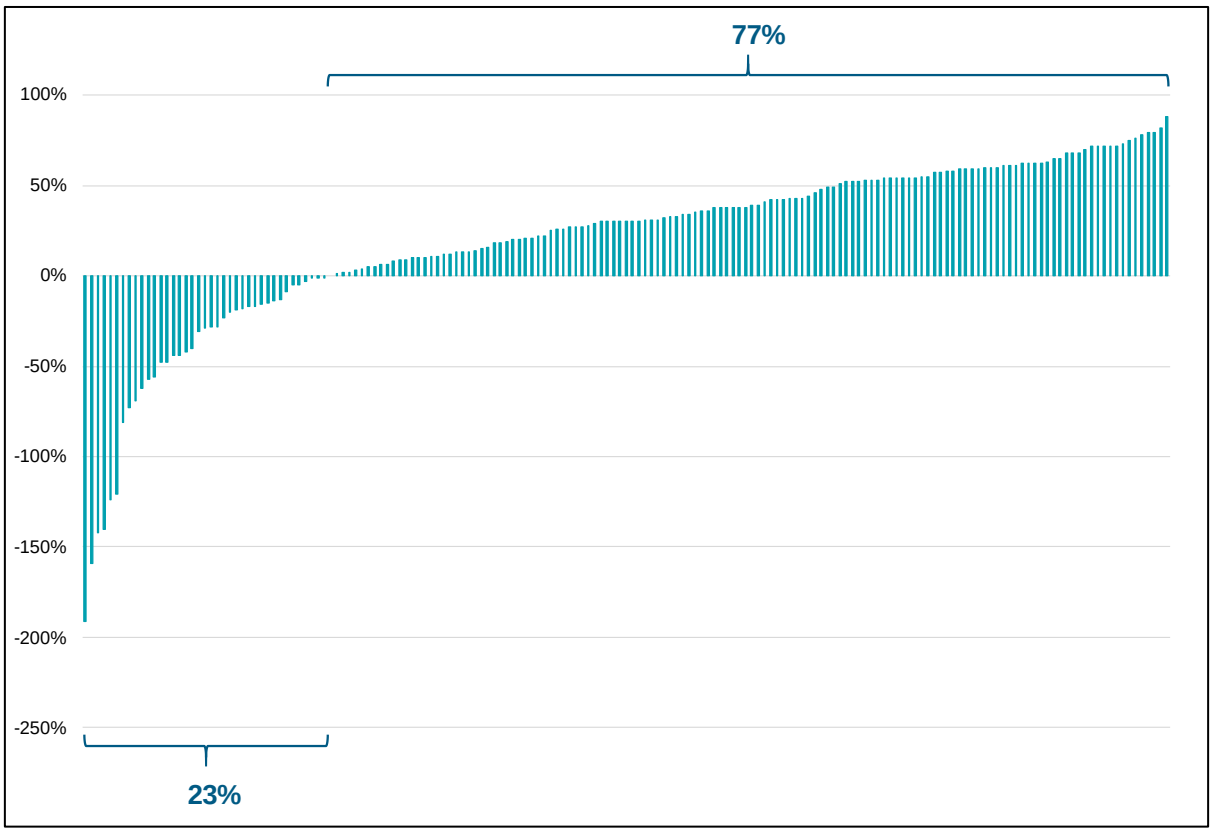
Base: all data points collected with a cost for each element, excluding any with modelled data

[49] https://www.instituteforapprenticeships.org/reviews/funding-review/

Eligible costs compared with income received (up to funding band maximum)

10.6 As shown in Figure 10.1, based on subtracting total calculated eligible costs (including the fee for EPA, as reported by training providers) from income received up to the maximum funding band as reported by providers and then calculating the difference as a proportion of the income, in over three-quarters (77%) of data points collected, the calculated cost of delivery was below the reported income received up to the maximum funding band. This meant that just under a quarter (23%) of calculated eligible costs exceeded the reported income received.

Figure 10.1 Distribution of differences between calculated eligible costs and reported income up to funding band maximum



Base: all data points collected where income was reported, excluding those with modelled costs (173)
Each column in the chart represents one data point

10.7 It should be noted that these figures do not necessarily represent surplus or loss as such, and extrapolations around profit cannot be made from this data, as we cannot tell in reality if there is a surplus or loss, and what the extent of this might be, due to the fact that:

- Data was based on self-reported figures;
- Ineligible costs such as contributions to overheads were not included (meaning total costs could be higher);
- Any additional income received from employers above the funding band maximum was not included (meaning actual income could be higher);
- The reported income received up to the funding band maximum could have included additional payments made by the employer for additional training (costs for which were not included here); furthermore, reported income may also have factored in additional

government payments outside of the funding band (for example for younger learners or care leavers);

- Figures for individual standards are here being looked at in isolation, when in reality they were usually just one aspect of a larger overall picture of delivery expenditure and income, with training providers often working on the basis of achieving sufficient contributions to overheads and re-investment across the department or organisation as a whole;
- For Employer Providers, this analysis does not reflect any wider business costs and income / economic value associated with the apprentice's day-to-day role as a productive worker;
- Providers were often in different stages of delivery maturity, and markets for some apprenticeship standards were still emerging;
- Some training providers emphasised that the staff hours and costs they reported were minimum levels required to deliver the standard and, in reality, some apprentices might need more, which would increase costs in those cases;
- Similarly, several training providers mentioned that the amount of time different employers were prepared to spend supporting apprentices would vary, and where this fell below the necessary level, the training provider would need to increase their own time, and therefore costs, to support the apprentices; and
- In some cases, estimated figures were provided by respondents, particularly where no learners had gone through EPA at the time of fieldwork; these could potentially be either over- or under-estimates, meaning actual delivery costs could increase or decrease.

Gap between eligible costs and income up to funding band maximum by level

10.8 Table 10.2 presents the mean and median difference between the reported income received up to the funding band maximum and the total calculated eligible cost at each data point collected, alongside the mean and median difference between calculated eligible costs and reported income, split by level. This indicates that on average, the calculated eligible cost reported for standards at each level was within the maximum funding band, with Levels 3 and 4 having the largest differences between calculated eligible costs and reported income, while Levels 2, 5, 6 and 7 had lower differences between calculated eligible costs and reported income.

Table 10.2 Difference between calculated eligible costs and reported income up to funding band maximum per learner, by level

	Base	Mean reported income minus calculated costs	Median reported income minus calculated costs	Mean percentage difference	Median percentage difference
Level 2	*61*	£500	£627	0%[50]	15%
Level 3	*68*	£6,326	£5,928	34%	38%
Level 4	*15*	£4,073	£4,282	33%	44%
Level 5	*17*	£5,519	£1,739	28%	25%
Level 6 & 7[51]	*12*	£4,778	£3,467	18%	13%
Overall	**173**	**£3,638**	**£2,840**	**20%**	**30%**

Base: all data points collected with a cost for each element, excluding any with modelled data

10.9 Level 2 had the lowest mean differences between calculated eligible costs and reported income by a considerable degree, with a mean percentage difference of 0% overall. A key factor in the low difference at Level 2 was the relatively high proportion of data points at Level 2 where calculated costs exceed reported income (34%). Table 10.3 shows the proportion of data points at each level with calculated eligible costs under or equal to the reported income up to the funding band maximum. At all levels, only a minority had calculated costs exceeding the reported income received, but this was notably higher at Level 2 (34%) than across all others (23%).

10.10 Level 5 data points also had a higher than average proportion of cases where calculated costs exceeded their reported income (29%). In the cases at Level 5 where calculated costs exceeded reported income, the mean percentage difference was relatively low (at -9%). This was a much lower difference than among cases where calculated costs exceeded reported income at Level 2 (-67%). The Level 2 cases where calculated costs exceeded reported income covered a range of routes, and included delivery by ITPs, FE Colleges and Employer Providers.

10.11 The extent to which calculated costs often exceeded reported income among Level 2 data points could be related to these standards having a lower funding band maximum on average, presumably driven by their shorter average duration, making them more sensitive to any increase in costs (and making costs in excess of the funding band maximum appear proportionately larger). Among data points where calculated costs exceeded reported income, those at Level 2 had a mean funding band of £5,738, compared with £8,300 among Level 3, £9,000 among Level 4, £7,600 among Level 5, and £24,000 among Levels 6 and 7.

[50] The mean percentage difference was calculated as the mean of the percentage difference of each individual data point, therefore in this case the average percentage difference is zero, despite the average monetary figure for income minus costs being positive (£500).
[51] Due to low base sizes, Levels 6 and 7 were combined for this analysis.

Table 10.3 Proportion of cases with calculated eligible costs above reported income received up to the funding band maximum per learner, by level

	Base	Calculated eligible costs exceed reported income up to funding band maximum
Level 2	*61*	34%
Level 3	*68*	15%
Level 4	*15*	13%
Level 5	*17*	29%
Level 6 & 7	*12*	17%
Overall	**173**	**23%**

Base: all data points collected with a cost for each element, excluding any with modelled data

10.12 Lower than average differences between calculated eligible costs and reported income among the higher-level standards was confirmed by some of the qualitative findings, where some training providers mentioned that higher level standards were more challenging from a cost perspective due to the nature of the qualifications included (for example, Higher National Certificates and Higher National Diplomas). Some higher-level standards also had high calculated delivery costs where some of the delivery was subcontracted to a university, which would be building in their own margins to the amount charged.

Gap between eligible costs and income up to funding band maximum, by course duration

10.13 Table 10.4 shows the mean and median cost differences between the reported income received up to the funding band maximum and the calculated total eligible cost at each data point collected, alongside the mean and median percentage difference. Courses with the shortest average duration of less than 18 months had the lowest mean and median percentage difference between calculated eligible costs and reported income. Mean percentage differences between calculated eligible costs and reported income broadly increased with duration, apart from a slight spike in the 36-47 months band. Median percentage differences between calculated eligible costs and reported income were more even across durations of 18 months and over, ranging between 30% and 36%, compared with an overall median of 30%.

Table 10.4 Difference between calculated eligible costs and reported income up to funding band maximum per learner, by average duration

	Base	Mean reported income minus calculated costs	Median reported income minus calculated costs	Mean percentage difference	Median percentage difference
12-17 months	*38*	£1,801	£808	11%	20%
18-23 months	*53*	£2,439	£2,178	15%	30%
24-35 months	*48*	£3,514	£2,985	22%	36%
36-47 months	*20*	£8,355	£7,395	40%	34%
48 months+	*14*	£6,851	£6,628	30%	32%
Overall	**173**	**£3,638**	**£2,840**	**20%**	**30%**

Base: all data points collected with a cost for each element, excluding any with modelled data

10.14 Table 10.5 shows the proportion of data points with calculated eligible costs in excess of reported income up to the funding band maximum. The longest duration apprenticeships (36-47 months and 48+ months) had the lowest proportion of data points where calculated costs exceeded reported income (5% and 7% respectively).

Table 10.5 Proportion of cases with calculated eligible costs above reported income received up to the funding band maximum, by average duration

	Base	Calculated eligible costs exceed reported income up to funding band maximum
12-17 months	*38*	26%
18-23 months	*53*	32%
24-35 months	*48*	23%
36-47 months	*19*	5%
48 months+	*13*	7%
Overall	**173**	**23%**

Base: all data points collected with a cost for each element, excluding any with modelled data

Impact of classroom delivery on the gap between eligible costs and income up to funding band maximum

10.15 Earlier in this report (chapter seven) we saw that classroom delivery to a group of students was more cost effective in terms of teaching staff costs per hour per learner than other forms of delivery. Qualitatively, training providers also mentioned the economies of scale that classroom delivery brings compared with travelling out to visit individual or smaller groups of learners.

"The more apprentices that there are within a geographical area, the more scope there is to teach in groups, which would reduce some of the one-to-one costs."

FE College

10.16 This is reflected in Table 10.6, which shows that the mean and median differences between calculated eligible costs and reported income were higher for cases where the delivery included an element of classroom training, compared with cases where no classroom training was included. This is likely to be because those with no classroom teaching had higher calculated teaching costs (a mean £180 per month per learner, versus £160 where classroom training was offered), combined with a lower mean funding band among those with no classroom delivery (£7,361 compared with £12,879 among those with classroom training included).

Table 10.6 Difference between calculated eligible costs and reported income up to funding band maximum, by inclusion of classroom delivery

	Base	Mean reported income minus calculated costs	Median reported income minus calculated costs	Mean percentage difference	Median percentage difference
Delivery included classroom training	*157*	£3,885	£3,229	23%	30%
Delivery did not include classroom training	*16*	£1,220	£560	-4%	12%
Overall	**173**	**£3,638**	**£2,840**	**20%**	**30%**

Base: all data points collected with a cost for each element, excluding any with modelled data

Overall picture

10.17 Overall, comparing training provider costs against income presents a mixed picture. More widely, when asked about overall surpluses or losses in the business, training providers reported that where a surplus was made, this tended to be reinvested and used to offset provision where costs exceed income, while conversely other provision was often used to offset delivery where calculated costs exceed the reported income.

10.18 Although there was some indication that differences between calculated eligible costs and reported income were lower for the lowest and highest level standards, and that differences between calculated eligible costs and reported income were lower for courses with an average duration of less than 18 months, it should be noted that within each level and duration band there was a mix of training providers with calculated costs both exceeding or below the reported income received; this was also true for other factors such as route and provider type. It would appear that the inclusion of classroom or group delivery brought cost efficiencies that allowed greater differences between calculated eligible costs and reported income to be achieved, a factor also mentioned by training providers in their qualitative feedback (discussed in the next section).

10.19 The qualitative feedback also revealed a tendency for costs on newly delivered programmes to be higher than the income received, but with an expectation that per learner costs would be likely to reduce over time, due to being able to attract greater numbers of learners, to introduce more cost efficiencies through experience, and once current unknowns, such as EPA re-take levels, could be better planned for.

10.20 It was also clear from discussions with training providers that, in most cases, there was a complex interplay between delivery of an individual standard, and other apprenticeships and courses offered by the same provider. For example, economies of scale could be realised

where teaching staff were utilised across multiple courses. This is discussed in the following section of this report.

Training provider feedback on costs compared to income

10.21 A majority of respondents said they looked to make a surplus on the delivery of each standard, that is, they aimed for their delivery costs to come in below the price charged. Where training providers said that a surplus was sought, around half said it was a separate line in their management accounts and half that it was built into other costs.

10.22 Where a surplus was sought on apprenticeship delivery this ranged from a target of 5% to 50% of total income, but again it should be noted the various reasons why this should not be read as a calculation of profit, as providers may be including additional non-related income and ineligible costs, and some providers also struggled to identify their per learner costs; while just under a fifth (18%) said they knew the exact per apprentice cost of their delivery, the same proportion (18%) said they did not know the cost at all, while the remaining cases (64%) said they had an estimate of the cost, but not an exact figure.

10.23 Several providers, mostly FE Colleges, stated target margins of 50%, covering a range of levels and routes. One clarified that this figure would be the expected surplus once direct costs (teaching, assessment, materials costs) had been deducted; another described the desired surplus as a “50% sustainability contribution” that was used to cover general overheads, as well as allowing them to offer other standards that were loss making or breaking even. Note that some costs that the surplus was described as contributing to would likely be eligible items, which makes this target surplus on government funding sound higher than it might be in practice.

10.24 Around half of training providers at the qualitative stage said that they were currently able to deliver the standard with at least some surplus, which was a lower proportion than the 77% of data points which had eligible costs that were lower than income received. In addition to previous caveats around the calculation of differences between reported eligible costs and reported income using this data, reasons for this discrepancy could be that training providers were factoring in non-eligible costs such as contributions to overheads, or that their calculations were based on an earlier stage of delivery – new courses were widely expected to be more costly to run than more established delivery.

10.25 Where training providers reported that their costs exceeded the price, a number of issues tended to be raised:

- Relying upon other course provision to balance the books;
- Looking to build up numbers of learners, especially where a course was new, to utilise economies of scale going forwards;
- High levels of variability in the costs between individual cohorts or learners;
- Looking to introduce efficiency savings, again particularly in the case of new delivery; and
- Considering potentially withdrawing their provision.

10.26 One ITP said that when developing a new programme there was acceptance that it might be difficult to build up the numbers of learners in the first year to fully comply with the provider's cost model. An FE College also mentioned that although their current cohort of five learners

was costing them more to deliver than they received in income, they could deliver to a group of up to 20 learners for the same amount of staff time, which allowed them to deliver the standard with some surplus.

10.27 Some training providers felt that costs exceeding income was something that could be managed in the first few years of delivery, but there would be a point at which the training provider would need to decide whether it was worth continuing if the desired surplus level had not been achieved. There was also a common assumption that the funding band could be reduced, and some providers reported factoring potential price reductions into the costing of provision.[52] Another training provider said that it was able to operate its apprenticeship delivery with a surplus, but sometimes it was as low as three to four per cent (they were looking for 10 to 15 per cent) and if it dropped below the three per cent level then they would cease to provide the course (which they stated had happened in the past).

10.28 Several training providers also mentioned that due to the early stage of delivery on the standard, it was not yet possible to tell what their final margins would be. This was particularly the case where no learners had yet reached gateway or gone through EPA. Although training providers had estimates for levels of training and preparation needed and estimates for likely proportions of learners needing to re-take, these had not yet been tested.

"The uncertainty for us is the additional cost for all the apprenticeship administration, monitoring, quality control, Ofsted and all of that additional stuff that's being brought on us. It's quite an unknown quantity for us. There is a huge amount of risk therein for us."

Independent Training Provider

10.29 Around half of training providers at the qualitative stage felt that their costs were exceeding their income on the standard or standards under discussion, although this was sometimes based on cost estimates rather than definite figures, and was likely to refer to *all* costs, not just those eligible for government funding. In some cases, this difference between their costs and the income received was such that they were considering stopping delivery of the standard:

"This standard is very close to being stopped… I would think we are losing around two to three thousand pounds per learner on this programme."

Independent Training Provider

10.30 Many training providers with delivery costs currently exceeding income reported that their aim would be to reach a point where the income simply covers their costs, rather than bringing in a surplus; although in order to cover costs ineligible for funding, such as general overheads and maintenance of equipment, this could mean generating a surplus in terms of eligible costs.

"All I want to do, is do what we do well, and turnover enough so that we can pay our staff. We want to maintain the contracts and help others and live our lives."

Independent Training Provider

10.31 In some cases, it was hoped that by improving and streamlining their delivery models, and by increasing the number of learners, costs could be brought more in line with income levels in

[52] Where funding bands have been reviewed thus far, bands have been both reduced and increased: https://www.instituteforapprenticeships.org/reviews/funding-review/

the future. A couple of training providers also mentioned reviewing or reducing the geographical scope of their delivery, as large amounts of travel time for tutors increased costs.

10.32 Where training providers were faced with a situation where costs might exceed funding, some said they were prepared to approach employers to see if they would meet the difference. Where additional funding from employers was sought, training providers said that it was large employers who were more willing to agree to pay more. In many respects, training providers' responses to costs exceeding funding depended upon the scale of this, as the example below from an ITP demonstrates.

Costs exceeding funding: ITP example

This ITP offered a standard on the Business and Administration route but could not deliver the course within the maximum funding band, so requested a supplement from employers of around £1,000 - who they found were willing to pay it.

The funding band cap was then reduced. The provider felt that it could not ask employers for more, so it decided to look for efficiency savings – mainly by using less expensive coaches to deliver the course. The upshot of needing to ask employers for a financial contribution was that it reduced demand from non-Levy paying companies because it would mean asking them for the above supplement plus five per cent (as per employer contribution rules).

10.33 Many training providers pointed out that any losses on individual standards would generally be balanced out across other apprenticeships or training courses, either across the whole organisation or within a particular department. Several training providers mentioned that they did not track income and costs on an individual standard basis but would keep track within a department as a whole.

"There are other areas where we deliver commercial training and we use the same staff to deliver that training, so all the training combined [makes a surplus]… we are not just [public] funded delivery."

Independent Training Provider

"Some you'll make a little bit more and some you'll make a little bit less… sometimes it's ok because with the Healthcare ones we know that it's actually going to be very poor for us, but in some of the other areas, in Digital for example, we know that actually we do have a little bit more… so we can offset that."

FE College

10.34 Occasionally other activities, such as the leasing of buildings, would also be used to supplement income and ensure the sustainability of the business as a whole.

10.35 A few training providers operated certain standards as "loss-leaders", where it was known that the standard would not in itself generate any surplus, but nonetheless brought benefits to the business in other ways, for example attracting and retaining certain employers, or providing a necessary service in the local area.

"We don't aim for a profit or surplus. This Level 5 standard is on the back of some pretty large employers. We deliver it in relation to a service agreement and if we didn't deliver the standard, we would lose the contract, so we don't just do the standard delivery with this employer, we do other things. It would be nice to make a profit but in the rural areas we deliver this standard we probably make a loss."

Independent Training Provider

10.36 Some training providers mentioned that they needed to achieve quite high margins on the apprenticeships they delivered in order to ensure the sustainability of their organisation. For example, one FE College said that surplus was needed to contribute to the college overall, funding investment back into the building and facilities as well as paying off loans; this contribution rate needed to be around 52% for it to be viable for them to run the programme (this figure does not necessarily represent a profit margin based on eligible costs, as this level would be outside of expectations, however it reflects the level of operating costs that need to be covered within the income for the standard; some of these costs, such as room hire for delivery, would be considered eligible for funding). Another FE College aimed for similar contributions in order to invest back into the business:

"We are looking for lecturer costs to be around 50% of the income, but obviously we are making a 50% contribution to the centre."[53]

FE College

10.37 As discussed previously (see paragraph 10.24), several providers stated that they aimed to achieve a surplus or contribution of level of around 50% to put towards overheads costs; in some cases, this would be 50% after direct costs were deducted, rather than 50% of the total income, and in other cases the provider noted that achieving this level of margin on some standards allowed them to continue offering loss-making or breakeven standards.

10.38 A couple of training providers also cautioned that although they believed they were currently achieving sufficient margins in their delivery, this could be at risk depending on the level of support needed for learners to pass the EPA, and whether or not they need to re-take, something unknown at the moment if their apprentices had not yet reached gateway.

[53] It should be noted that some of this 'contribution to the centre' may be costs eligible for funding.

11 End-Point Assessment

Introduction

11.1 This chapter covers the costs of end-point assessment (EPA), covering both the costs incurred by end-point assessment organisations (EPAOs) themselves, and the fees paid by employers, via training providers, to EPAOs in return for the assessment.

11.2 All apprentices on apprenticeship standards must go through EPA to ensure that apprentices have achieved occupational competence. EPA is conducted independently of the training provider, and only organisations on the register of EPAOs are able to conduct EPAs. It is the employers' responsibility to select the EPAO they wish to use from the register.

11.3 End-point assessment is a new feature of apprenticeship standards (that was not a requirement for apprenticeship frameworks). Because of this the market for EPA is in a relatively early stage of development. Many EPAOs reported it being 'early days' and that the volume of learners they had assessed was only just starting to increase after a significant period of development. Similarly, and particularly with standards that were of a longer duration, some training providers had not put any apprentices through EPA at the stage when their data on delivery costs was collected.

11.4 Against this backdrop, there was still a lot of uncertainty within the market as to the amount employers would be charged for EPA, the extent to which re-takes would be a feature, the cost for EPAOs to deliver assessments, and the volume of apprentices each EPAO might eventually be assessing. EPAOs were still at an early stage in the development and delivery of EPAs at the point of fieldwork, therefore a number of costs were estimated. While all EPAOs that gave a detailed cost-breakdown had conducted at least one EPA, in some cases only a handful of EPAs had been delivered so far (and in one case, an EPAO had only conducted an EPA for one of the two standards they gave costs for). **As such, data presented in this chapter should be treated with caution** - these findings give an early view from the market on the costs associated with EPA, rather than a definitive view. As more apprentices complete EPA the costs associated with delivery will become clearer for EPAOs, and this chapter is a snapshot of the picture between March and July 2019 that may warrant re-visiting in the future as the market further develops.

11.5 As outlined in the introduction, the research gathered cost data from eight EPAOs covering 17 standards. The data was therefore based on a relatively small sample size and did not cover all standards. By assessment method, seven types of assessment method were covered:

- Written or online knowledge test;
- Observation or practical assessment;
- Professional dialogue or viva;
- Interview or panel discussion;
- Portfolio or log book;
- Presentation or showcase; and
- Case study.

11.6 EPAOs were asked to break down their costs (including staff time and direct costs) between the setup and development costs of each EPA; assessor recruitment and training; ongoing assessor costs; travel and subsistence costs; room costs; internal and external quality assurance costs; and any other costs.

11.7 In addition to the cost data covering 17 standards, five qualitative follow-up interviews were undertaken to gather more strategic insight into the costs of EPA delivery and commercial decision-making, and this material is covered throughout the chapter.

Payments and contractual relationship between employers, training providers, and EPAOs

11.8 The ESFA's funding rules outline that it is the responsibility of the employer to select an EPAO from the register of EPAOs, and to negotiate a price for EPA with that EPAO. However, in practice, the provider would often lead on engaging with the EPAO, with payment being routed through the training provider. This meant that funds were paid - either from the employer's apprenticeship service levy account or from the government - to the training provider, who then passed on the payment for EPA to the EPAO. The training provider often held a contract directly with the EPAO setting out the agreed terms, including arrangements for re-takes and payments.

11.9 It is also the responsibility of the training provider to complete the ILR fields for the assessment price and EPAO identifier as soon as the price and EPAO is agreed with the employer.

11.10 The employer is required to select the EPAO and negotiate a price at least three months before the apprentice reaches the gateway; therefore, it is possible that the selection of the EPAO and negotiation of the price for EPA could happen after the employer and training provider have agreed the overall price for delivery of the standard.

Price reported by training providers for end-point assessment

11.11 In terms of the fees that training providers reported for EPA, Table 11.1 shows that in general EPAOs were charging less than 20% of the funding band. The EPA fee as reported by training providers, therefore including any surplus factored in by EPAOs, was 13% of the funding band on average, although as discussed below, depending on who bears the cost of re-takes this could push up employers' and training providers' costs as there was variation in whether costs of re-sits or re-takes were covered by employers or training providers.

11.12 Table 11.1 shows the mean, median, minimum and maximum costs for EPA fees reported by training providers, among the 204 training provider data points collected for each element of EPA. The re-sit fee presented in the second row of data is the amount the training provider reported they would be charged for a single learner to re-sit; the EPA re-sit cost average per learner in an average cohort (shown in the final row of data) calculates the total re-sit fees for a cohort based on the percentage of learners needing (or likely to need) to re-take, divided by the total number of learners in the cohort, to give an overall average 'per learner' cost for re-sits.

Table 11.1 EPA fees reported by training providers per learner, and re-sit fees per learner among training providers paying for re-sits

	Base	Mean cost	Median cost	Minimum cost	Maximum cost	Mean % of funding band
EPA fee	*204*	£1,554	£1,200	£350	£5,400	13%
EPA re-sit fee (per learner needing to re-sit)	*93*	£867	£750	£50	£3,634	8%
EPA re-sit fee (average per learner across cohort)	*22*	£190	£75	£5	£1,000	2%

Base: all data points collected with a cost for each element

11.13 There was a mix between training providers paying for EPA re-sits or re-takes[54] themselves and the employer having to pay. In over three-fifths (63%) of provider data points collected, the provider paid for the cost of apprentices re-sitting or retaking EPA, while in the remaining two-fifths (37%) of cases the employer paid. Some EPAOs may also offer a free re-sit opportunity, although that was not mentioned in this research.

11.14 It is likely that a proportion of re-sits and re-takes may be partial, where only one assessment method requires a re-sit or re-take; some providers factored this into the average re-sit fee they reported, hence the mean re-sit fee being £867 compared with a mean EPA fee of £1,554. Additionally, some EPAOs may offer discounts or free re-sits, as mentioned above.

11.15 Many training providers were unsure at present as to what proportion of apprentices would need to re-sit or re-take, due to limited numbers of apprentices having reached the point of EPA so far. Training providers estimated that around 12% of their apprentices would need to re-sit or re-take some or all of their EPA; these estimates were largely based on re-sit and re-take proportions apprenticeship frameworks or other similar courses that had been running for longer. Assuming the given proportion of learners within a cohort did need to re-sit, the re-sit fees would work out at a mean cost of £190 per learner across the whole cohort (though caution should be taken with this figure, as it was based on just 22 training providers that gave estimates for both re-sit fees and the proportion likely to need to re-sit or re-take).

Costs of delivering EPAs by EPAOs

Total steady state costs

11.16 Steady state costs of EPA delivery included all ongoing costs that would be incurred as part of the regular delivery of EPAs, but excluded any costs incurred as part of set-up and development, which were not eligible for government funding (these ineligible costs are discussed later in the chapter). To reach a per EPA cost, total figures were divided by the number of EPAs the EPAO **anticipated delivering** per year once they were fully up and

[54] A re-sit is when an apprentice undertakes assessment again without receiving any additional training, whereas a re-take involves additional training as well as assessment.

running (note that current numbers of actual EPAs delivered are considerably lower, due to the early stage of the development of the market).

11.17 Based on this anticipated steady state volume of EPAs, the calculated eligible cost per EPA was a mean £457 (median £399). However, as mentioned, current delivery levels are lower than the anticipated steady state, and therefore the current cost on a per EPA basis would be considerably higher. This was reflected in the fees currently being charged per EPA, with a mean fee of £1,121 and a median of £825.

11.18 The mean fee reported by EPAOs (£1,121) was lower than the mean fee reported by training providers (£1,554, see Table 11.1). A similar difference exists when looking at median fees, albeit at a lower level (the median EPA fee reported by training providers was £1,200 compared with £825 reported by EPAOs). This difference was primarily a factor of the wider range of standards covered in the training provider data, as the training provider dataset contained a number of standards at the highest funding band not covered in the EPAO dataset.

11.19 While most EPAOs said that there would be no variation in the fee per EPA for a specific standard, some did offer different fee levels depending on circumstances; for example, offering a lower price if the assessment was carried out remotely rather than face-to-face, or discounts based on the size of the cohort. One mentioned a lower fee might be offered to a high-profile customer for relationship building reasons.

11.20 The expected steady state cost per EPA exceeded the fee charged in only two of 17 cases; one by around £50, and the other by £315.

11.21 There were a variety of reasons EPAOs might still decide to continue providing EPA for standards that were making a loss. One EPAO explained how the EPA could work as a loss leader and lead to a 'cross-pollination' and bring in business for the assessment of other standards. Others explained that they had to go into certain areas to keep up with their competitors, and a number noted they did not expect to see a return on the investment for several years.

"Some standards we think are going to be really good for the business in terms of income generation and some are loss leaders… it is great to have [hospitality standard A] if you are working with a provider who wants to do hospitality because they might not have lots of [hospitality standard A] learners but as part of the service they don't want to have a different provider for doing [the hospitality standard B]... [it] allows us to cross pollinate and to get business... they want to use somebody who can [assess] both."

End-Point Assessment Organisation

"[We] aim to make a surplus as it was loss making for a number of years; now we are getting a return on investment… we have not had a surplus on the 30 put through in 2018. As the volume increases in 2019, we will…. we are pretty much where we expected to be."

End-Point Assessment Organisation

11.22 In all other cases (15 of 17), the fee charged by the EPAO was greater than the anticipated steady state eligible delivery cost, although in some cases this difference was marginal. Where the fee being charged for EPA was lower than 20% of the funding band, an EPAO had the option to increase fees if increased volumes did not bring about sufficient cost savings.

However, this would also depend on employer and training provider willingness to pay more, and the price offered by competitors.

11.23 Where anticipated steady state costs appeared lower than the fee charged, this could be used to offset other EPAs. One EPAO mentioned that they look at EPA costs and income as a whole, rather than at an individual level for each standard; therefore, underperforming standards would be offset by those which were generating a surplus.

11.24 Due to the early stage of EPA delivery, most EPAOs were not yet able to say whether they would make a surplus; in some cases, their forecasts suggested that offering the EPA should generate a surplus once they were running at a desired steady-state level; however, it is too soon to say if these forecasts will prove accurate. While one EPAO stated they had "no concerns" based on the numbers registered so far, another noted that:

"The estimated number of EPAs that were expected to be delivered have so far not materialised, as providers are delaying the start of EPAs. [We were] expecting numbers to come through earlier, but it appears that providers and employers either aren't ready, or providers are taking apprentices through the new standard very slowly because they are unsure of what to expect."

End-Point Assessment Organisation

Margins

11.25 EPAOs were nearly always looking to make a surplus on their activities. There were instances where EPAOs were not currently making a surplus and were considering whether to continue offering an EPA:

"Our financial year is the calendar year, so I think we're committed to another year… I would say we have another eight months before the business really needs to make a call on whether we stick with this or not."

End-Point Assessment Organisation

11.26 In the longer run the aim was to gain high volumes of activity and gain efficiency savings, for example through delivering assessments remotely. The fact that EPAOs were in the process of developing their EPA capacity might explain to some degree their willingness to absorb certain costs.

Assessor costs by assessment method

11.27 As assessor costs made up a considerable proportion of the overall steady state cost per EPA, these are discussed in more detail below. The chapter will then examine how other costs build up to create the total steady state cost presented in the previous section.

11.28 Assessor costs were affected by the proportion of time each assessor spent on the standard in question. Where assessors were utilised over multiple standards, this brought costs down, but where an assessor spent all of their time on one standard, this typically increased the overall cost, as it generally meant more assessor time was spent on the standard. In some cases where assessors would cover multiple courses the proportion of assessor time needed for the standard in question was estimated based on the anticipated volume of EPAs per year. Several EPAOs also said travel costs for assessors were an estimate, based on experience so far, but multiplied up in line with the anticipated annual number of EPAs.

11.29 As the amount of time spent by assessors on different assessment methods included in the assessment plan could vary considerably, EPAOs reported assessor time and related costs such as travel for each assessment method within the EPA. Table 11.2 presents assessor costs split by assessment method. It is important to stress that the averages for each method are based on a low number of responses, in some cases fewer than five, and therefore should only be treated as indicative.

11.30 In order to reach a cost per EPA, the costs provided were divided by the total number of EPAs that the EPAO **anticipated delivering** once they are fully up and running (Table 11.2).

11.31 As mentioned above, the actual number of EPAs delivered so far was considerably lower than the annual volume EPAOs anticipated delivering once they reached steady state; therefore, looking at their per EPA costs based on **current volumes**, some EPAOs mentioned that they were currently operating at a loss, due not only to considerable initial setup costs, but also due to low volumes of learners currently going through EPA for some standards (for example, where not many learners have reached the EPA stage yet). Both factors meant that in some cases anticipated efficiencies had not yet been achieved.

Table 11.2 Ongoing costs of assessor time based on assessor salary by assessment method

Assessment method	*Base*	Mean number of EPAs anticipated per year	Mean cost per EPA, based on number of EPAs anticipated per year
Written or Online Knowledge Test	*<5*	597	£36
Observation or Practical Assessment	*9*	192	£100
Professional Dialogue or Viva	*10*	245	£72
Interview or Panel Discussion	*<5*	218	£55
Project	*	*	*
Portfolio or Log Book	*5*	480	£34
Presentation or Showcase	*<5*	301	£45
Employer or Peer Review	*	*	*
Verbal Knowledge Test	*	*	*
Other ('Case Study')[55]	*<5*	133	£46

Base: all data points collected with a cost for each element
Asterisks show assessment methods for which no data was collected

11.32 EPAOs reported that the number and type of assessment methods attached to a standard influence the overall cost of delivery, with multiple modes of assessment within a standard and face-to-face assessments increasing costs. While the cost of conducting the actual assessment may be similar for remote assessments compared with face-to-face, the travel and accommodation costs attached to face-to-face assessments made it a more costly method overall:

[55] 'Case Study' as an assessment method was included as an 'Other' category as the EPAO did not feel this method belonged in any of the other categories.

"Travel and accommodation, if the assessment plan needs them in a place for such a long time that they need to stay over… That's the clear line of cost that if it's remote… between £140 to £220 extra just because it's done face-to-face rather than remote."

End-Point Assessment Organisation

11.33 Some EPAOs described costs related to specific assessment methods:

- One mentioned that costs for face-to-face assessments could be reduced if the assessor was able to combine elements, for example practical observations and professional discussions on the same day. However, for some standards, multiple days of face-to-face time were required, one standard in the Catering and Hospitality route for example involved two practical observations which could not be held on the same day, thereby increasing costs for time and travel;

- One mentioned the portfolio or log book assessment method in particular, as they were doing a lot of work to educate training providers to ensure that submitted portfolios would become less lengthy in future, thereby reducing the assessor time needed to review them;

- Another provider mentioned that the knowledge test for the standard had been a far more expensive assessment component than they had originally envisaged, due to being very resource heavy:

"You need a platform to have a server, you need sound invigilation, you need a massive bank of questions, there's a lot of question analysis that goes into it."

End-Point Assessment Organisation

- An EPAO mentioned that they hoped that switching a short answer module from paper-based to screen-based would potentially bring about cost savings, as then the assessor would only need to be involved in the observation and interview modules which could speed up assessment and increase capacity.

Assessment costs by standard route and level

11.34 In this section we present the total steady state assessment costs of EPAs, which included the cost of assessor time, as well as travel and subsistence costs, room costs and any other costs. These costs exclude any development costs (that have previously been outlined) and quality assurance costs and other ongoing costs, which are discussed in the following section.

11.35 The total steady state assessment cost per EPA was derived from the following individual costs:

- Total cost of assessor time spent on the standard in question per EPA;
- Total travel and assessment costs per EPA;
- Total room costs per EPA; and
- Any other costs related to conducting assessments per EPA.

11.36 For each standard up to four different assessment methods could be used. The overall costs of these assessment methods were combined in order to attain overall costs of assessor time per EPA by standard.

11.37 Table 11.3 shows the average assessment cost per EPA based on the number of EPAs that EPAOs anticipated delivering per year, to give an indication of how steady state costs per EPA might look when provision is fully up and running. As noted previously, in most cases a much lower number of EPAs had actually been delivered so far, meaning the EPAOs' current per EPA costs will be considerable higher, however these figures would not be reflective of the longer-term delivery costs.

11.38 When based on the number of EPAs that EPAOs anticipate delivering once they are fully up and running, the mean overall assessment cost per EPA was £160, with a median cost of £123. The lowest cost per EPA was £26, heavily influenced by the high number of EPAs this EPAO expects to deliver per annum. The highest was £507, which was driven by high staff costs associated with using freelance assessors.

11.39 Assessor costs were raised by some EPAOs as having a significant impact on their overall costs, as in some cases the requirements for assessors could mean high salary levels were needed to attract qualified candidates. This was raised particularly for some Health standards, for example where the assessor also needed to be a qualified nurse, and within Financial Services and Engineering or Scientific routes, where potential assessors would need to balance their time against potentially well-paid jobs in the industry.

11.40 As assessor time made up a substantial proportion of the total assessment cost, figures for assessor time only are also presented in Table 11.3. The average cost for assessor time based on the total number of assessments EPAOs **expect** to carry out per annum was £146, with a median cost of £114.

Table 11.3 Total assessment cost per EPA (based on expected number of EPAs per year)

	Base	No. of assessments anticipated per annum	Total anticipated cost, per EPA	Total anticipated cost, per EPA - assessor time only
Mean	*17*	284	£160	£146
Median	*17*	250	£123	£114

Base: all data points collected with a cost for each element

Quality Assurance Costs

11.41 Costs given in this chapter so far have excluded any quality assurance costs. All EPAOs had some form of quality assurance of their EPAs. For the survey this was broken down into internal quality assurance (IQA) and external quality assurance (EQA). All EPAOs interviewed gave costs for IQA. Just over half of the EPAOs interviewed gave costs for EQA. Of those not giving a cost, a number stated that they were not currently charged for EQA, hence the EQA cost for most of these EPAOs was £0. In a few cases, the EPAO did not yet know what the EQA fee would be.

11.42 IQA usually related to activities such as checking the consistency of assessors, checking of assessment records, moderation of papers, and observations of assessors. IQA activities generally happened to a greater degree where new assessments were being run or new assessors were in place as there was more to check and quality assure. Some EPAOs mentioned that in these instances all assessments would be checked for the first few conducted. This was reflected in IQA costs appearing higher than EQA costs in a number of instances.

11.43 The average total internal and external quality assurance costs are presented in Table 11.4 based on the number of EPAs that EPAOs anticipate carrying out in this standard per year. Where nil values were given, these could potentially rise over time if the EQA providers who currently do not charge were to introduce charges, and as EPAOs who did not yet know their EQA fee begin to include this in their costs.

11.44 The highest EQA cost reported was £75 per EPA; the lowest EQA cost, where a cost was incurred, was £40 per EPA.

11.45 For three standards the EPAO gave a cost of zero for the EQA fee but did report some other internal costs associated with EQA returns and inspections. These costs are given in the 'other EQA costs' column in Table 11.4, and ranged from £5 to £7 per EPA, although at an overall level the mean cost was just £1 per EPA, due to the fact most EPAOs did not report any 'other' EQA costs.

11.46 All EPAOs had costs related to IQA. On a per EPA basis these costs ranged from £13 to £161 per EPA.

11.47 Total quality assurance costs, including both internal and external QA costs, and any other costs associated with quality assurance, ranged from around £13 per EPA to £264, based on expected numbers of EPAs.

11.48 EPAOs said that they included the cost of EQA in their EPA price. None reported any instances where the EQA costs had pushed the total assessment cost over the funding band allocation, although one EPAO recalled an early EQA quote they received proposing a fee of £140 per learner, which would have been prohibitive from a cost perspective.

11.49 A number of EPAOs were not yet able to give an estimate for the cost of running appeals. Those that provided a figure estimated the cost would be equivalent to up to £28 per EPA, though the lowest estimates came to less than £1 per EPA (note this was not per appeal).

Table 11.4 Internal and external quality assurance figures per EPA (based on expected number of EPAs per year)

	Expected EPAs per year	Internal QA costs per EPA	EQA fee per EPA	Other EQA costs	Cost of running appeals	**Total QA costs per EPA**
Base	*17*	*17*	*15*	*17*	*12*	***17***
Mean	284	£51	£26	£1	£9	**£82**
Median	250	£30	£0	£0	£5	**£70**

Base: all data points collected with a cost for each element

Ongoing supporting costs

11.50 EPAOs reported various ongoing costs to support conducting EPAs, including annual IT and software development costs, annual ongoing marketing costs, administration costs, and any other supporting costs. Other supporting costs mentioned were printing costs of EPA logs and trackers, provider and employer workshops and visits, travel costs, test writing and marking.

11.51 Most EPAOs stated that these costs were estimates at this stage, in particular IT costs, which could be difficult to apportion to individual EPAs.

Table 11.5 Ongoing support costs per EPA (based on expected number of EPAs per year)

	Expected EPAs per year	Administration costs per EPA	IT, marketing, training materials per EPA	Other supporting ongoing costs per EPA
Base	*17*	*9*	*17*	*7*
Mean	284	£160	£78	£126
Median	250	£132	£80	£32

Base: all data points collected with a cost for each element

External factors influencing steady state costs

Cohort size

11.52 While some EPAOs said that the number of apprentices being assessed within a cohort would not make a difference (although larger numbers overall would bring economies of scale in terms of spreading their initial development and setup costs over a larger number of EPAs), most EPAOs felt that larger cohort sizes would reduce costs. For example, working with a large employer with large cohort sizes made it easier to plan the time, capacity and availability of assessors, and, where an observation element was involved, assessors could maximise their efficiency by observing a whole group together. Another EPAO mentioned learners in some Construction standards could be assessed in groups of four which cut travel costs and overall workload.

11.53 One EPAO stated that whether larger cohorts or numbers of apprentices would bring economies of scale depends on the assessment methods being used. In the case of multiple-choice tests, there were increased setup costs as they could only administer a particular paper with a combination of questions for a certain number of learners; whereas if the assessment was, for example, a work-based project, it did not matter how many learners took it, as the method would remain the same regardless.

Apprentice characteristics

11.54 EPAOs did not feel that the age of apprentices undertaking EPA impacted on the cost of assessment.

11.55 The location of apprentices was seen as having a significant impact, particularly when the assessment needs to be done face-to-face. This was due both to the travel and accommodation costs involved in sending assessors to visit apprentices, as well as having to recruit assessors based across the country to ensure they could cover the necessary

geographical areas. Generally, where higher travel costs were involved, these would be absorbed by the EPAO, rather than being passed on to the employer.

Employers and training providers

11.56 Employers could impact on the cost of EPA delivery in a number of ways. EPAOs identified the number of employers they work with as one factor, as working with multiple employers or training providers brings increased support costs, compared with working with one employer or training provider with a large number of learners.

11.57 Some EPAOs mentioned that many employers, both SMEs and larger employers, do not engage with the EPA process sufficiently, or until late in the programme. Lack of employer engagement could lead to apprentices struggling more to complete the EPA; one EPAO cited working with a large number of apprentices on a standard with a low funding band, where it was taking learners around five months to get through the EPA process. By engaging the employer earlier in the process and providing more support, they were able to reduce this time down to around two months, thus reducing costs.

11.58 Training providers were seen as more demanding than employers, requesting support in up-skilling staff and requesting in-depth feedback on different elements of the process. Often employers were seen as delegating the decision around EPA to training providers, so the training provider became an intermediary between the employer and the EPAO, which could lead to confusion over who was responsible for what and could make apprentices unsure where to go for support. One EPAO felt that around 90% of the time apprentices were not sufficiently prepared to take the EPA:

"We've had quite a steep learning curve in terms of actually being able to support the apprentice, but also their line manager and the training provider to actually get the apprentice prepared. We've kind of developed resources on the go and that's almost become the norm for us."

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11.59 Employers could also constrain what technology was used in the EPA, some stipulated face-to-face elements, which increased costs. Another EPAO felt that training providers had an impact on the cost of the EPA, as they sought to get the best deal possible by negotiating what they would pay the EPAO. Some EPAOs felt that usually the employer was charged 20% of the funding band and then the training provider would try to negotiate a lower cost with the EPAO, without passing on the saving to the employer; this would go against the expected behaviour wherein training providers should be directly transferring the actual fee from the employer to the EPAO.

Ineligible costs – development and training

11.60 Given that EPA is a new feature of apprenticeships, EPAOs had invested time in developing and setting up their assessment infrastructure. Although these set up costs are not eligible for government funding, this section considers these set-up and other initial costs which included assessor recruitment and training, and the setup of assessments, development of materials, IT purchases and other equipment purchases.

11.61 As these investments would be expected to cover multiple years of EPA delivery, total initial investment costs are presented spread across the anticipated annual number of EPAs over three years, five years and ten years, to give an indication of how these costs on a per EPA

level should reduce over time. However, it should be noted that this is only a broad estimation, as other one-off costs could occur within these timeframes (such as having to recruit and train additional assessors due to increased volumes or staff turnover) which could increase the 'per EPA' cost, while the actual number of EPAs delivered over the time period could be higher or lower than currently predicted.

Assessor recruitment and initial training

11.62 The cost of recruiting assessors per EPA was calculated by combining the total cost of recruiting each assessor recruited and taking the proportion of their time spent assessing the standard in question, multiplied by the total number of assessors recruited. Initial assessor training costs were added to this, as well as any other initial costs related to assessor recruitment. Other recruitment costs included capital investment in training materials for recruiters, advertising costs, initial standardisation and shadowing new assessors, and assessor manager input. One EPAO also incurred a cost for digital voice recorders as part of their assessor recruitment.

11.63 This total was divided by the anticipated annual number of EPAs once they have reached steady state. However, as assessors were at times recruited on an 'as needed' basis, further recruitment and training could be necessary to deliver the expected annual volume of EPAs going forwards, therefore these per EPA figures may well be an under-estimate (once additional recruitment and training costs and staff turnover are factored in).

11.64 It should be noted that when validating the data, in some cases EPAOs were using assessors on a freelance basis; the average cost of recruiting these has still been included. Some EPAOs had to use estimates in this section where assessors would work across multiple standards, in terms of the time and costs that would relate to the individual standard in question.

11.65 When the steady state delivery volumes expected over a year are taken into account the cost of recruiting assessors was a mean £22 per EPA (and a median of £23), as shown in Table 11.6. As mentioned above, this may be an underestimate, due to the fact that additional assessors may need to be recruited and trained in order to reach the anticipated steady state number of EPAs per year. Based on the number of EPAs carried out so far, the mean total cost of recruiting assessors per EPA was around 10 times higher at £240, with a median cost of £138, however these reflect the very early stage of delivery at the point of this research.

11.66 EPAOs mentioned that recruiting assessors for Healthcare-related standards could be particularly challenging, due to the high levels of professional experience and competency required:

"Healthcare occupationally competent staff work primarily within the NHS, and they have a capacity issue even with their normal service delivery, some of those standards are so specialist they're almost like gold dust."

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11.67 One EPAO had to pull out of two Healthcare standards due to capacity issues as they could not recruit enough qualified staff. Another EPAO reported difficulty recruiting staff for a standard due to the requirement for the assessor to also be a qualified nurse, with an accompanying potential salary premium. Another EPAO had difficulties recruiting in sectors

like Engineering, Manufacturing and Science, as assessors in those areas charged premium rates and were scarce:

"Those assessors… there's not many of them, and they're a premium when you find them, bagging £1,500 per day, £1,000 per day sort of rates, because usually they're fully employed, usually have to take a holiday to do the EPA… You've almost got to incentivise them to take the work up… You have to have a dedicated resource to find the assessors because they are like unicorns."

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Table 11.6 Total recruitment and initial training of assessor costs per EPA

	Base	Mean cost	Median cost	Lowest cost	Highest cost
Costs based on annual expected EPAs	*17*	£22	£23	<£1	£64

Base: all data points collected with a cost for each element

11.68 Where costs were much lower in the overall calculations, this was due in part to a higher number of learners, as well as due to lower (or zero, where freelance assessors were used) training costs.

11.69 The costs of training assessors can also be examined independently on a **per assessor** basis. The average cost of initial assessor training per assessor was £941, with a median cost of £450.

Table 11.7 Total initial training of assessor costs per assessor

	Base	Mean cost	Median cost	Lowest cost	Highest cost
Costs based on annual expected EPAs	*16*	£941	£450	£56	£3,000

Base: all data points collected with a cost for this element

11.70 The initial costs of assessor training per assessor ranged from £55 to £3,000 per assessor. These higher costs were because the training was a detailed 12-month training programme, which included shadowing, delivery sessions and reflection.

11.71 As well as initial training, EPAOs also gave costs for the continuing professional development (CPD) of assessment staff. On an EPA level per year, assessor CPD costs varied from less than £1 up to £58, with the variation perhaps due to the fact that at this stage EPAOs could only estimate how much ongoing training would be required.

Table 11.8 Ongoing assessor training costs per EPA per year

	Base	Mean cost	Median cost	Lowest cost	Highest cost
Costs based on annual expected EPAs	*16*	£9.44	£4.94	<£1	£58

Base: all data points collected with a cost for this element

Setup and development costs of assessment

11.72 The assessment development costs for EPAs were calculated based on the staff time utilised for this purpose, the average salary of those staff, the costs of any external consultants and any other costs which EPAOs included in their assessment development. In order to attain a figure 'per EPA', these costs were then divided by the total number of EPAs the EPAO anticipated delivering per annum once all was 'up and running'. This figure was used, as opposed to the number of EPAs conducted so far, as some EPAOs had conducted a large amount of development but were still in the early stages of delivering the EPA in question.

11.73 Most EPAOs said that the figures given in this section were estimates, although they were felt to be reasonably reliable ones. Staff hours often needed to be estimated where time was recorded at a granular enough level to allow development work to be split out for a single standard. In a few cases average salary bands given were also estimates, due to the range of salary levels for staff involved. Costs related to specific setup costs such as IT investment and licence fees were felt to be accurate.

11.74 These development and setup costs are being treated primarily as one-off investments which will amortise over time, therefore these total costs are shown on a per EPA basis, based on EPA figures when up and running at expected 'steady state' numbers, spread over three, five and ten years (although it is likely that some further development will be needed in the future, meaning these estimates are likely to be underestimates to some degree). These time periods were chosen with regard to the minimum amount of time it is likely to take for EPAOs to reach full steady state delivery, versus the maximum amount of time the assessment might be expected to be running in a similar form.

11.75 The mean assessment development cost per EPA was £40 over three years, £24 over five years, and £12 over 10 years, with median costs around half that (at £16 per EPA over three years, and £5 per EPA over 10 years).

Table 11.9 EPAO Assessment Development Costs spread out over 3, 5 and 10 years (based on expected number of EPAs per annum), per EPA

	Base	Mean cost	Median cost	Lowest cost	Highest cost
Cost per EPA over 3 years	*17*	£40	£16	£1	£146
Cost per EPA over 5 years	*17*	£24	£9	£1	£88
Cost per EPA over 10 years	*17*	£12	£5	<£1	£44

Base: all data points collected with a cost for each element

11.76 The highest assessment development costs were for two standards with costs per EPA of £146 and £122 when spread over three years; this was followed by a standard with a cost of £109 per EPA over three years. Conversely, standards with lower assessment development costs included some with costs per EPA of £2 or lower when spread across three years.

11.77 The difference between the highest and lowest costs per EPA was caused by the difference in development time for the standards, as well as use of consultants and other additional development related costs. One EPAO had undertaken a significant development exercise across multiple standards, in addition to being a brand new EPAO set up for this purpose, and thus unable to make use of any existing assessment infrastructure. The other standards also covered by this EPAO had higher than average development costs due to this exercise. This included a high number of days for design and planning of the assessment for this particular standard.

11.78 In addition, this EPAO also had various 'other' costs they included in designing and planning, including for example the piloting and testing of test materials, for which the costs were several thousand pounds overall. The particularly high costs seemed to be driven by the large-scale development exercise conducted.

11.79 In contrast, an EPAO providing EPA for a standard in a different route had spent only seven days on the development of the assessment approach for this standard, meaning that their overall assessment development costs were lower. This EPAO had been operating in the learning and skills arena within the sector for well over 10 years, as such they did not use consultants or have any additional 'other costs', further bringing down their overall assessment development costs. Additionally, this EPAO anticipated conducting a higher number of EPAs per annum once everything was up and running, therefore further bringing down the costs per EPA.

Development of materials

11.80 The materials development costs for EPAs were calculated based on the staff time utilised for material design, the average salary of those staff, the costs of any external consultants and any other costs which EPAOs included in their materials development. Other costs given by EPAOs included editorial and publication costs, marketing and support materials, design of print materials and writing the end assessment guide. As with the assessment development

cost, to calculate a materials development cost per EPA the overall figure was divided by the number of EPAs the EPAO anticipates delivering once everything is 'up and running'.

11.81 The mean materials development cost per EPA was £15 when spread over three years, £9 when spread over five years, and £4 when spread over 10 years. Once again, the median costs were around half that level.

Table 11.10 EPAO Materials Development Cost spread out over 3, 5 and 10 years (based on expected number of EPAs per annum), per EPA

	Base	Mean cost	Median cost	Lowest cost	Highest cost
Cost per EPA over 3 years	*17*	£15	£7	£2	£50
Cost per EPA over 5 years	*17*	£9	£4	£1	£30
Cost per EPA over 10 years	*17*	£4	£2	£1	£15

Base: all data points collected with a cost for each element

11.82 The highest cost for materials development was £50 per EPA when spread over three years, and this was driven by a number of factors, including an above average number of days required for material design. This EPAO had also spent more than three times the average total amount on external consultants, and had a total of over £1,000 in other costs which were used on editorial and publication tasks related to assessment materials.

11.83 The lowest cost was £2 per EPA when spread over three years; this was driven by the lower number of days spent on material design overall, and the fact the EPAO had not used any external consultants and did not have any other costs associated.

Total Initial Design and Setup Cost per EPA

11.84 The total initial design and setup costs per EPA were calculated including:

- Total assessment development costs;
- Total materials development cost;
- Total IT Purchase costs;
- Total other equipment costs; and
- Any other initial design and setup costs.

11.85 The only costs included in the 'any other initial design and setup costs' category were for meetings with employers and construction costs associated with meeting the security requirements for becoming an EPAO, reported by one EPAO for three standards.

11.86 The mean total initial design and setup cost per EPA was £79 when spread over three years, £47 when spread over five years, and £24 when spread over 10 years; the mean costs were impacted by a handful of high figures, as shown by the median cost which was £27 per EPA over three years, falling to just £8 per EPA when spread over 10 years.

Table 11.11 Total initial design and set-up costs spread out over 3, 5 and 10 years (based on expected number of EPAs per annum), per EPA

	Base	Mean cost	Median cost	Lowest cost	Highest cost
Cost per EPA over 3 years	17	£79	£27	£4	£243
Cost per EPA over 5 years	17	£47	£16	£2	£146
Cost per EPA over 10 years	17	£24	£8	£1	£73

Base: all data points collected with a cost for each element

11.87 The highest cost reported was driven in part by the significant investment in IT equipment made by the EPAO for the standard, as well as both assessment development costs and materials development costs per EPA that were higher than average, at £208 and £77 respectively.

11.88 Some EPAOs mentioned that they would not look to offer EPAs for some standards due to the level of capital investment that would be required. For example, one EPAO said they were not offering EPA for hospitality standards as it would require a working restaurant standard kitchen, which they were not prepared to invest in. However, in cases where other equipment was required, they might try to work in partnership with an employer or training provider to share the cost of capital investment. An example of this were the standards within the Transport and Logistics route, where some employers would provide a vehicle for the practical test at a reduced EPA price.

11.89 Another EPAO stated that they would always use the training provider or employer's equipment when conducting assessments, rather than making the investment themselves:

"We're clear that when we're observing, we're observing the learners in their workplace undertaking their duties of work in line with their employment, therefore we're not saying that we need a salon, we're not saying that we need to provide the equipment. An apprentice is going to perform best in any type of assessment-type activity where they work and where they learn, so we are normally very clear that the onus is on the provider needing that specialist equipment."

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Total costs of EPA delivery – eligible vs. ineligible costs

11.90 This final section presents total costs incurred by EPAOs for elements that are not eligible for government funding, including all set up and development costs, and costs for the recruitment and training of assessors. These average total costs are shown on a per EPA basis, based on EPA figures when up and running at expected 'steady state' numbers, spread over three, five and ten years in Table 11.12. The average total eligible cost per EPA is shown alongside.

Table 11.12 Total ineligible cost per EPA spread out over 3, 5 and 10 years, and total eligible cost per EPA (based on expected EPAs per annum)

	Base	Total ineligible cost per EPA			Total eligible cost per EPA
		Over 3 years	Over 5 years	Over 10 years	
Overall mean per EPA	*17*	£89	£53	£27	£457
Overall median per EPA	*17*	£54	£33	£16	£399

12 Commercial decision-making among training providers and EPAOs

Commercial decisions among training providers on offering apprenticeship standards

12.1 Training providers pointed to a range of factors in deciding which standards to offer. In general, it tended to be a mix of the following:

- Assessment of the level of demand for a course (how many potential employers and learners would be interested);
- The level of funding available, and how this relates to likely costs; and
- Capacity to deliver the course.

12.2 A few training providers also mentioned that the skills policies of local authorities and Local Enterprise Partnerships (LEPs) was sometimes a factor in deciding what to deliver as was the availability of funding through, for instance, European Structural Funds.

12.3 One FE College explained the key decision-making process was as follows:

Decision-making process for offering an apprenticeship standard: FE Case Study

Need:

"Have we had an employer, or a number of employers ask us questions about it?"

Identifying specialist opportunities:

"There are some sectors we can look at it, you know there is some low hanging fruit… if you want a big cohort of that it shouldn't be too difficult to get it because every business needs that. But then there are some very specialist things like laboratory technicians where you have got to look at what businesses are around you, and, are we in an area that will generate enough supply for us to invest in staff and equipment if required to deliver that?"

LEP priorities:

"And then if it is a priority for an area that we want to get into as well as if it makes economic sense as well, we will try and generate employer excitement around it."

Commercial factors:

"If we pump it through a spreadsheet and it says this makes a reasonable contribution, then we would look at trying to develop it as an offer."

12.4 Other training providers explained the decision about what to deliver in more strategic terms. For example, an ITP described the process as follows:

'It starts with our business planning cycle, but before that we have a two to three-year strategic plan. Commercially we would look at the large employers and grow them to make sure that we've got capacity, and the reason why we do that is to make sure that we can support the small businesses locally."

Independent Training Provider

12.5 Others, particularly ITPs, were particularly driven by funding band, the potential costs and the potential margin it could deliver:

"If you look at it and think £3,000 for a big old standard – I don't think that is one we are going to do because we need a margin of profit because we are a private provider."

Independent Training Provider

Responding to employer demand

12.6 Training providers reported receiving requests from employers to deliver new standards, often as a result of the introduction of the Levy:

"With the Levy… we get new employers ringing that have never been engaged with apprenticeships before because suddenly their finance director has noticed all this money so they will say they want the new course or standard and not the old one … they will know very much what they want … if it is something we offer, great. If not, we will say let's have a look…"

Independent Training Provider

12.7 Training providers were also in regular contact with employers to see if there was a skills demand they could satisfy. Where training providers decided to develop a new programme to deliver a standard they had not delivered previously, they would then look to see if there was demand from other employers for that standard. The initial request from one employer could provide the base upon which the training provider could build provision by drawing in other employers. Some providers, for example, hosted forums – both on- and offline – whereby employers could put their requests to the provider.

12.8 In general, training providers were open to delivering new standards, but the decision depended upon being able to make a business case for doing so. If the new standard was within scope of their existing provision, then the more likely they were to agree to deliver a new standard. Some training providers reported that they might consider working with other providers to develop a new programme, or perhaps redirect an employer to an alternative training provider. It was not the case that an employer approaching a provider to deliver a new standard would need to supply a sufficiently large number of apprentices to cover all of the costs. Training providers were willing to use an initial approach as a basis to see if other employers would be attracted to the standard as well. As noted above, training providers were actively engaged with employers to assess what their skills demands were and how the training provider might meet them.

12.9 Employer demand could also impact modes of delivery, for example one ITP mentioned that they were starting to see a bigger drive towards e-learning, as one of their key employers was reluctant to release their apprentices to visit the provider. Although this went against the provider's own ethos of how to deliver high quality learning, it had moved towards delivering what the employer wanted by using e-learning alongside their face-to-face provision.

12.10 Training providers acknowledged the importance of meeting employer demands and expectations, as if they were not able to deliver courses to the satisfaction of learners and employers there would be substantial reputational risk. Some also pointed to the financial risk which might result from a fall in demand for a course if quality was perceived as being low.

12.11 For the most part, training providers indicated that they were able to manage employer expectations in terms of what the training would cover. Training providers typically consulted with employers in the first instance to explain how the course would be delivered and agree any employer requirements. Providers mentioned that if employers were too demanding then they were prepared to walk away:

"If the employer - I was going to say dictatorial - but if they mandate too much, in that respect, it won't allow us to deliver the programme... There are times when we would walk away."

Independent Training Provider

12.12 The evidence above provides an outline of how training providers managed the risk attached to delivering apprenticeship standards and investing in new ones. Overall, training providers revealed that they were:

- **Cautious with respect to investments in new plant, machinery and equipment.** There was some indicative evidence that this might lead to a reluctance to invest in those courses where apprentices need to have access to relatively expensive technologies, particularly if they were uncertain of the level of demand for a course. One FE College noted:

"'For example, cyber security [an apprenticeship we've decided not to deliver]…because we couldn't get enough interest in the course to generate return on investment to deliver that."

FE College

Some training providers had sought to find ways around this with at least one provider looking to employers to provide access to particularly expensive technologies. There was little evidence of training providers hiring equipment though some were looking into this;

- **Subject to a degree of uncertainty attached to providing courses, not least of which were changes in the maximum level of funding available** and the costs to be charged by EPAOs. With respect to the latter some providers assumed a 20 per cent charge where the EPAOs fees were yet to be determined though others thought this was probably too high with the cost tending to come in under this amount. Regarding funding band changes, although funding band reviews have led to both increases and decreases in funding bands, training providers were often concerned that the funding band might be decreased in the future which might impact whether they could deliver the course within budget, particularly if the course had been set up with a higher cost level in mind. Where the cost of delivering a course exceeded the funding available employers used a variety of means to balance the books, for example seeking efficiency savings in the way they delivered training such as delivering more training remotely/online; looking to the employer to contribute (more) to the cost; and looking for savings in staff costs;

- **Open to providing new courses that build upon existing delivery, but cautious about branching into new subject areas**. There was a degree of cautiousness here in that they preferred to deliver courses which were within their existing sphere of expertise. To this end a preference was expressed by some providers for delivering existing programmes to a higher

level so that they could build upon existing expertise. This related to the costs of developing new provision and ensuring that there was sufficient demand for it over the medium term, and ensuring that learning could be delivered to a high quality; and

- **Conscious of the need to deliver high quality training.** All training providers pointed to the reputational damage – and consequential financial damage - to their organisations if they failed to deliver a high quality of learning. Training providers had in place various systems for monitoring the quality of provision, for example measuring drop-out/success rates, collecting feedback from learners and employers, and sharing good practice within the organisation. Several respondents pointed to work carried out centrally within their organisation by quality assurance departments.

12.13 Despite the various difficulties that training providers alluded to, it needs to be borne in mind that for the most part they continued to deliver a variety of apprenticeship standards and were looking to invest, in some instances, in new ones. For the time being they had found ways around dealing with the financial uncertainties and attendant risks attached to their mix of provision.

Commercial decision-making among EPAOs

12.14 In this final section we consider in more depth what determines the commercial decision-making of EPAOs as to whether or not to offer EPA for a particular standard.

12.15 Overall, EPAOs reported that their decision-making was determined by a mix of:

- An opportunity to make a sufficient margin;
- There being a sufficiently large volume of learners to assess;
- The extent to which there were other EPAOs offering these EPAs; and
- There being a sufficient supply of assessors to carry out the assessments.

12.16 For example, one EPAO was looking for a gross margin of around 30 to 40 per cent which would contribute around 10 per cent to the company's bottom line (which would be outside expectations of margin levels). But it went on to say that they expected this element of their business to be loss making for the first two years as they developed their expertise in EPAs. Another EPAO said that it was looking to see how it could further develop its pool of assessors so that where new standards came on line or where employers were looking to develop standards, they would be in a better position to potentially meet the demand for EPAs.

12.17 EPAOs said that successful assessment was based on being clear about what was required – as sometimes there was a degree of ambiguity about what was needed – and having the monitoring in place to ensure that assessments were being conducted to plan. EPAOs said that in general employers had not made special demands with regard to how assessments should be carried out, sometimes because employers were not felt to be knowledgeable about the EPA process. EPAOs were sensitive to workplace considerations when planning assessments. For example, in some financial service organisations it was usually not appropriate to undertake assessments where money was being handled, and one EPAO for security reasons could not carry out the EPA in a nuclear power station. This was factored into the EPA process by the EPAOs.

12.18 One EPAO mentioned that it engages with employers and training providers to inform them about the EPA so as to avoid cost overruns – these included additional training materials, delivering free webinars for employers, learners and training providers, and preparing documents which outline the evidence requirements for EPA.

12.19 The impact of funding band changes on what they were able to charge for an EPA was mentioned by another EPAO, however, this was built into their initial costing:

"Often the funding band may change, which will then affect the maximum amount that we can charge in terms of percent etc… Fortunately, our assessments have been priced in the manner which wasn't anywhere near the cap, so we've had some room for the overall percentage to reduce."

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12.20 EPAOs were also asked about the impact of revisions to published standards. Some said this had already had a detrimental effect on them, with one having had to delay their entry into the market based on changes to a standard when they had already almost finished development of the EPA; another mentioned that in some cases they had only found out about changes to a standard very late, and that they would now incur extra costs revising their approach:

"I was on the Institute website and noticed that two days earlier or a few days earlier revised assessment plans for [the standard] had been published. Within that revision the short answer question test no longer featured as one of the assessment components, and so therefore instantly I'm out of pocket because I've spent money on an assessment tool that I no longer need, and I now don't have a current assessment offer that fits the new assessment plan."

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13 Conclusions

13.1 The Institute and the DfE continue to develop their evidence base on the cost of apprenticeships, to inform funding band recommendations and policy. This research supports that aim by providing recent and granular data on the individual costs associated with training and assessment across 54 apprenticeship standards.

13.2 The project provides the Institute and the DfE with an important body of evidence and has sought to understand the typical costs of delivering apprenticeship standards across different levels and sectors. It has examined in detail how these costs break down across different elements of training and assessment, the key factors associated with significant differences in costs, and explored the wider factors that affect providers commercial decision-making.

13.3 As well as considering the costs incurred by providers delivering training for apprenticeship standards, the research also collected preliminary data from eight EPAOs on the costs of EPA across 17 standards. It is early days for the EPA market, which is still developing, and this data gives an initial view on the costs of EPA across a small number EPAOs. It also highlights the key commercial challenges and opportunities the EPA market is facing.

13.4 Across the 54 apprenticeship standards covered by the research, the overall mean cost per apprenticeship for delivering elements of the apprenticeship standard eligible for funding ('eligible costs'), including the fee reported by training providers for the EPA, was £8,655 (the median was £7,058). Excluding the EPA fee, the mean total eligible cost was £7,101, and the median was £5,506. Around this average, costs **varied widely by a range of factors** including the following (mean costs are shown, these exclude the fee charged for the EPA):

- **Apprenticeship duration**: from £3,881 where the duration was 12-17 months, to £14,295 where it was 48 months or longer;
- **Level**: from £5,371 for Level 2 apprenticeships to £17,466 for those at Level 6; and
- **Route**: for routes with at least 10 data points, from £3,597 for Business and Administration to £10,656 for Engineering and Manufacturing.

13.5 **These factors interrelate** – most clearly higher-level apprenticeships tend to be of longer duration. When looking at *monthly* mean costs per apprentice, excluding EPA fees, costs vary less widely. For example, the monthly mean cost for Level 2 apprenticeships was £274 and for Level 6 apprenticeships was £312 (it was highest at Level 4, at £371 per month). In the same way, the monthly mean cost for Business and Administration and Engineering and Manufacturing apprenticeships was broadly similar (£216 and £296 respectively; it was highest for Digital apprenticeships at £503 a month).

13.6 Costs varied by provider size, with **larger providers (with 5,000 plus learners) reporting lower monthly mean costs (excluding EPA) per apprentice** (£226 per month, 47% of the funding band on average) than providers with fewer than 5,000 learners (£309 per month, and equivalent to 73% of the funding band on average).

13.7 Statistical analysis shows that a number of factors were most closely correlated to higher overall costs of delivering an apprenticeship, including: longer duration apprenticeships, higher total number of teaching hours, and higher average salaries of those delivering training; while

higher *proportions* of training time spent on supporting self-directed and distance learning or classroom training, and larger class sizes, were correlated with lower costs.

13.8 On average **eligible costs (excluding the fee charged for EPA) were equivalent to two-thirds (67%) of the funding band** for the apprenticeship standards. Overall eligible costs generally increase with the funding band, but there was no clear pattern when looking at monthly eligible costs. EPA fees reported by training providers were equivalent to 13% of the funding band on average.

13.9 The **largest share of eligible costs was made up of teaching costs** (45%, and just over half these costs were for face-to-face delivery). The remainder of total eligible costs per learner split relatively evenly across the fee charged for EPA (18%), administration (17%), and assessment costs excluding EPA (14%); consumables comprised the smallest proportion (6%).

13.10 The findings suggest a **complex interplay of factors drive costs** with specific route/level/duration combinations coupled with the approach to teaching delivery (for example teaching method and class sizes) and teaching salaries coalescing to drive costs. By considering the particular features of a standard, the granular findings can be used to help understand why certain standards may incur higher or lower delivery costs.

13.11 Turning to EPAOs, cost data needs to be treated with caution both because of a relatively low number of interviews and the nascent stage of the market with most EPAOs having assessed relatively few apprentices and hence significant uncertainty about numbers and costs. With this note of caution in mind, the early findings from the market found a mean cost to EPAOs for each EPA, based on the numbers they expect to assess *once the system is fully up and running*, of £457 per learner, against a current mean fee charged of £1,121 (note that these figures are not directly comparable, as the current fee may reflect current higher delivery costs per EPA, rather than the cost based on anticipated numbers). Costs and fees varied quite widely, from costs of £178 to £1,037 per EPA.

13.12 Key to the success of the apprenticeship market is having a strong network of training providers to deliver standards across all routes and levels, and as such it is important to understand the commercial decision-making of providers when considering which standards to offer (or discontinue). Commercial decision-making tended to be a mix of the **level of demand for a course** (and how many employers and learners would be interested), the **level of funding available and how that would relate to their anticipated costs of delivery**, and their **capacity/expertise to deliver** the course.

13.13 Overall, training providers noted there was a risk attached to delivering apprenticeship standards and investing in new ones, and they had to manage this risk. As such they were **cautious with respect to investments in new plant, machinery and equipment** that might be expensive; **subject to a degree of uncertainty relating to the level of funding available**; they were **open to providing new courses, but preferred to build upon existing delivery and expertise** rather than branching into new subject areas; and were **committed to delivering high quality training** and therefore were reluctant to expose their organisations to any reputational and financial damage that would be caused if they were not delivering high quality training.

13.14 Similarly, the apprenticeship market relies on the development of a strong network of EPAOs offering EPA for apprenticeship standards at sufficient volumes and appropriate level of quality for the number of learners coming through. The market is in its infancy, and some EPAOs were still operating at a level where they had only conducted low volumes of EPAs, and were still recouping development costs. As with providers, EPAOs had a clear set of commercial considerations they bore in mind when deciding whether to offer an EPA for a particular standard (or indeed whether they continue to offer EPA for particular standards in the future). Overall EPAOs reported their commercial decision-making related to a mix of the **opportunity to make a sufficient margin**, there being **sufficiently large volumes of learners to assess**, the **extent to which other EPAOs were offering particular EPAs**, and there being **a sufficient supply of assessors** to carry out the assessments.

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Whether employer or employee, client or collaborator, we are all humans first and foremost. Recognising this essential humanity is central to how we conduct our business, and how we lead our lives. We respect and accommodate each individual’s way of thinking, working and communicating, mindful of the fact that each has their own story and means of telling it.

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