Achievement and retention in post 16 education

A report for the Local Government Association

February 2015

centre for economic & social Inclusion

Local Government Association

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Executive Summary

This report provides a statistical overview of drop out and success rates for post-16 education and skills in England. We have looked at twelve indicators which together have the potential to provide a summary of the effectiveness of our education and skills system in retaining young people in education and achieving qualifications that will be of value in the labour market. Where it has been possible we have looked at trends.

There are human and financial costs every time a young person fails to complete a course or does not achieve a recognised grade. For the young person it means coping with uncertainty and a sense of failure and with hard decisions about what to do next. For schools, the Exchequer and the taxpayer there is the cost of providing education that does not result in a positive outcome.

It is therefore interests of everyone to minimise drop out and non-achievement and maximise retention and success rates. The decisions made by young people in terms of their post-16 education are critical, but there is a wide range of factors that contribute to retention and success rates.

Ideally, it would have been desirable to end up with definitive figures of the total number of 16-18 year olds that start but do not complete their post-16 education options. However, statistically this is difficult due to the possibility of double counting, therefore the analysis and description of the indicators is more complex than would normally be desired, especially when informing policy decisions. However, the following key points emerge from the analysis:

Retention

- Latest figures show 178,100 16-18-year-olds failed to complete all or some of the post-16 qualifications they started in 2012/13, including Apprenticeships
- There were just under 75,000 withdrawals from individual AS Levels in 2012/13, a withdrawal rate of 9.4% of all AS Levels
- There were around 22,000 withdrawals from individual A Levels in the same academic year, 4.8% of the total
- Data suggests that the number and rate of withdrawals from AS and A Levels has fallen in recent years
- Approximately 16,000 students from state-funded schools withdrew from all their aims they started in 2012/13, around 2.4% of the total
- Just over 97,000 learning aims in FE were not completed in 2012/13, 10.8% of the total number of aims started

- As with schools, FE retention rates of 16-18 year olds have improved markedly in recent years, with the number of aims not completed falling by almost 30% since 2006/07.

Achievements

- Around 13% of AS Level entries did not result in a passing grade in 2012/13 (150,000 individual exam entries)
- The failure rate for A Levels was just 1.3% (around 10,000 exam entries) in the same year
- Non-achievement rates for both AS and A Levels have generally been falling in recent years
- For most subject areas, progression rates from AS to A2 lie between 60% and 70%
- Success rates in FE have also been rising, although 15.7% of all learning aims (over 141,000) taken by 16-18 year olds did not result in qualifications (through both non-completion and non-achievement)
- Despite significant increases in Apprenticeship success rates in recent years, around 1 in 4 Apprenticeships started by 16-18 year olds are not successfully completed. This represented around 24,000 Apprenticeships.

Costs to the Exchequer

We estimate that the cost to the exchequer of post-16 learning aims that were started but not successfully completed to be approximately £814 million in 2012/13. This represented around 12% of the funding allocated to provision for 16-18 year olds. This figure has fallen across schools, FE and Apprenticeships in the last two years, with total costs to the Exchequer down by around £164 million (17%) since 2010/11.

Achievement and retention in post-16 education

This report examines the available evidence on the number of young people (16+) who drop out of education and skills courses or who are not successful. There are human and financial costs every time a young person fails to complete a course or does not achieve a recognised grade. For the young person it means coping with uncertainty and a sense of failure and with hard decisions about what to do next. For schools, the Exchequer and the taxpayer there is the cost of providing education that does not result in a positive outcome.

It is therefore interests of everyone to minimise drop out and non-achievement and maximise retention and success rates. The decisions made by young people in terms of their post-16 education are critical, but there is a wide range of factors that contribute to retention and success rates. It is not possible to disentangle the various influences on decisions to attribute the impact any one single factor will have, however the over-riding point is that all parts of the education and skills system need to be working effectively to minimise failure.

The main factors that could influence retention and success rates are:

- how schools and colleges are incentivised through their funding
- how performance is measured through league tables
- how quickly schools and colleges adjust to learner demand
- the perceived and/or actual rigour of curricula and exams
- the quality of teaching and class sizes
- the quality and amount of careers information, advice and guidance (CIAG) accessible to young people
- the perception of academic and vocational routes
- attainment levels in primary education, especially for English and Maths.

Over the last ten years there have been significant changes in some of these factors that will have had a direct (but unquantifiable) influence on retention and success rates. Particularly in the last four years it is probable that there have been changes whose impact is yet to be fully felt. For instance, CIAG is one of those changes

where there is widespread concern that without effective provision in every school and college could lead to poorly informed young people making choices that lead to higher levels of drop out and lower attainment.

This report provides a statistical overview of drop out and success rates for post-16 education and skills in England. Where it has been possible we have looked at trends. We have looked at 12 indicators which together have the potential to provide a summary of the effectiveness of our education and skills system in retaining young people in education and achieving qualifications that will be of value in the labour market.

Analysis of Indicators

Indicator 1 - Retention & Completion rates - A and AS Levels

Published statistics about A and AS Levels only relate to examination entries and grades achieved. With exam entries typically submitted around three months prior to taking them, this means that any students who may have started studying A Levels and dropped out prior to their examination entry being submitted are not covered in this publicly available dataset. The achievement rates of AS and A Levels are covered under Indicator 3, but in order to establish a more complete picture of retention and completion, a request for an extract of data from the National Pupil Database (NPD) was submitted to DfE.

Using post-16 learning aims (PLAMS[1]) data from the NPD, Table 1 shows that in 2012/13, of the just over 1.25 million learning aims that were started in schools (and for which final outcomes are recorded), there were over 152,000 withdrawals i.e. where the student didn't complete the course, accounting for 10.1% of all aims started. For AS levels, the withdrawal rate was slightly below average at 9.4% (with almost 75,000 withdrawals), compared to a rate of just 4.8% for A Levels.

Table 1: Withdrawal rate from post-16 learning aims in state-funded schools, 2009/10 and 2012/13, England

	2012/13			2009/10
	Withdrawals	Total starts	Withdrawal rate (%)	Withdrawal rate (%)

[1] PLAMS data is derived from the School Census, a statutory data collection for all maintained nursery, primary, secondary, middle-deemed primary, middle-deemed secondary, local authority maintained special and non-maintained special schools, academies including free schools, studio schools and university technical colleges and city technology colleges in England. Data is returned three times a year by schools, enabling effective tracking of all students' course choices, withdrawals and achievements.

AS Levels	74,600	792,200	9.4%	10.8%
A Levels	22,100	462,500	4.8%	9.0%
All post-16 learning aims	**152,200**	**1,254,700**	**10.1%**	**11.2%**

Source: National Pupil Database (PLAMS). Note: data relates to the number of learning aims, not the number of students. Post-16 learning aims include BTECs, City & Guilds, GCSEs taken post-16, Baccalaureates, and other qualifications and Levels 1,2 and 3.Table includes only those aims for which a final learning status is recorded i.e. excludes those who were recorded as 'continuing' in the PLAMS dataset.

Establishing a clear trend in terms of withdrawal rates post-16 is difficult due to some quality issues with the PLAMS data relating to learning completion status in certain years. For example, in 2011, just over 11% of learning aims (around 234,000 records), had no completion status recorded. NPD guidance documentation[2] states:

'Since 2006/07, the method of collecting learning aims data has changed. The quality of the data has improved and the resulting NPD extracts produced have altered in nature. Therefore, care should be taken when comparing learning aims across years, as the data may not be equivalent or consistent. Prior to 2012 learning aims were returned for Year 11 pupils. From 2012, learning aims have only been returned for those pupils in National Curriculum Year Group 12 or above.'

Taking these data quality issues into account, the indicative trend is a reasonably positive one. Compared to 2009/10 (a year when PLAMS data has a much better level of coverage regarding the completion status of learning aims), withdrawal rates were significantly higher than in 2012/13. For all post-16 learning aims, the withdrawal rate was 11.2%, 10.8% for AS levels and 9.0% for A Levels.

The number of withdrawals from AS Levels fell by around 16% in this time (from 88,900 to around 74,600), despite an increase in starts of around two thirds. The number of withdrawals from A levels almost halved during the same period, while the number of aims started rose by more than 70%.

Table 2 shows the subject areas that account for the largest number of AS and A level withdrawals. For AS levels, the three subject areas accounting for the most withdrawals were Mathematics (6,700 withdrawals), General Studies (6,500) and Psychology (6,300). For A levels, General Studies (3,800) is by far the most common subject to be dropped, accounting for 17.2% of withdrawals in 2012/13. For both AS and A levels, the three main sciences all feature among the most common subjects regarding number of withdrawals.

[2] DfE (2013) The National Pupil Database - User guide, Reference: DFE-00258-2013

Table 2: Most common subject of post-16 withdrawals, 2012/13, England

AS Level	No.	% of total	A Level	No.	% of total
Mathematics	6,700	9.0%	General Studies	3,800	17.2%
General Studies	6,500	8.7%	Mathematics	1,500	6.7%
Psychology	6,300	8.4%	Psychology	1,400	6.4%
Biology	4,900	6.5%	Biology	1,200	5.4%
Chemistry	3,400	4.6%	English Literature	1,000	4.5%
Sociology	3,300	4.4%	Chemistry	900	4.2%
English Literature	3,000	4.0%	History	900	4.0%
Physics	2,700	3.7%	Sociology	700	3.1%
History	2,400	3.2%	Media/Film/TV Stds	700	3.0%
Media/Film/TV Stds	2,400	3.2%	Physics	600	2.9%
Religious Studies	2,100	2.8%	English Language	500	2.4%
Total Withdrawals	**74,600**		**Total Withdrawals**	**22,100**	

Source: National Pupil Database (PLAMS)

The PLAMS data indicates that a total of around 92,000 students withdrew from at least one of their post-16 learning aims (this figure includes all learning aims, not just AS and A Levels) in 2012/13 and this is an average of 1.57 learning aims per student (based on a total of 152,000 withdrawals). Approximately 16,000 withdraw from all the aims they started. This group of 16,000 represented around 2.4% of the entire cohort of students at state funded schools.

Taking into account the coverage and data quality issues regarding PLAMS data highlighted above, identifying any clear trend over time in terms of students withdrawing is problematic. However, the data does indicate a slight but consistent downward trend in the proportion of students withdrawing from all their post-16 studies at schools. In 2009, this was 4.9% of students, falling to 4.8% in 2010, and again to 4.1% in 2011.

Indicator 2 - Retention and Completion rates - FE

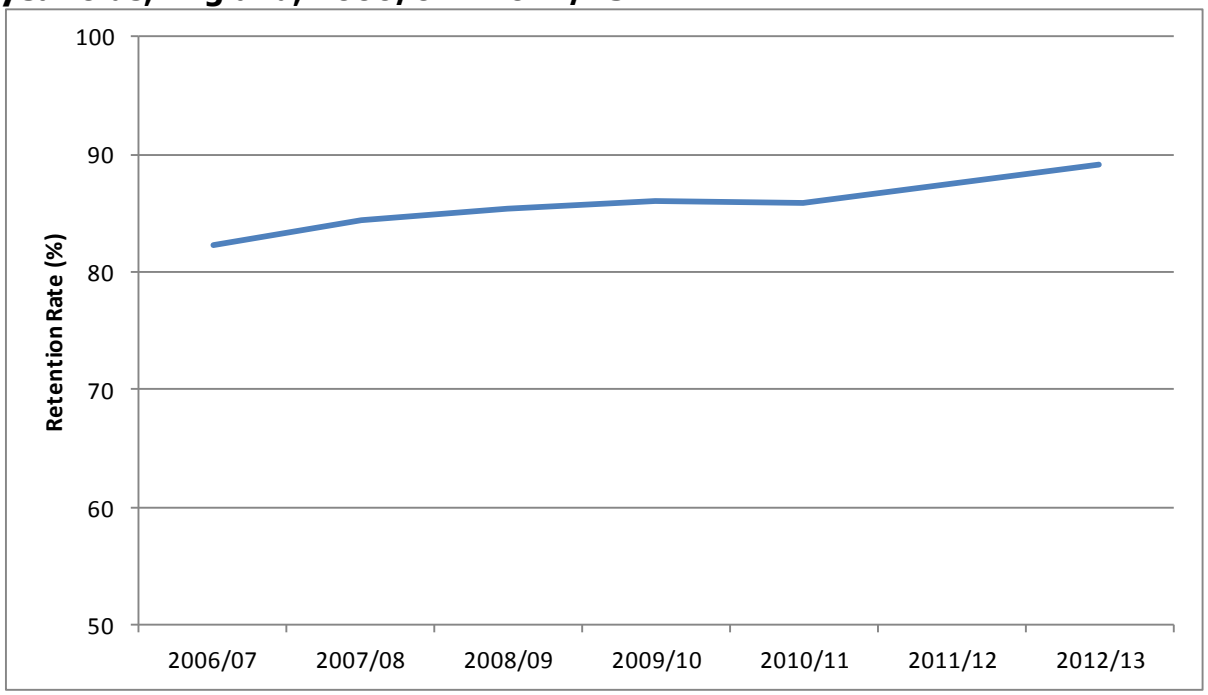
Poorly informed choices may also have a significant influence on dropout rates from further education. Among 16-18 year olds, statistics on retention rates[3] for long courses (i.e. the proportion of learning aims started that were completed) show that 89.2% of all FE learning aims in 2012/13 were completed. Figure 1 shows that the retention of 16-18 year olds has been improving consistently from 2006/07, when around 82% of courses studied by this age group were completed.

In terms of absolute numbers, the number of FE learning aims not completed by 16-18 year olds fell from over 137,000 in 2006/07 to just over 97,000 in 2012/13, a fall

[3] To avoid duplication with A and AS level data in indicator 3 (which include the FE sector), A and AS level data have been removed from the FE sector indicators on retention and achievement.

of around 29% (as shown in Table 3). On the assumption there was the same proportion of withdrawal from 'learning aims' to 'numbers of students' as for AS and A Levels (1.57 learning aims per student) then this gives an *estimated* 61,900 students that dropped at least one learning aim.

Figure 1: Retention Rates in the FE Sector (% of aims completed), 16-18 year olds, England, 2006/07 - 2012/13



Source: Skills Funding Agency, National Success Rate Tables,
https://www.gov.uk/government/collections/further-education-and-skills-official-statistics

Table 3: Withdrawals from FE sector learning aims, 16-18 year olds, 2006/07 - 2012/13

	Starters (Excluding Transfers)	Retention Rate %	Non-completions
2006/07	771,708	82.2	137,329
2007/08	788,538	84.4	122,659
2008/09	794,333	85.4	116,240
2009/10	826,616	86.0	115,597
2010/11	808,760	85.9	113,951
2011/12	875,090	87.5	109,071
2012/13	898,140	89.2	97,139
Change 06/07 - 12/13	**126,432**	**7.0**	**-40,190**
% change 06/07 - 12/13	**16.4%**		**-29.3%**

Source: Skills Funding Agency, National Success Rate Tables,
https://www.gov.uk/government/collections/further-education-and-skills-official-statistics

Indicator 3 - Success & Achievement rates - A Levels

Non-achievement of AS Levels

According to statistics published by the DfE[4], the rate of non-achievements of AS Levels (across all sectors[5]) is fairly high. In 2012/13, just over 13% of all AS Level entries in England did not result in a pass graded A-E (just over 150,000 individual entries). Since 2001 (the first year for which these statistics were published), there has been a general trend of gradually falling proportions of entries not resulting in a passing grade, as shown in Figure 2. However, Figure 2 also shows that the number of entries not resulting in passing grades rose sharply in 2010/11, even though the number of young people entering level 3 qualifications actually fell. This apparent increase was due to changes in funding rules, as explained in DfE's Statistical First Release for 2010/11 examination results[6]:

'On completion of the AS results can be claimed or 'cashed-in' with the examination board or delayed to re-sit a module, or possibly not cashed-in at all if the student progresses on to the A2 part of the A-level. This 'cashing-in' behaviour appears to have changed given recent policy changes on how qualification success rates are calculated and funding allocations derived. From the 2010/11 academic year, performance funding and success rates for all qualifications (including the AS) will be calculated according to when the qualifications are due to end (i.e. the planned end date), regardless of whether they are cashed-in (i.e. claimed). Any AS that has a one year end date that is not cashed-in will be treated as a 'fail' for funding and success rate purposes. As most AS courses are taught and funded over 1 year, it is expected that the vast majority will be 'cashed-in' at the end of one year's teaching.
Impact of 'cashing-in' The number of examination entries and results in this SFR are affected by whether the AS is 'cashed-in'. If an AS is not cashed-in then it will not appear in the figures presented in this SFR. The above funding policy change appears to have changed cashing-in behaviour, resulting in a higher number of examination entries recorded in this SFR.'

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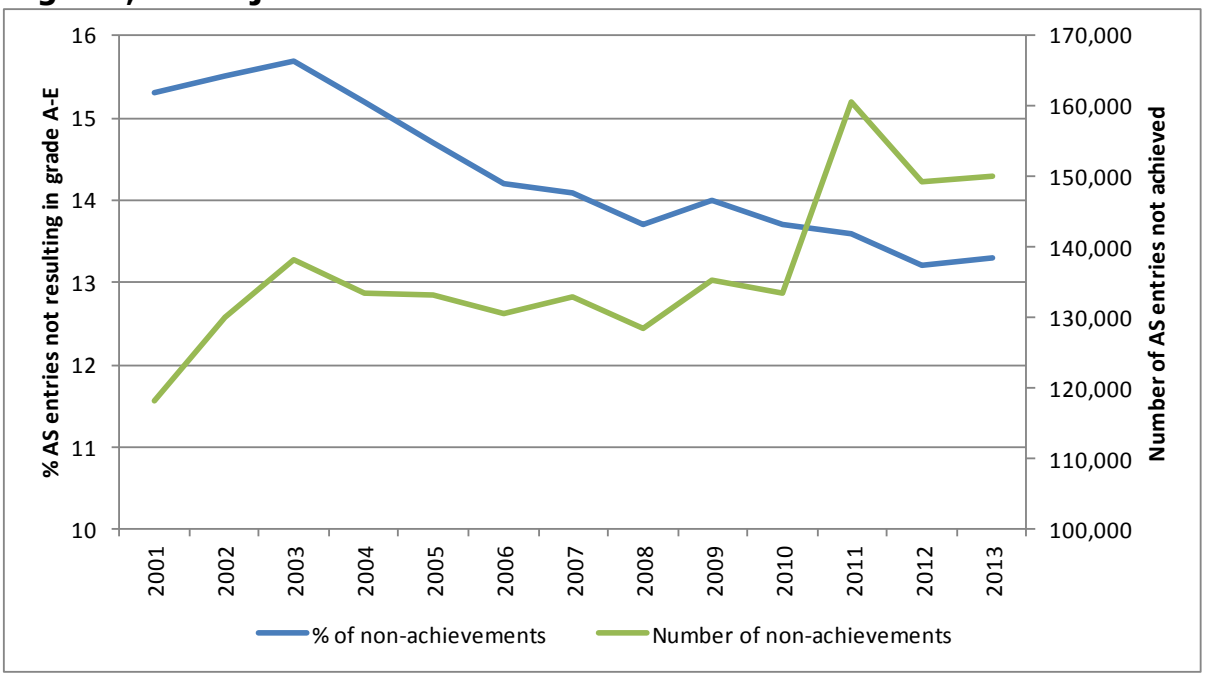
[4] DfE SFR 02_2014 https://www.gov.uk/government/statistics/a-level-and-other-level-3-results-england-2012-to-2013-revised

[5] It should be noted that the PLAMS data used for indicator 1 and the published SFR data used for indicator 3 are not directly comparable. PLAMS is based on the school census and only covers those stated funded schools and colleges that are obliged to make such a submission. The data from the SFR on examination results also includes the FE sector and independent schools.

[6] https://www.gov.uk/government/statistics/provisional-gce-or-applied-gce-a-and-as-and-equivalent-examination-results-in-england-academic-year-2010-to-2011

Figure 2: Trend in Non Achievement Rates at AS Level, 2001-2013, England, all subjects



Source: DfE, SFR 02/2014 Subject Time Series https://www.gov.uk/government/publications/a-level-and-other-level-3-results-england-2012-to-2013-revised

Significant differences by subject

The statistics show significant differences in pass rates between different subjects at AS Level. Table 4 shows that non-achievement rates vary from as little as 1.7% of entries in Drama to 30.5% in Accounting and Finance. While some of the variation may be in part explained by the difficulty of the subjects being studied (non-achievement is higher than average in ICT and science-related subjects), the high level of non-achievement across so many subjects raises questions as to whether AS students are pursuing the type and level of qualifications that are right for them.

Table 4: Non-achievement of AS Levels by subject, England, 2012/13

	% of non-achievements	Number of non-achievements
Accounting and Finance	30.5	1,828
Law	22.3	4,187
Computer Studies	21.9	1,718
Other social studies	21.6	2,118
Psychology	20.5	18,000
General Studies	19.8	12,707
ICT	19.2	2,482
Mathematics	18.1	19,740
Biological Sciences	17.6	15,122

Physics	17.5	9,143
Home Economics	17.5	89
Chemistry	16.9	12,136
Sociology	16.4	7,617
Other Science	16	1,160
Business Studies	14	5,573
Economics	13.8	4,452
Physical Education	13.3	2,833
Design and Technology	13.1	2,466
Government and Politics	12.3	2,082
Geography	10.9	4,492
Further Mathematics	8.9	1,313
Spanish	8.8	830
French	8.4	1,136
Religious Studies	8.4	2,306
German	6.6	369
History	6.1	3,688
Music	6.1	647
Art and Design	5.5	3,270
Other modern languages	5.2	245
Classical Studies	5.2	394
Media/Film/TV Studies	5	1,489
English	3.4	3,594
Other Communication Studies	3.4	440
Drama	1.7	263
All subjects	**13.3**	**150,067**

Source: DfE, SFR 02/2014 Subject Time Series https://www.gov.uk/government/publications/a-level-and-other-level-3-results-england-2012-to-2013-revised

In terms of trying to explain these differences in achievements between subjects, there is evidence of guidance published by leading universities that indicates a preference for candidates who have studied traditional, more theoretical A Levels. The Russell Group (which represents 24 leading UK universities)' in collaboration with the Institute of Career Guidance' have published 'Informed Choices'[7], a guide aimed at all students considering A-level and equivalent options. It includes advice on the best subject combinations for a wide range of their university courses, and states:

'Some advanced level subjects are more frequently required for entry to degree courses than others. We call these subjects 'facilitating' because choosing them at advanced level leaves open a wide range of options for university study. These

[7] http://www.russellgroup.ac.uk/informed-choices/

facilitating subjects include: Maths and further maths; Physics; Biology; Chemistry; History; Geography; Modern and classical languages; English Literature.'

'If you decide not to choose one or more of the facilitating subjects at advanced level, many degrees at competitive universities will not be open to you.'

Over time, the general trend has been for a slight fall in the proportion of AS Level entries that don't result in a pass, from 15.3% in 2001 to 13.3% in 2013. The majority of subjects show a similar slight fall in non-achievement, other than Mathematics and Art & Design, which have both seen a much higher than average fall in non-achievement (12.6 and 10.3 percentage points respectively).

Trends in progression from AS to A2

The relatively high levels of non-achievement at AS level discussed above raises questions about the rate of progression from AS level to A2 level (the second year of A Levels). In addition to those who failed to pass their AS Levels, it may also be useful to examine rates of non-progression to A2 level among those who did achieve passing grades at AS level.

Unfortunately, due to the way in which AS Level entry statistics are published, the official statistics underestimate the total level of participation, due to discounting rules applied and cashing in of qualifications[8]. Essentially this is a means of avoiding double counting of qualifications achieved, as the AS and A2 are part of the same qualification. However, this makes a simple analysis of measuring progression from AS to A2 levels based on the published number of entries unfeasible. However, the DfE have published the findings of some research into the effect on the published statistics of discounting and cashing in, and also provided some estimates of the 'true' level of progression from AS to A2 in selected subjects, based on analysis from the NPD (shown in Table 5). It shows that for most subjects, continuation rates lie between 60% and 70%.

Table 5: Estimated progression rates from AS to A2, 2008/09 to 2009/10

	Estimated 'True' number of AS entries in 2008/09	Estimated Continuation rate to A2 in 2009/10
History	63,000	71%
Biological Sciences	85,000	62%
Chemistry	63,000	63%
Physics	45,000	62%

[8] Effects of Discounting and cashing in are explained in section 4.16 of the Technical Notes of SFR02_14 https://www.gov.uk/government/publications/a-level-and-other-level-3-results-england-2012-to-2013-revised

Mathematics	105,000	67%
Geography	42,000	69%
Modern Foreign Languages	46,000	65%
English	115,000	73%
Art & Design	67,000	64%
Psychology	87,000	61%
Business Studies	48,000	65%
Media Studies	38,000	63%

Source: DfE, Understanding Participation in Selected AS level Subjects and Continuation to Full A level, published as part of SFR27_2011
https://www.gov.uk/government/publications/provisional-gce-or-applied-gce-a-and-as-and-equivalent-examination-results-in-england-academic-year-2010-to-2011

It is of course true that AS levels have value as qualifications in their own right, and for some students there is no intent at the outset to progress to a full A level. However, the observed low rates of achievement and continuation would seem to fit with the findings of a Policy Exchange[9] report published in 2013. From a tracking study of young people, they estimated that 31% of young people who do A-levels drop out of their studies, and their research has suggested that vocationally oriented programmes of study may be more suitable for them. The direct cost of A-level dropout to the taxpayer is estimated at around £300 million per annum.

Non-achievement of A Levels

Latest statistics from the DfE show that the vast majority of A Level entries result in a passing grade. In 2012/13, just 1.3% of entries across all subjects did not result in a grade of A*-E, down from 10% in 2001 (see Table 6). The rate of non-achievement has fallen year on year since 1996, and the number of entries resulting in no qualification gained has fallen from around 89,300 in 1996 to just over 10,000 in 2013, resulting in a much reduced cost to the exchequer (see indicator 6).

Table 6: Non-achievement of A Levels, 1996 - 2013

Academic year ending	Number of entries	% of non-achievements	Number of non-achievements
1996	620,164	14.4	89,304
1997	662,163	12.8	84,757
1998	681,082	11.7	79,687
1999	680,048	11	74,805
2000	672,362	10.5	70,598

[9] Policy Exchange (2013) Technical Matters: Building a high quality technical and vocational route through the education system, 21 January 2013
http://www.policyexchange.org.uk/publications/category/item/technical-matters-building-a-high-quality-technical-and-vocational-route-through-the-education-system?category_id=24

2001	681,553	10	68,155
2002	645,033	5.2	33,542
2003	662,670	3.9	25,844
2004	675,924	3.4	22,981
2005	691,371	3.2	22,124
2006	715,203	2.8	20,026
2007	718,756	2.6	18,688
2008	741,356	2.2	16,310
2009	757,696	1.9	14,396
2010	783,347	1.7	13,317
2011	782,771	1.5	11,742
2012	779,479	1.4	10,913
2013	773,651	1.3	10,057

Source: DfE, SFR 02/2014

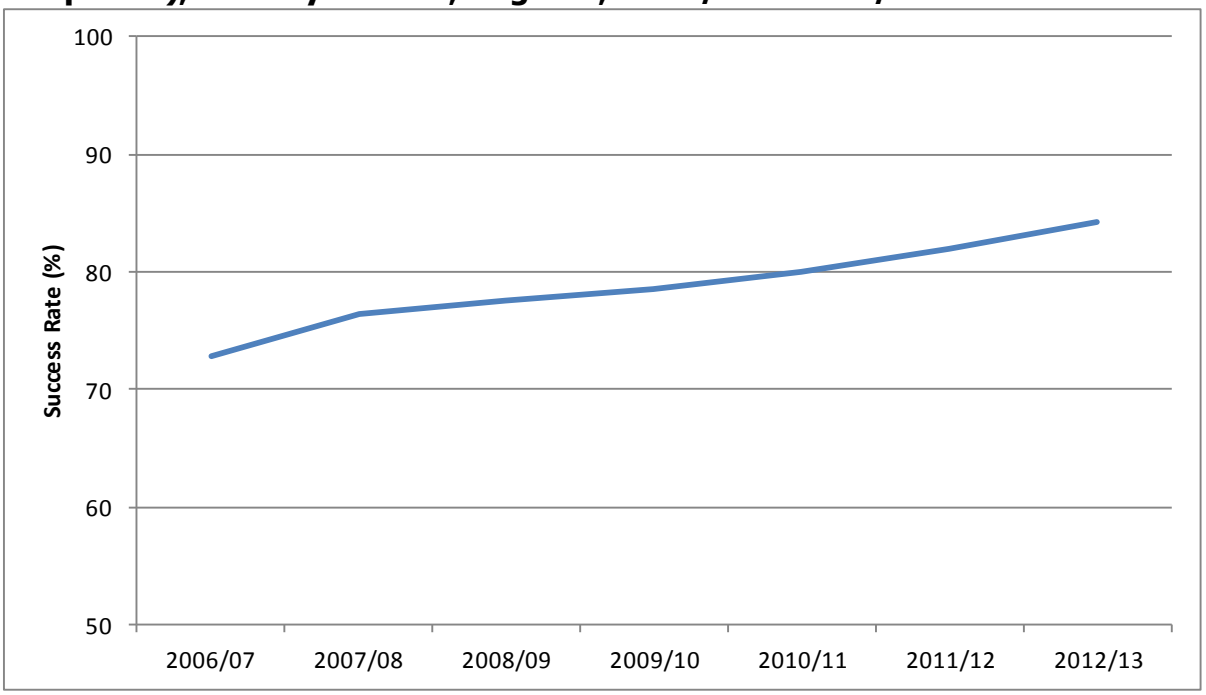
By subject, rates of non-achievement range from just 0.4% of entries to a high of 4.4% in 2013. This suggests that those students continuing into the second year of their A Levels are pursuing the right educational route for them.

Indicator 4 - Success rates - FE

Indicator 2 showed that retention rates among 16-18 year olds in the FE sector had risen significantly in recent years, and the same is true of the proportion of completers that actually achieved their qualifications. Therefore, success rates (the proportion of a total cohort starting a particular learning aim that achieved the qualification) have also increased significantly in recent years, as shown in Figure 3.

For long courses (excluding A and AS Levels), in 2012/13 84.3% of all aims studied resulted in a qualification achieved, up from just 72.8% in 2006/07. However, despite the dramatic increase in success rates, there were still 15.7% (more than 141,000) learning aims started by 16-18 year olds that did not result in qualifications (through a combination of non-completion and non-achievement).

Figure 3: Success Rates in the FE Sector (% of aims successfully completed), 16-18 year olds, England, 2006/07 - 2012/13



Source: Skills Funding Agency, National Success Rate Tables,
https://www.gov.uk/government/collections/further-education-and-skills-official-statistics

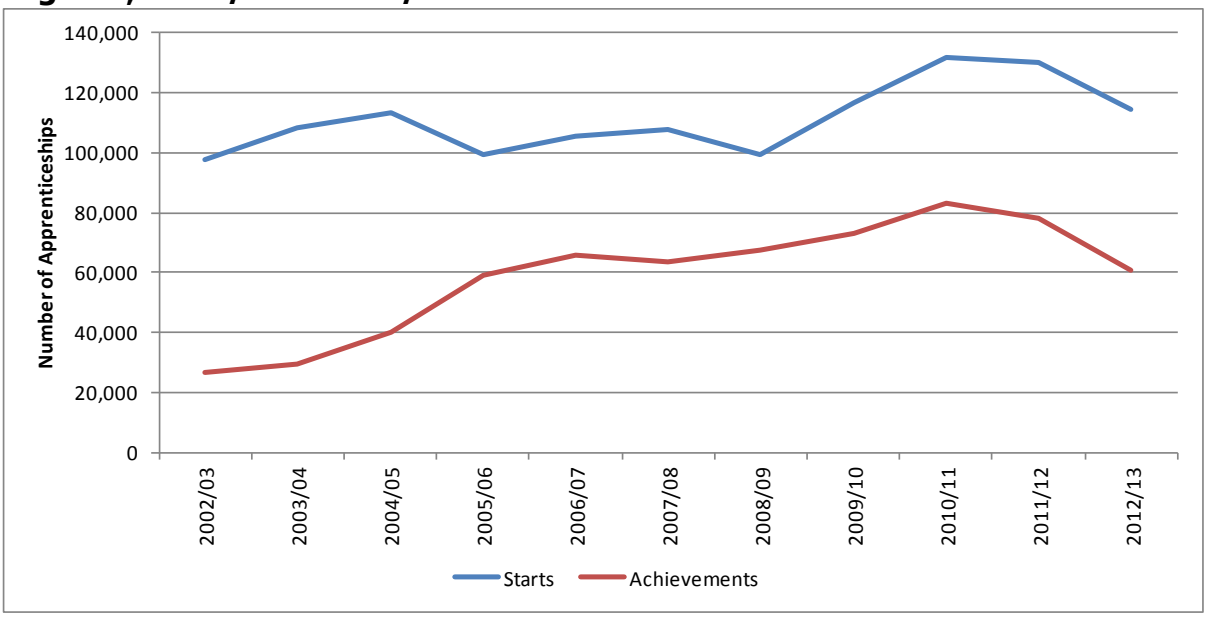
Indicator 5 - Success rates - Apprenticeships

Apprenticeships have a key role in the government's strategy to develop the skills of the workforce and to promote the growth and rebalancing of the nation's economy. Recent government investment has given priority to helping more young people into work and training through apprenticeships.

As a whole, the number of Apprenticeships started and completed has risen dramatically in line with the increased priority and funding being driven by the coalition government. However, for the 16-18 age group, the increase has been less dramatic over the longer term. Figure 4 shows that there was a sharp initial increase from 2008/09, but unfortunately due to a change in the way learner data is collected[10], data from 2011/12 onwards are not directly comparable with earlier years.

[10] Figures for 2011/12 onwards are not directly comparable to earlier years as a Single Individualised Learner Record (ILR) data collection system has been introduced. Small technical changes have been made in the way learners from more than one provision type are counted, leading to a removal of duplicate learners and a reduction in overall learner numbers of approximately 2 per cent.

Figure 4: Apprenticeship Starts and Achievements, 16-18 year olds, England, 2002/03 - 2012/13



Source: Skills Funding Agency, FE Data Library: Apprenticeships
https://www.gov.uk/government/statistical-data-sets/fe-data-library-apprenticeships--2
Note: Data from 2011/12 onwards is not directly comparable with earlier years.

In terms of success rates i.e. the proportion of Apprenticeship frameworks successfully completed, the signs are generally positive. Success rates were rising year on year from 2005/06 to 2010/11 to 74% in 2010/11, although they are slightly below average for the under 19 age group (Table 7).

However, even taking into account the slight change in methodology and data collection, success rates appear to have dipped slightly in 2012/13, for all age groups. In terms of total numbers, Table 8 shows that around 24,200 people aged 16-18 did not successfully complete their apprenticeships in 2012/13, a number which has generally been falling in recent years.

Table 7: Apprenticeship Success Rates, 2005/06 - 2012/13, by age group, England

Year	Under 19	19+	Total
2005/06	49.6%	46.7%	48.4%
2006/07	59.3%	58.2%	58.9%
2007/08	63.2%	64.5%	63.7%
2008/09	69.6%	72.2%	70.9%
2009/10	72.4%	75.0%	73.8%
2010/11	74.0%	78.2%	76.4%
2011/12	73.1%	74.2%	73.8%
2012/13	71.5%	72.6%	72.3%

Source: Skills Funding Agency, Statistical First Release SFA/SFR24 Table 10.2 https://www.gov.uk/government/publications/learner-participation-outcomes-and-level-of-highest-qualification-held and The Data Service, Statistical First Release: DS/SFR1 v2 22December 2008 http://readingroom.lsc.gov.uk/lsc/national/nat-ds_sfr1-dec08.pdf
Note: Data from 2011/12 onwards is not directly comparable with earlier years.

Table 8: Apprenticeship Non-achievements, 2005/06 - 2012/13, by age group, England

Year	Under 19	19+	Total
2005/06	60,000	45,300	105,200
2006/07	45,100	33,200	78,000
2007/08	36,900	27,100	64,200
2008/09	29,600	29,100	58,900
2009/10	27,900	32,800	60,900
2010/11	29,300	32,600	61,900
2011/12	28,700	62,800	91,700
2012/13	24,200	72,500	96,900

Source: Derived from Skills Funding Agency, Statistical First Release SFA/SFR24 Table 10.2 https://www.gov.uk/government/publications/learner-participation-outcomes-and-level-of-highest-qualification-held and The Data Service, Statistical First Release: DS/SFR1 v2 22December 2008 http://readingroom.lsc.gov.uk/lsc/national/nat-ds_sfr1-dec08.pdf. These rounded estimates are based on published success rates and on the number of Apprenticeships successfully completed. Note: Data from 2011/12 onwards is not directly comparable with earlier years.

Costs to the Exchequer

Indicators 6 to 8 focus on using the non-completion and non-achievement data presented above to provide estimates of the direct cost to the Exchequer in terms of funding 'wasted' education and skills provision. Separate indicators are included for A/AS Levels, FE (excluding A/AS Levels) and Apprenticeships.

These estimates have been derived using published data on funding for different aspects of post-16 education, from the Education Funding Agency and the Skills Funding Agency (and their predecessor organisations) and the statistics presented above on the proportion of each aspect of provision that resulted in the successful completion and achievement of qualifications. The estimates are fairly simplistic, in that they simply apply overall success rates to an overall funding figure, and assume that all courses within each stream of post-16 education covered are funded equally.

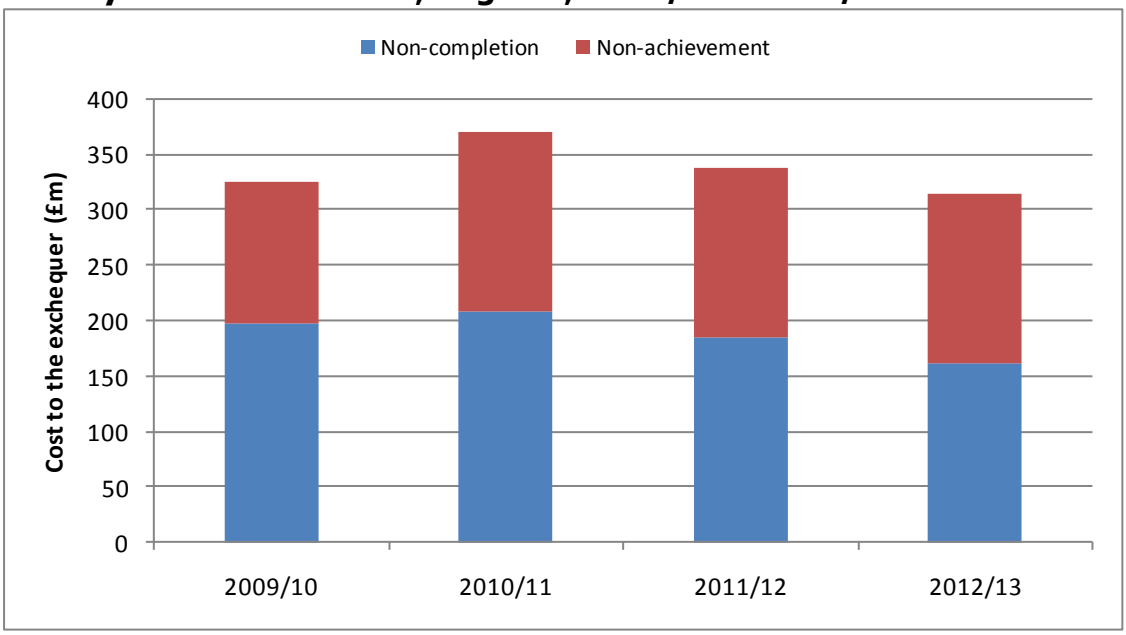
In total, we estimate that the cost to the exchequer of post-16 learning aims that were started but not successfully completed to be approximately £814 million in 2012/13.

Indicator 6 - Costs of non-completion & non-achievement for A/AS Levels

Using the PLAMS data presented above for indicator three on completion rates of AS and A Levels started, along with Education Funding Agency funding allocation data for school sixth forms, Academies, University Technology Colleges and Studio Schools, Figure 5 shows the estimated costs to the Exchequer in terms of AS and A Level provision in these types of providers that is not successfully completed. It shows that the estimated cost to be around £316 million in 2012/13 (close to the £300 million estimate from the Policy Exchange research), down from a peak level of £371 million in 2010/11. The average cost per AS or A Level not successfully completed was estimated at £1,682 for 2012/13.

It can be seen that the total cost associated with non-completion i.e. students withdrawing from courses before actually entering exams have fallen in each of the last two years' of data (by around £47 million, over 20%), and the costs of non-achievement have fallen by around 5% (an estimated £9 million) since their peak in 2010/11.

Figure 5: Cost to the Exchequer of uncompleted A and AS levels started by 16-18 year olds in schools, England, 2008/09 - 2012/13



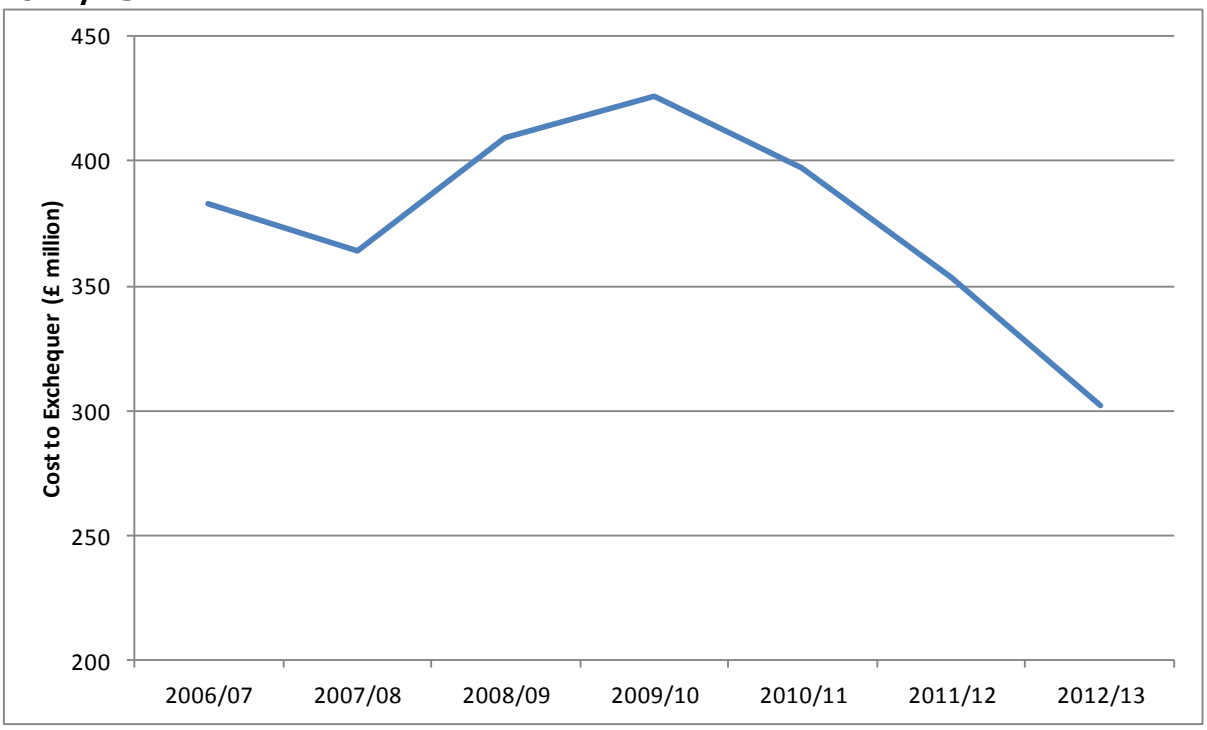
Source: Derived from EFA 16-18 Funding Allocations and DfE PLAMS data (via NPD).

Indicator 7 - Costs of non-completion and non-achievement in FE

Using historic published FE success rates data and funding allocation data from the Learning & Skills Council, Young Peoples Learning Agency and Education Funding

Agency (both for the 16-18 age group), Figure 6 shows the recent trend in estimated costs to the Exchequer in terms of FE learning aims[11] (excluding A and AS Levels) started but not completed. This figure was estimated to be around £302 million in 2012/13, down from a peak level of £426 million in 2009/10, driven by rising success rates and falling levels of funding for 16-18 provision.

Figure 6: Cost to the Exchequer of uncompleted learning aims started by 16-18 year olds in FE (excluding A / AS Levels), England, 2006/07 - 2012/13



Source: LSC / YPLA/ EFA 16-18 Funding Allocations and Success Rate Data
https://www.gov.uk/government/publications/16-to-19-allocation-data-2013-to-2014-academic-year
Note: Data excludes short courses

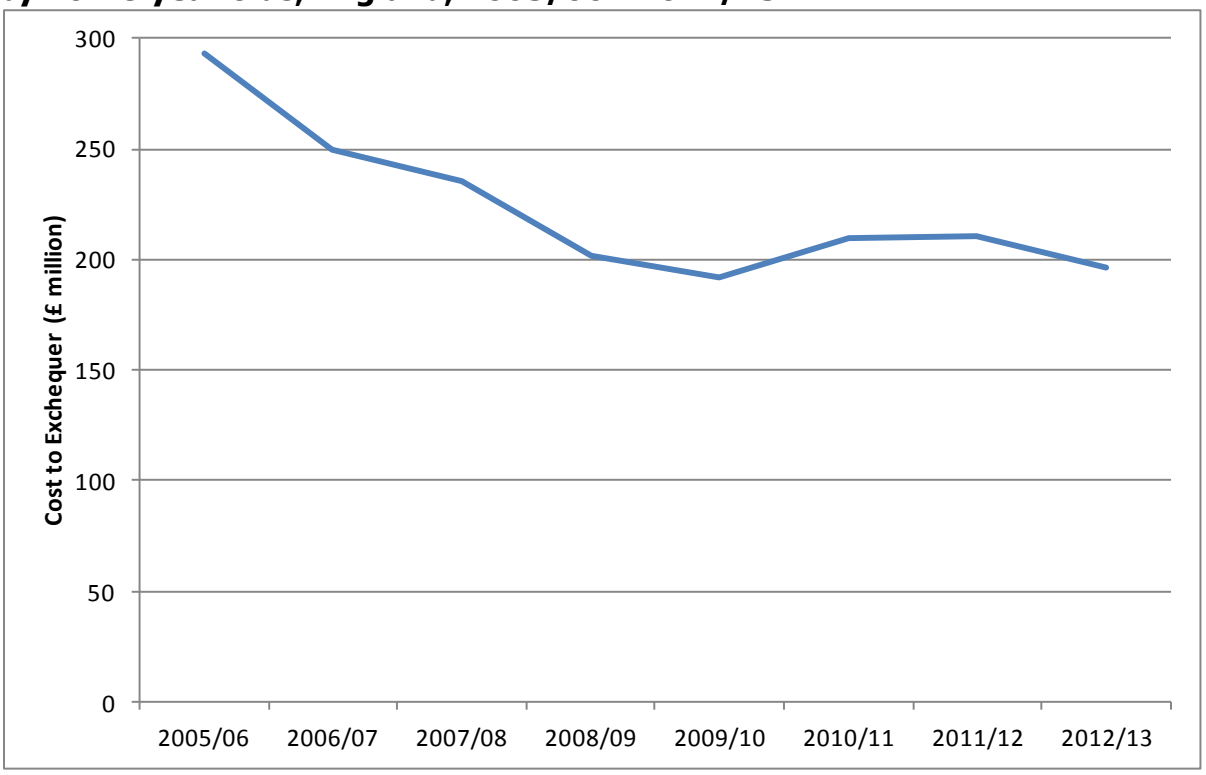
Indicator 8 - Costs of non-completion & non-achievement - Apprenticeships

Using Apprenticeship success rates data and funding allocation data from the Skills Funding Agency (both for the 16-18 age group), Figure 7 shows that the estimated cost to the Exchequer in terms of Apprenticeships started but not completed was approximately £196 million in 2012/13.This represents a decline of around a third from the £293 million estimate in 2005/06.

[11] excluding short courses

As with the success rate data, it should be noted that changes in ILR data collection methods mean that data for 2011/12 is not directly comparable with earlier years. It should also be taken into account that among uncompleted Apprenticeship, some learners may have achieved some of the separate qualifications that make up each Apprenticeship framework (usually a mix of work-based, classroom based and key skills qualifications). Therefore, these learners who have achieved some elements of their framework will not be counted within the success rates data, and the actual cost to the Exchequer may be somewhat lower than the estimate produced here.

Figure 7: Cost to the Exchequer of uncompleted Apprenticeships started by 16-18 year olds, England, 2005/06 - 2012/13



Source: SFA Funding Allocations and Success Rate Data
https://www.gov.uk/government/collections/funding-allocations-and-performance-management-for-providers.

Indicator 9 - Proportion of young people starting more than one post-16 destination

Under Indicator 1 on retention and completion rates, our analysis estimated that around 16,000 students dropped out from their post-16 studies at state funded schools in 2012/13. It had been hoped that we could extent this analysis using data linking the NPD with the Individualised Learner Record (ILR), which would enable

some analysis of 'churn' within the post-16 education system, by identifying the number of students who started on more than one learning route.

However, despite submitting a data request to DfE / BIS in July 2014, we have been unable to obtain the required data to complete this aspect of our proposed analysis.

Indicator 10 - Level of NEETs

According to the latest statistics[12], the 16-18 NEET rate fell to 8.0% in April to June 2014, 1.1 percentage points lower than for the same period in 2013 and the lowest April to June figure since comparable data began in 2000. This represented 146,000 individuals, down from 168,000 in the same period the previous year. This change was driven by a fall in the proportion of those not in education or training (NET) and a rise in the employment rate of the NET group. The biggest percentage point fall was for 16 year olds, which may be influenced by the raising of the participation age to 17 for those reaching the end of Year 11 in 2013.

Table 9: NEETs Rates for 16-18 year olds, England, 2012 - 2014

Age	April - June			% point change 2013-2014
	2012	2013	2014	
16	5.9	5.0	3.8	-1.3
17	9.7	8.0	7.4	-0.7
18	15.9	14.4	12.9	-1.5
16-18	**10.5**	**9.1**	**8.0**	**-1.1**

Source: SFR29/2014 (LFS methodology)

DfE uses different sources to measure the level of NEETs. According to the NEET Participation SFR series, between the end of 2012 and the end of 2013 the proportion of 16-18 year olds participating in education and training increased from 83.6% to 85.6%, while the employment rate of the 16-18 year olds not in education or training rose from 43.8% to 47.4%. The result of these two factors is that the proportion of 16-18 year olds NEET at the end of 2013 decreased by 1.6 percentage points to 7.6% (148,000 young people).

Indicator 11 - Cost of NEETs

A 2012 research report by the Work Foundation[13] concluded that the changes to careers guidance introduced through the Education Act 'risk severely compromising

[12] DfE NEET Quarterly Brief April - June 2014, SFR 29/2014
https://www.gov.uk/government/statistics/neet-statistics-quarterly-brief-april-to-june-2014
[13] The Work Foundation (2012) Raising Aspirations and Smoothing Transitions, Brhmie Balaram and Lizzie Crowley, 05 September 2012

the quality and availability of support for young people, and could exacerbate the problems they face when first entering the labour market'. Their report warns that the changes 'represent a false economy which could leave young people at greater risk of becoming NEET (not in education, employment or training)'.

The authors stated that:

'.. cuts to careers services are storing up much bigger problems for the future. These changes could see growing numbers of young people left without the support they need to effectively navigate their way into the labour market. This is short-termist thinking that will ultimately place a greater burden on the economy as rising numbers of young people find themselves not in education, employment or training (NEET).

'Our research has shown that most of the rise in NEETs in recent years has been down to young people struggling to make the school to work transition. With today's difficult jobs market, young people need more, not less, support if they are to successfully make that first step.'

Although these concerns have not yet been realised according to the latest statistics, it may be helpful to illustrate the estimated costs to the Exchequer of NEETs.

A 2010 research study by the University of York[14] on behalf of the Audit Commission demonstrated the costs of youth unemployment associated with NEET (not in education, employment or training between the ages of 16 and 18). Their estimate of the life-time public finance cost of young people who are NEET (not in education, employment or training) between the ages of 16 and 18 was a lowest estimate of £12 billion to a highest estimate of £32.5billion, based on 2008 NEET numbers. This represented a 44% per cent rise in costs since 2002.

That research also estimated 'resource costs' associated with NEET i.e. the losses to the economy and to individuals and their families resulting from NEET and under- and unemployment following NEET. Their lowest estimate of resource costs was just under £22 billion (a 210% increase on their 2002 estimate), while the high estimate is nearly £77 billion. For every young person NEET in 2008 will cost an average of £56,000 in public finance costs before retirement age (for example, welfare payments, costs to health and criminal justice services, and loss of tax and national insurance revenue), plus around £104,000 in resource costs.

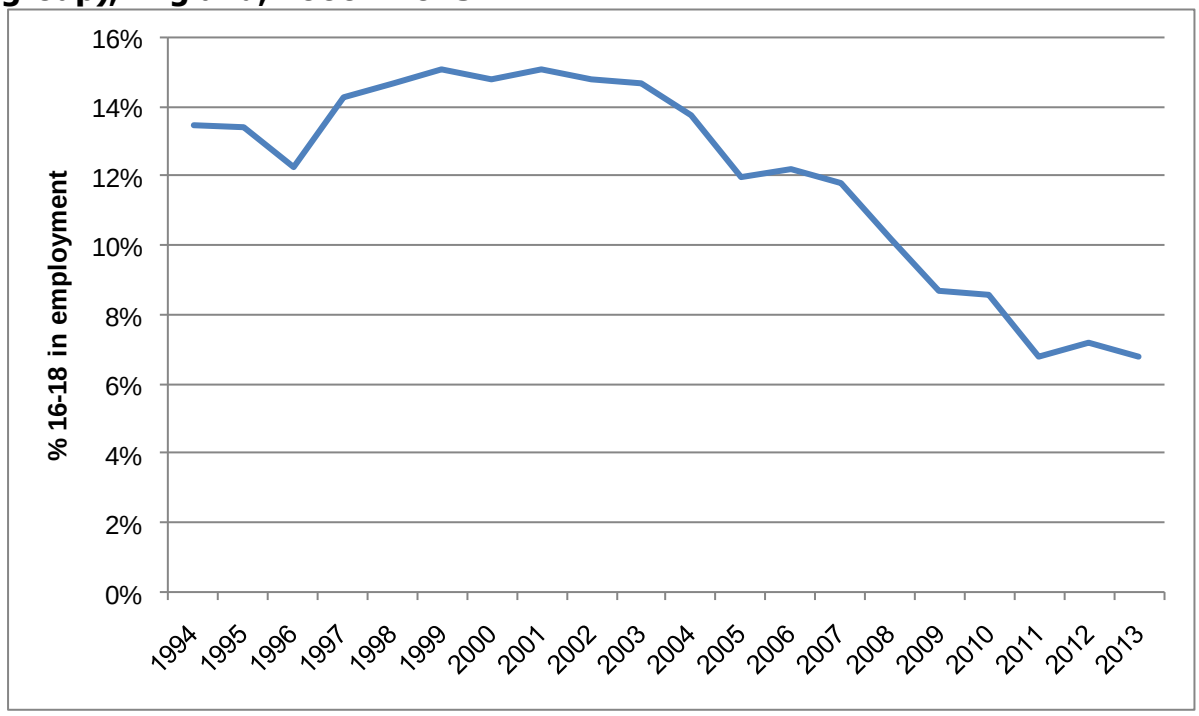
[14] University of York (2010) Estimating the life-time cost of NEET: 16-18 year olds not in Education, Employment or Training, Research Undertaken for the Audit Commission, July 2010 http://www.york.ac.uk/spsw/research/neet/

The research used a series of case studies to illustrate how relatively inexpensive youth support projects produce major public finance savings, which indicated that cuts in such programmes would result in 'very significant rises in public expenditure'.

Indicator 12 - 16-18 year olds in employment without training

Figure 8 shows that the proportion of this age group who move into jobs without training has been steadily falling for the last decade or so, to its current low level of 6.8 at the end of 2013%. The number of young people in this group has more than halved since its peak level of 281,200 in 2003, to just 133,200 in 2013.

Figure 8: 16-18 year olds in employment without training (% of age group), England, 2000 - 2013



Source: 'Participation in Education, Training and Employment by 16-18 Year Olds in England' SFR 18/2014 https://www.gov.uk/government/statistics/participation-in-education-training-and-employment-age-16-to-18.

In terms of understanding the characteristics of the young people in this group, a 2006 study by Inclusion on behalf of DfES[15], based on interviews with young people in employment found that:

[15] DfES (2006) Understanding Young People in Jobs without Training, Research Report No 736, Centre for Economic and Social Inclusion http://www.cesi.org.uk/publications/understanding-young-people-jobs-without-training

- Almost half of the young people reported having unauthorised absences at school, and almost a quarter of the young people had had fixed term or permanent exclusions from school.
- Almost three quarters of young people reported having GCSEs equivalent to level 1 (Ds and Es)
- At least a quarter had experienced extended periods of NEET, ranging from one month to one year.
- Almost a third had had more than one job since leaving school;
- One in five young people had stayed on at sixth form or started a full time college course.

Most of the young people interviewed suggested that they had an idea of the career they wanted to move into while at school, but had not followed these ambitions on leaving school. The most common reasons for not pursuing these were:

- the prospect of having to study or gain further qualifications
- their current or previous jobs had lead them into a different career
- work experience in or research on the career had made them rethink
- they had found it was too hard to get into because they had been rejected from jobs or college places.

In terms of the employment that young people were in, the same research found that most were employed full time 'in a variety of routine jobs, requiring few qualifications or little training'. Some were paid the minimum wage but the average was £4.67 an hour. Most young people said they were in their current job because of the pay and the lifestyle it facilitated. Although the jobs were described as 'permanent' most young people viewed them as being a 'stopgap' before a 'better job' or a return to education/training.

There have been some research studies that have linked the position of those in jobs without training to careers guidance they may have received. *Inclusion's* 2006 study on behalf of DfES, based on interviews with young people in employment found that:

'Almost a third had participated in some form of education or training since leaving school. At least half of these young people reported not completing their courses or apprenticeships. Many of these young people had moved into education or training as a default option and the course had not met their expectations.'

Another study by Maguire et al (2008)[16] sought to gain a deeper understanding of the reasons why young people were in jobs without training, which included some investigation of their sources of careers guidance. That research found that some young people 'may have avoided early labour market entry if post-16 courses had not been driven by September starts and had more guidance and support being available to those who fail to apply 'in time' or do not secure their first option'.

Summary

In conclusion the following key points emerge from the analysis:

Retention

- Latest figures show 178,100 16-18-year-olds failed to complete all or some of the post-16 qualifications they started in 2012/13, including Apprenticeships. This is composed of:
    - 92,000 withdrawals in schools, primarily for AS and A Levels
    - 61,900 estimated withdrawals in Further Education
    - 24,200 did not complete Apprenticeship training
- There were just under 75,000 withdrawals from individual AS Levels in 2012/13, a withdrawal rate of 9.4% of all AS Levels
- There were around 22,000 withdrawals from individual A Levels in the same academic year, 4.8% of the total
- Data suggests that the number and rate of withdrawals from AS and A Levels has fallen in recent years
- Approximately 16,000 students from state-funded schools withdrew from all their aims they started in 2012/13, around 2.4% of the total
- Just over 97,000 learning aims in FE were not completed in 2012/13, 10.8% of the total number of aims started
- As with schools, FE retention rates of 16-18 year olds have improved markedly in recent years, with the number of aims not completed falling by almost 30% since 2006/07.

Achievements

- Around 13% of AS Level entries did not result in a passing grade in 2012/13 (150,000 individual exam entries)

[16] Maguire, Susan et al (2008). Young People who enter Jobs without Training: Full Research Report, ESRC End of Award Report, RES-000-22-1786. Swindon: ESRC http://www.esrc.ac.uk/my-esrc/Grants/RES-000-22-1786/read

- The failure rate for A Levels was just 1.3% (around 10,000 exam entries) in the same year
- Non-achievement rates for both AS and A Levels have generally been falling in recent years
- For most subject areas, progression rates from AS to A2 lie between 60% and 70%
- Success rates in FE have also been rising, although 15.7% of all learning aims (over 141,000) taken by 16-18 year olds did not result in qualifications (through both non-completion and non-achievement)
- Despite significant increases in Apprenticeship success rates in recent years, around 1 in 4 Apprenticeships started by 16-18 year olds are not successfully completed. This represented around 24,000 Apprenticeships.

Costs to the Exchequer

We estimate that the cost to the exchequer of post-16 learning aims that were started but not successfully completed to be approximately £814 million in 2012/13. This represented around 12% of the funding allocated to provision for 16-18 year olds. This figure has fallen across schools, FE and Apprenticeships in the last two years, with total costs to the Exchequer down by around £164 million (17%) since 2010/11.