

February 2015/03

Issues paper

This report is for information

This report considers rates of young participation in higher education for Key Stage 5 pupils from English schools and colleges, based on their attainment in terms of qualifications studied at the level prior to higher education. It also examines the extent to which a pupil's school and background affects their likelihood of progressing to higher education at the age of 18 or 19.

Young participation in higher education

A-levels and similar qualifications

Contents

Executive Summary	2
Introduction	6
Profile of pupils holding different Level 3 qualifications	8
Overall populations	8
Grade profiles.....	16
Subject profiles.....	22
Emerging pictures of qualification types	31
Young participation of Level 3 qualifications	32
Overall participation	33
Young participation rates by Level 3 attainment.....	37
Young participation by subject.....	45
Young participation of Level 3 pupils by other characteristics.....	49
Annex A: List of included and excluded qualifications from the observed population	78
Annex B: Tracking the cohort across data sources over time.....	80
Annex C: A-level grade equivalences.....	81
Annex D: Overall participation tables.....	82
Annex E: Other characteristic population proportions	83
Annex F: Abbreviations and Glossary	113

Young participation in higher education: A-levels and similar qualifications

To	Heads of HEFCE-funded higher education institutions Heads of further education providers
Of interest to those responsible for	Planning, Admissions, Widening participation, Advice to applicants to higher education
Reference	2015/03
Publication date	February 2015
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Executive summary

Purpose

1. This report looks at the rates of young participation in higher education (HE) for pupils from English schools and colleges based on their attainment in terms of qualifications studied at the level prior to HE (known as Level 3 qualifications). The report also examines the extent to which a pupil's school and background affects their likelihood of progressing to HE at the ages of 18 or 19.
2. Interactive graphs accompany this document and provide more detailed data relating to some of the profiles and participation rates discussed here. They can be accessed on the HEFCE web-site at www.hefce.ac.uk/whatwedo/wp/ourresearch/ypalevel/.

Context

3. Research to understand trends in HE participation among young people has previously looked at how participation changes over time, identifying changes at the national level, as well as differences in the young participation of men and women, and between people living in different parts of the country. Understanding how different Level 3 qualifications affect a pupil's likelihood of progression into HE forms part of HEFCE's ongoing programme of work in this area, and this report seeks to extend the existing evidence base to incorporate this additional dimension.
4. Prior educational attainment is a key consideration in terms of a student's pathway into higher education. Whether from academic or vocational qualifications, a prospective student's prior educational attainment is the main criterion used by higher education institutions (HEIs) to decide whether to make offers to or accept applicants. And in choosing a path beyond Level 3, prospective students themselves may judge the attainability of a place in HE on the basis of their educational attainment to date.
5. While it is our ambition to build as comprehensive an evidence base as we are able with regards to young participation in HE, we cannot provide a complete analysis of young participation generally. We are unable to consider participation in HE at institutions outside of the UK, HE in further education colleges outside of England, or HE delivered at a significant number of alternative providers in England. Nor have we reported here on the outcomes of Level 3 pupils

beyond their rates of participation in HE while young (on account of the timescales involved in tracking A-level 3 cohort through to HE attainment and employment destinations).

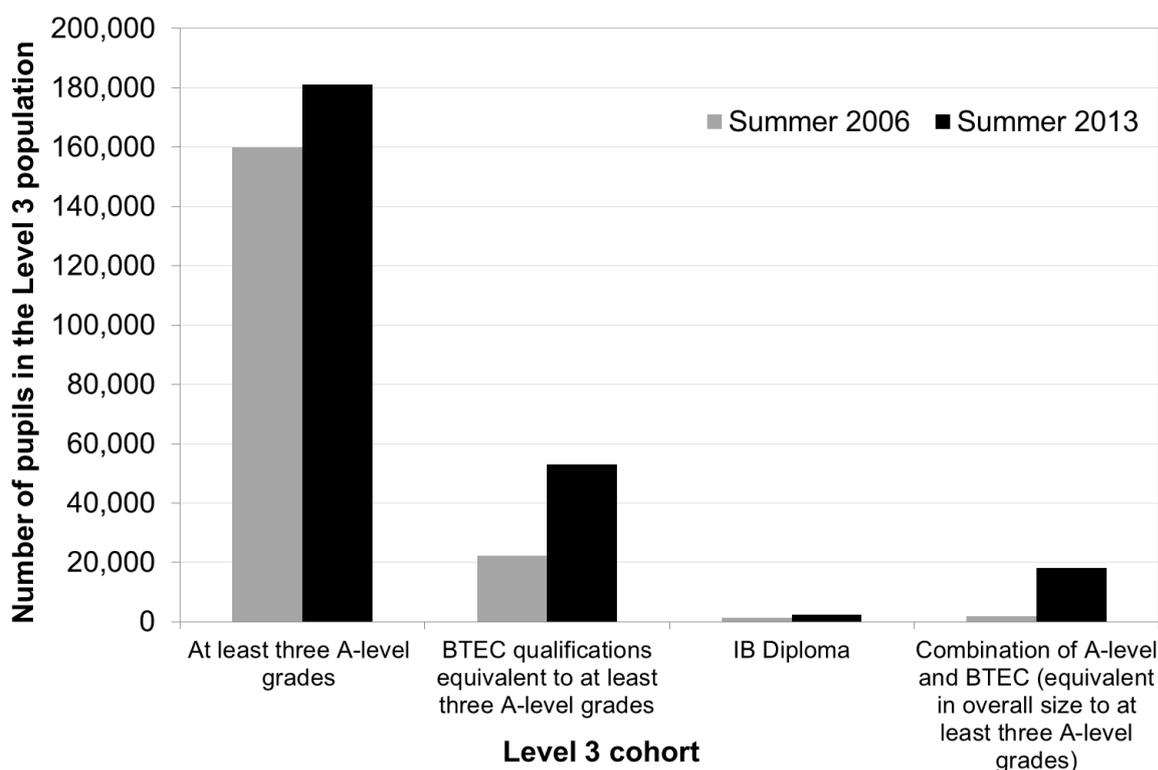
6. We have not attempted to identify the specific causes behind the findings reported in this document. Nor have we attempted to consider all of the factors that may influence or explain an individual's participation in HE. While we are aware that factors such as a pupil's ethnicity or socio-economic background can affect their propensity to participate in HE, these factors are not considered here because of limitations in the underlying pupil data. On this basis we have not attempted to model combined effects on a pupil's propensity to participate in HE. Instead we present simple univariate summaries, and make no comment as to whether other measurable factors or unobserved effects might be responsible for the patterns we have observed.

Key points

7. This study looks at all Key Stage 5 pupils from English schools and colleges who achieved A-level 3 qualification from school year 13 (typically aged 18) between summer 2006 and summer 2013. For each of the eight cohorts covered by this period we have observed the proportion of pupils who entered higher education within two academic years (typically before the age of 20).

8. The key findings from this investigation largely focus on those pupils whose Level 3 achievement is equivalent to a minimum of three A-levels, and are as follows below. Figure A shows the size of the Level 3 populations discussed within these key findings, and their growth between summer 2006 and summer 2013. Interactive graphs accompany this document and provide access to further, detailed data relating to the profiles and participation rates discussed. They can be accessed on the HEFCE web-site at www.hefce.ac.uk/whatwedo/wp/ourresearch/ypalevel/.

Figure A: Size of Level 3 populations whose achievement is equivalent to a minimum of three A-levels



The proportion of pupils achieving the highest grades at A-level has remained broadly static between summer 2006 and summer 2013.

9. Although absolute numbers of A-level pupils achieving the highest grades (including AAA, as well as A*A*A*, A*A*A and A*AA for cohorts after 2008-09) have increased by more than 5,000 since summer 2006, to 30,975 in summer 2013, these pupils continue to represent a similar proportion of the cohort. Having accounted for 16 per cent of pupils with at least three A-level grades in summer 2006, in summer 2013 the proportion achieving the highest grades was only one percentage point higher, at 17 per cent.

The number and proportion of pupils holding a BTEC National or a combination of Level 3 qualifications has risen since summer 2006.

10. The number of pupils whose Level 3 attainment has been obtained solely from one type of Level 3 BTEC National qualification almost doubled, from 25,515 in summer 2006 to 48,425 in summer 2013. Having accounted for 10 per cent of the overall 2005-06 Level 3 cohort, they made up 17 per cent of the equivalent 2012-13 cohort.

11. Meanwhile the number of pupils holding a combination of Level 3 qualifications more than tripled in the same period, from 6 per cent of the overall Level 3 cohort (14,460 pupils) to 16 per cent (48,625 pupils).

12. Within this, the numbers of pupils holding a combination of A-level and BTEC qualifications has increased tenfold, from 2,100 in summer 2006 to 21,000 in summer 2013. The vast majority of pupils holding this combination of qualifications have an achievement equivalent, in overall size, to at least three A-level grades. There was particular growth in pupils achieving one 'one-grade' BTEC and two A-level grades.

13. Similar growth has been found in the numbers of pupils who hold only BTEC qualifications at Level 3, but who hold more than one type (or a mixture) of BTEC. From 1,125 in summer 2006 numbers increased to 18,140 in summer 2013.

The proportion of pupils achieving the highest grades at BTEC has increased since 2005-06.

14. The proportion of pupils holding Level 3 BTEC qualifications equivalent to three A-levels who achieved the highest grades of three distinctions (DDD) or above increased by 21 percentage points between summer 2006 and summer 2013, from 17 per cent of the cohort to 38 per cent.

Pupils with A-levels or International Baccalaureate (IB) Diplomas generally have higher HE participation rates than those with other Level 3 qualifications.

15. The young participation rate for the cohort completing in summer 2011 was 79 per cent for pupils with A-levels and 80 per cent for those with IBs. (We acknowledge that the young participation rates observed for pupils holding an IB Diploma may be understated if international entries to HE study – which cannot be counted in this study – are more common among this cohort.) The rate for pupils with BTEC qualifications was 41 per cent in the same year. 64 per cent of those holding a combination of A-level and BTEC qualifications entered HE while young.

Pupils holding Level 3 qualifications in science, technology, engineering and mathematics (STEM) subjects have higher rates of young participation in HE than those who did not study STEM subjects.

16. For those pupils achieving at least three A-levels, there have been increases in the occurrence of mathematics and science subjects among their best three A-levels: between summer 2006 and summer 2013 numbers grew by around 25,000 in each subject area (or by 63 per cent and 30 per cent respectively). This study also finds that at least 90 per cent of pupils with Mathematics, Further mathematics, Biology, Chemistry or Physics as one of their top three A-levels in summer 2011 entered HE while young.

17. Meanwhile, BTEC pupils with STEM subjects among their highest three grades increased in number more than threefold in the same period, to almost 20,000. Such pupils in the summer 2011 cohort were found to have a young participation rate of 50 per cent: four percentage points higher than the equivalent rate for BTEC pupils who had no STEM subjects among their highest three grades.

18. Of those pupils studying a combination of A-level and BTEC qualifications, pupils with STEM A-level(s) and non-STEM BTEC(s) had the highest young participation rate of 73 per cent. Those with the opposite combination of non-STEM A-level(s) and STEM BTEC(s) had the lowest rate (66 per cent).

Young participation rates are found to differ across the English regions for pupils holding A-levels and similar qualifications.

19. Disparities of as much as 27 percentage points were observed in the young participation rates of pupils from different regions, and these differences are found to become larger as pupils' attainment decreases. With the exception of those holding IB Diplomas, pupils from the North East and London regions were consistently seen to have some of the highest participation rates. For pupils holding IB Diplomas, young participation rates were highest among those from the South West and the South East.

20. At a national level, pupils with higher attainment from Level 3 qualifications were found to have higher rates of young participation in HE than those pupils with lower attainment. Nationally, we find that 94 per cent of pupils who achieved at least three A-levels at grades ABB or higher progressed into HE while young: this proportion was 79 per cent among equivalent pupils whose A-level attainment was lower than ABB.

21. Young participation rates among pupils with different attainment levels were also seen to vary by region. Among pupils with at least three A-level grades the largest difference is for those from the South East and the South West, where 93 per cent of pupils with grades of ABB or higher progressed to HE while young, compared with 75 per cent among pupils with lower grades. The smallest difference is among pupils gaining their A-levels from schools and colleges in London, where the young participation rates were 93 per cent and 82 per cent respectively.

Action required

22. This document is for information only.

Introduction

23. Widening participation (WP) is one of HEFCE's key priorities, and a central part of our strategy is that all those with the potential to benefit from successful participation in higher education (HE) should have the opportunity to do so. WP covers many aspects of participation in HE, and successful delivery of our strategy depends on a shared understanding of trends in different aspects of HE participation.

24. It is our ambition to build an evidence base that supports as many of these aspects of WP as possible. This report adds to a range of previous research that includes how HE participation among young people has changed over time, differences in the young participation of men and women and differences between people living in different parts of the country¹.

25. Prior educational attainment is arguably the main determinant of a student's pathway into higher education. Understanding how different Level 3 qualifications affect a pupil's likelihood of progression into HE forms part of HEFCE's on-going programme of work in this area. This report seeks to extend the existing evidence base to incorporate this crucial aspect. Prior attainment has also been of particular interest to HEFCE because of student numbers controls and the Government's high-grades policy.

26. Interactive graphs accompany this document and provide more detailed data relating to some of the profiles and participation rates discussed here. They can be accessed on the HEFCE web-site at www.hefce.ac.uk/whatwedo/wp/ourresearch/ypalevel/.

Structure of this report

27. This report does two things. Firstly, it provides a profile of pupils holding different Level 3 qualifications².

- a. This includes consideration of overall numbers holding A-level, BTEC and International Baccalaureate (IB) Diploma qualifications, as well as numbers holding other Level 3 qualifications or a combination of different Level 3 qualifications.
- b. For pupils holding A-levels, BTECs and IB Diplomas, we show the profile of grades achieved. The subject profile of the qualifications held is also provided.

28. The second section explores rates of participation on a number of bases:

- a. Overall rates of participation for pupils holding A-level, BTEC and IB Diploma qualifications, as well as those holding other Level 3 qualifications and a combination of different Level 3 qualifications. These overall participation rates are broken down by the age of the student on entry to HE.
- b. Young participation rates by Level 3 attainment (in terms of grades achieved) for those holding A-levels, BTECs and IB Diplomas.
- c. Young participation rates among those holding A-levels and BTECs in different subject areas

¹ See www.hefce.ac.uk/whatwedo/wp/ourresearch/trendstyp/ and www.hefce.ac.uk/whatwedo/wp/ourresearch/polar/.

² Level 3 study at one level below HE comprises a range of qualifications typically considered as being equivalent to GCE A-levels. These qualifications include BTEC Nationals, International Baccalaureate Diplomas, OCR Nationals (now Cambridge Nationals), Cambridge Pre U qualifications and Principal Learning Diplomas.

- d. Young participation rates by gender, school type and region for those holding A-levels, BTECs and IB Diplomas. The Level 3 attainment of pupils is considered in conjunction with each of these characteristics.
- e. For pupils holding A-levels, young participation rates by area-based measures of disadvantage are also examined.
- f. For those A-level, BTEC and IB Diploma pupils found to have progressed to HE within two academic years of obtaining their Level 3 qualifications, the region and type of institution that they entered for HE has been reported. Again, their Level 3 attainment is considered in conjunction with each of these attributes.

Defining the populations considered

29. Cohorts examined within this report are based on Key Stage 5 pupils who achieved at least one Level 3 qualification (not including AS levels) from maintained or independent schools and colleges in England between summer 2006 and summer 2013³. This population includes pupils who were aged 16, 17 or 18 on 31 August at the start of the academic year **and** who were in, or deemed to be in, school year 13. Throughout the remainder of this report, references to ‘the Level 3 population’ are references to this specific population. This population definition is consistent with the eligibility criteria for Key Stage 5 pupils to be included in the ‘16 to 18 performance tables’ and the National Statistics on ‘A-level and other Level 3 results in England’, both published annually by the Department for Education⁴.

30. Years referred to throughout the remainder of this report are determined by the academic year in which the cohort completed their exams; for instance 2012-13 is the cohort of pupils who sat their Level 3 qualifications in summer 2013 (potentially entering HE in or after the 2013-14 academic year).

31. The populations considered give a ‘snapshot’ of each cohort, typically aged 18 at the time of their qualifications being awarded, and do not account for resits. For instance, a person classified as being within the ‘two A-level grades’ category may have failed one of their subjects but stayed on in Key Stage 5 for an extra year in order to complete the award and then actually achieved three A-level grades⁵.

Defining participation

32. ‘Young participation’ refers to pupils who entered an HE course up to two years after they completed their Level 3 qualifications⁶. On the basis that the Level 3 population considered by

³ Key Stage 5 is the two years of post-compulsory education under the National Curriculum for students aged 16 to 18. The Level 3 qualifications that are observed in this study include: A-levels (not including AS levels), BTEC National qualifications, IB Diplomas, OCR National qualifications, Cambridge Pre-U qualifications and Principal Learning Diplomas. A full list of Level 3 qualifications included in the study is available at Annex A. The cohorts considered within this report include pupils who have gained qualifications from English schools and colleges, including maintained schools (comprehensive, selective and others), independent schools, sixth form colleges and other further education colleges.

⁴ For further information, see <https://www.gov.uk/government/collections/statistics-a-as-levels-key-stage-5> and www.education.gov.uk/schools/performance/.

⁵ Pupils remaining in Key Stage 5 for an additional year in order to resit a Level 3 award would be excluded from the cohorts considered here in that year of the resit: they would only be included in the analysis reported here once, in the cohort relating to the first year in which the qualification was attempted.

⁶ Three data sources are used within this analysis: the Department for Education’s National Pupil Database, the Higher Education Statistics Agency student records and the Individualised Learner Record (looking at HE students in further education providers). These datasets have been linked together to create a longitudinal record

this report were typically aged 18 at the time of their qualifications being awarded (in the summer of school year 13), the young participation examined in this report typically references pupils who entered an HE course aged 18 or 19. It also refers specifically to those who entered HE at either a UK higher education institution (HEI) or an English Further Education College (FEC). We recognise that the fact we are unable to examine progression to HE in other UK FECs or non-UK institutions may affect some results in particular, for instance the progression rates of pupils with IB Diplomas, the highest grades or from independent schools.

33. In profiling pupils holding Level 3 qualifications, the main focus of this study has been on the most recent cohort (2012-13). When considering young participation rates, the 2010-11 cohort becomes the main focus, as these data are the latest available that allow two years for the pupils to enter HE (and thus the most recent data for which we can report young participation in full).

34. Because of the timescales involved in tracking A-level 3 cohort from Key Stage 5 through to HE attainment and employment destinations, this study does not report on the outcomes of Level 3 pupils beyond their rates of participation in HE while young. The requirement to follow a pupil for a minimum of six academic years means that it has not been feasible to include analysis of this nature for the cohorts considered by this report⁷.

Profile of pupils holding different Level 3 qualifications

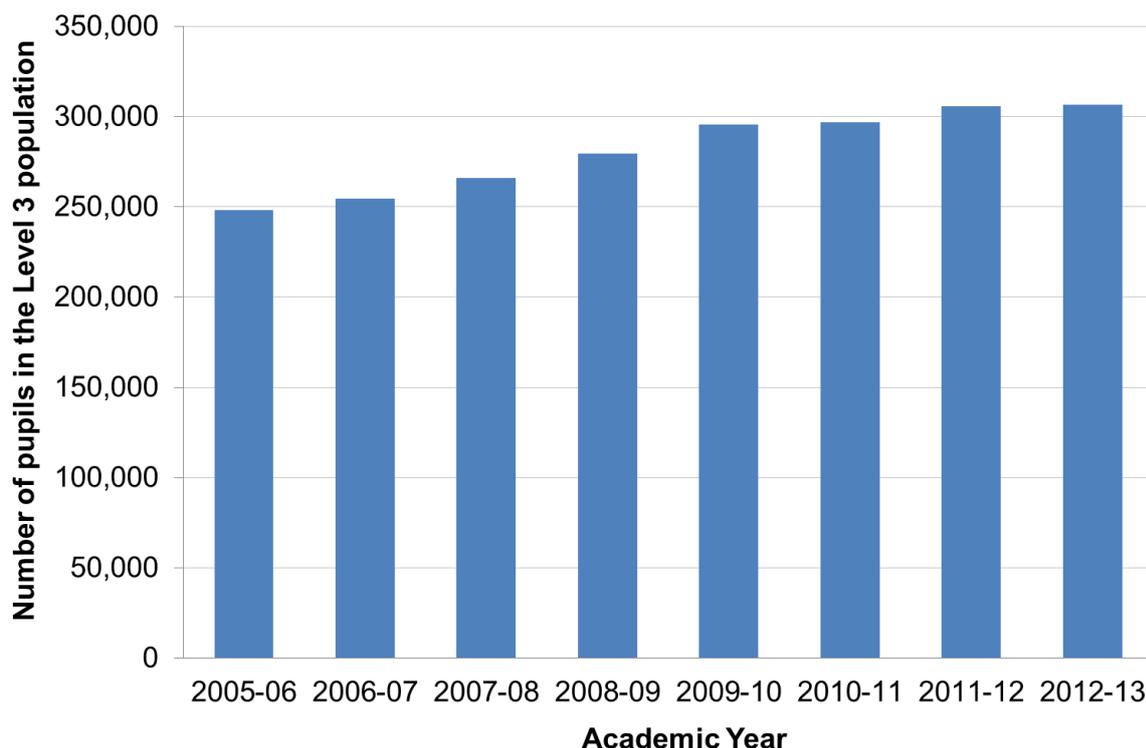
Overall populations

35. Figure 1 shows how numbers of pupils in the Level 3 population have increased steadily from 2005-06 to 2012-13. It shows that the overall Level 3 population in 2012-13 was more than 58,000 pupils larger than the equivalent population in 2005-06, an increase of around 23 per cent.

which enables us to track pupils from Key Stage 5 through to HE. Individual students were tracked within and through each annual student dataset using a number of personal characteristics such as name, date of birth and postcode. For a further explanation of how students are tracked and linked, see Annex B.

⁷ Taking the 2010-11 cohort of pupils gaining Level 3 qualifications as an example, we need to follow those pupils for two academic years (2011-12 and 2012-13) in order to robustly identify this cohort's participation in HE while young. In order to then identify their HE attainment we would need to follow pupils who progressed into HE for a further four academic years (i.e. until 2015-16) to allow sufficient time for the majority to have completed the HE course they were found to have commenced in 2011-12 or 2012-13.

Figure 1: Change in overall Level 3 population size over time



36. The overall Level 3 cohort, for the purpose of this report, has been split into several categories. We consider those pupils holding qualifications of only one type. Pupils whose only Level 3 qualifications are A-levels are split by the number of grades achieved, into those with one or two grades, and those with at least three grades. Pupils whose only Level 3 qualifications are BTEC Nationals equivalent to three A-level grades ('three-grade' BTECs) are considered separately from those holding only Level 3 BTEC Nationals equivalent to either one or two A-level grades ('one- or two-grade' BTECs)⁸. Another category considers those holding only an IB Diploma.

37. The category labelled as 'Other Level 3' encompasses any Level 3 qualification included in the study that is not categorised separately in Table 1, including OCR National qualifications, Cambridge Pre-U qualifications and Principal Learning Diplomas. 'Combination' includes those who studied any combination of the Level 3 qualifications examined, and is examined in more detail in Table 2⁹.

⁸ In this context, 'three-grade' BTEC includes NQF National Diploma and QCF National Extended Diploma. 'Two-grade' BTEC includes NQF National Certificate and QCF National Diploma. 'One-grade' BTEC includes NQF National Award and QCF National Subsidiary Diploma.

⁹ See Annex A for a full list of the qualifications included in and excluded from the population.

Table 1: Level 3 cohort by type of qualification, 2005-06 and 2012-13

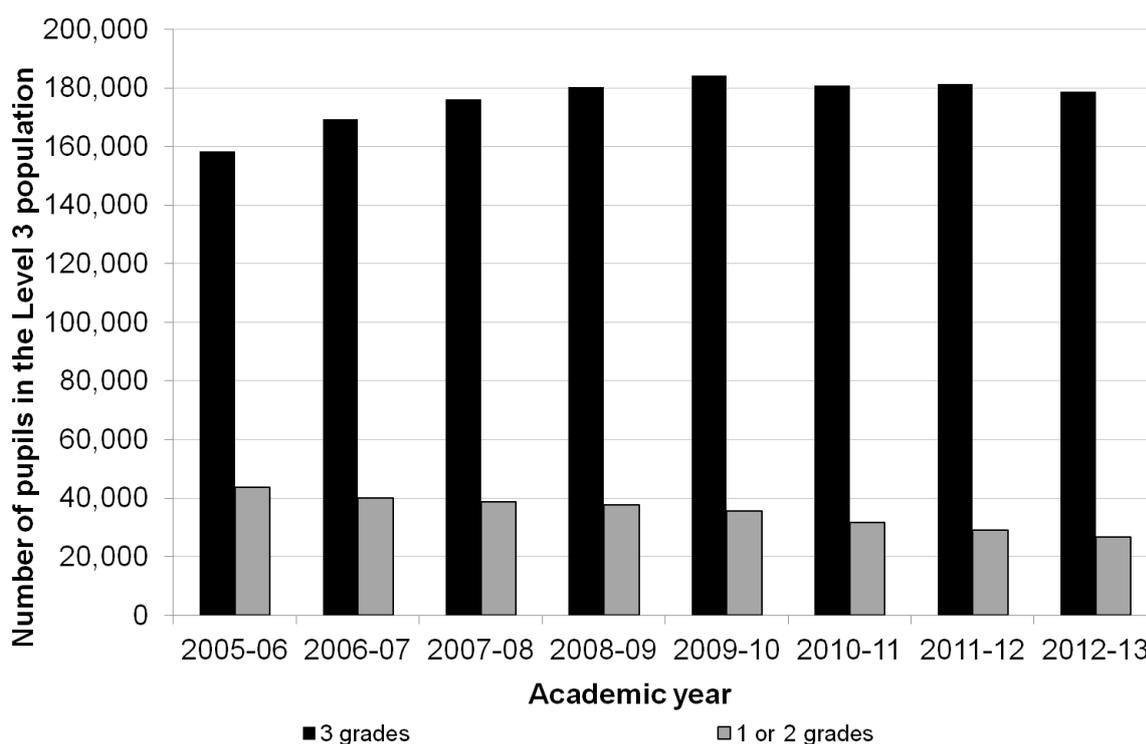
Level 3 qualification type	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
A-level	202,195	81%	205,170	67%
3 grades	158,410	64%	178,590	58%
1 or 2 grades	43,785	18%	26,585	9%
BTEC	25,515	10%	48,425	17%
3-grade	20,245	8%	31,795	10%
1- or 2-grade	5,270	2%	16,635	5%
International Baccalaureate Diploma	1,290	1%	2,420	1%
Other Level 3	4,905	2%	1,960	1%
Combination	14,460	6%	48,625	16%
Total	248,365	100%	306,605	100%

Changes in the A-level profile

38. Table 1 indicates that pupils who achieved at least three A-level grades from A-levels alone consistently make up over half of the Level 3 population for each year examined. It also shows that while those holding A-level qualifications alone continue to account for the majority of the cohort, this proportion has dropped from 81 per cent of the cohort in 2005-06 to 67 per cent in 2012-13.

39. Figure 2 shows that the numbers holding one or two A-level grades alone have fallen steadily each year between 2005-06 and 2012-13. In the latter years of the time series, these declines have been accompanied by A-level ling-off in the cohort who held at least three A-level grades. Following year-on-year growth from 2005-06, numbers holding three or more A-level grades as their only Level 3 qualifications peaked in 2009-10 and have fluctuated at around 180,000 in each year since.

Figure 2: Change in the A-level population size over time



Changes in the profile of the 'Combination' population

40. Table 1 shows a clear increase in the proportions of the Level 3 cohort holding a combination of qualifications over the time series observed: the Combination population has more than tripled in number between 2005-06 and 2012-13.

41. Table 2 provides greater detail on the qualification groupings within the Combination category. Because of the small numbers involved, it does not further disaggregate combinations involving IB Diplomas and includes these within the 'Other combination' category.

Table 2: Level 3 population holding a combination of qualifications by type of combination, 2005-06 and 2012-13

Level 3 combination type	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
A-level and BTEC	2,100	15%	21,000	43%
A-level and Other	11,105	77%	6,930	14%
BTEC mixture	1,125	8%	18,140	37%
BTEC and Other	85	1%	1,580	3%
Other combination	50	<0.5%	970	2%
Total	14,460	100%	48,625	100%

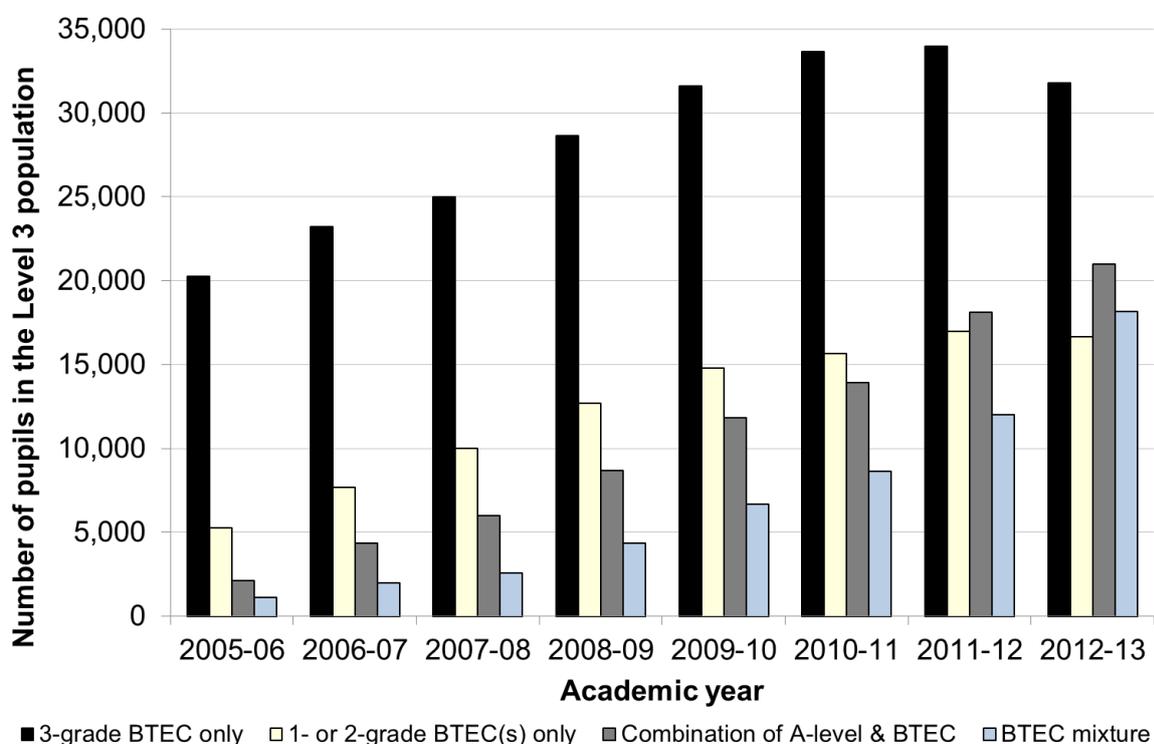
42. Table 2 shows that in 2005-06, pupils with an A-level and an Other Level 3 qualification made up 77 per cent of the population who achieved more than one type of Level 3 qualification. This proportion decreased as the number of pupils taking other combinations of Level 3 qualifications increased substantially; by 2012-13 it accounted for just 14 per cent of the cohort.

Changes in the BTEC profiles

43. Table 1 shows that number of pupils who held BTEC qualifications as their only Level 3 qualifications almost doubled between 2005-06 and 2012-13: from 25,515 in 2005-06 to 48,425 in 2012-13. Table 2 confirms that this increase occurred in conjunction with notable growth since 2005-06 in the Combinations involving BTECs. In particular, of the combination categories A-level and BTEC and BTEC mixture have seen the most substantial growth.

44. Figure 3 shows the number of pupils in each categorisation involving any BTEC study. It demonstrates that all categorisations show substantial growth between 2005-06 and 2012-13.

Figure 3: Changes in Level 3 populations involving BTEC study, 2005-06 to 2012-13



45. The BTEC mixture category includes pupils who hold only BTEC qualifications at Level 3, but who hold more than one type of BTEC. Table 3 outlines the mixtures of qualifications achieved wholly within BTEC study. It shows that, among those categorised as BTEC mixture, there has been a particular increase in the numbers holding at least one three-grade BTEC along with at least one other BTEC qualification, from fewer than 1,000 in 2005-06 to more than 12,000 in 2012-13. Table 3 also records a substantial change among pupils holding one- or two-grade BTECs only, where the numbers holding a single one-grade BTEC increased more than fourfold and accounted for more than half of the cohort categorised as 'BTEC only – one- or two-grades'.

Table 3: Mixtures within BTEC study

Mixtures within BTEC study		2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
BTEC only – 1- or 2-grades	One 1-grade BTEC	1,915	36%	8,690	52%
	Two 1-grade BTECs	40	1%	1,415	9%
	Three 1-grade BTECs	0	0%	655	4%
	One 2-grade BTEC	3,310	63%	5,875	35%
	Subtotal: BTEC only – one- or two grades	5,270	100%	16,635	100%
BTEC mixture	BTEC mixture involving at least one 3-grade BTEC	665	59%	12,440	69%
	BTEC mixture involving one 2-grade BTEC and one 1-grade BTEC	450	40%	5,015	28%
	Other mixture of BTECs	5	1%	680	4%
	within which, BTEC achievement is equivalent in overall size to three A-level grades	0	0%	25	<0.5%
	Subtotal: BTEC mixture	1,125	100%	18,140	100%

Changes in the profile of A-level and BTEC combinations

46. Table 2 and Figure 3 indicate that the number of pupils holding an A-level and BTEC combination increased tenfold over the time series examined. Table 4 shows how the specific combinations within this category have increased over this period. It shows that there were only 2,800 pupils within the 2012-13 A-level and BTEC cohort whose achievement from this combination of Level 3 qualification types was, in overall size, less than the equivalent of at least three A-level grades. Among both the 2005-06 and 2012-13 cohorts, only 13 per cent achieved the minimum combination of one one-grade BTEC and a single A-level grade.

47. Table 4 also demonstrates that some of the most substantial increases are observed among those achieving a combination equivalent in overall size to exactly three A-level grades: at 7,280, the number of the 2012-13 cohort who held one one-grade BTEC and two A-level grades was more than 20 times higher than the equivalent number of the 2005-06 cohort. Similarly, numbers holding one two-grade BTEC and one A-level grade increased almost tenfold.

Table 4: Types of A-level and BTEC combinations

	Type of A-level and BTEC combination	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
1	One 1-grade BTEC and one A-level grade	275	13%	2,800	13%
2	One 1-grade BTEC and two A-level grades	325	15%	7,280	35%
3	One 1-grade BTEC and at least three A-level grades	145	7%	1,490	7%
4	Two 1-grade BTECs and one A-level grade	10	1%	1,700	8%
5	One 2-grade BTEC and one A-level grade	360	17%	3,265	16%
6	One 2-grade BTEC and two A-level grades	80	4%	930	4%
7	One 2-grade BTEC, one 1-grade BTEC and one A-level grade	50	2%	1,365	7%
8	Minimum of one 3-grade BTEC and one A-level grade	780	37%	1,265	6%
9	Other combination of A-levels and BTECs, within which:	75	4%	900	4%
10	at least three A-level grades were achieved	25	1%	205	1%
11	a minimum of one 3-grade BTEC was achieved	40	2%	120	1%
12	BTEC achievement is otherwise equivalent in overall size to three A-level grades	15	1%	385	2%
	Total	2,100	100%	21,000	100%

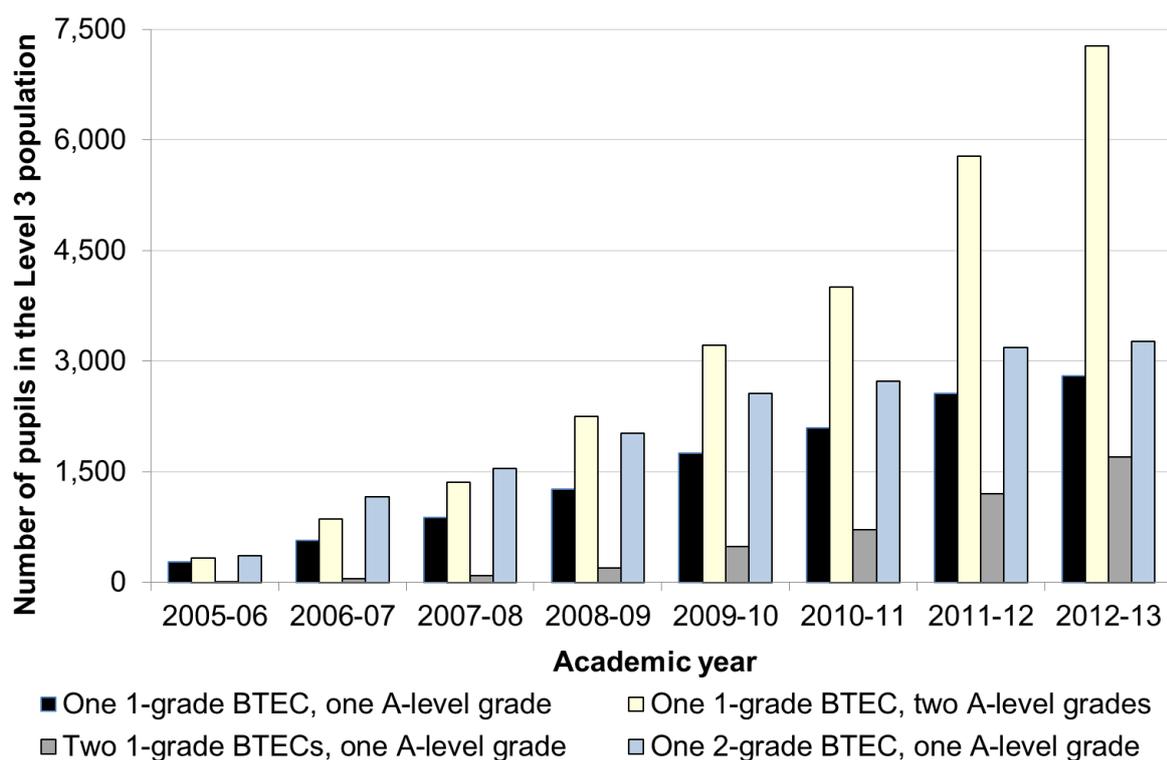
48. In providing information on grade and subject profiles later in this report, we will focus on those cohorts whose attainment at Level 3 in the different qualification types is equivalent in size to three A-level grades. While cohorts will be defined in the relevant sections of this report, we collapse Table 4 above to show three different subsets of the A-level and BTEC cohort which each amount to attainment equivalent in size to three A-level grades.

Table 4a: A-level and BTEC combinations equivalent in size to at least three A-level grades

Type of A-level and BTEC combination	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
Overall size of the combination is equivalent to at least three A-level grades (sum of Table 4 combination numbers 2 to 9)	1,825	87%	18,205	87%
BTEC size within the combination is equivalent to at least three A-level grades (sum of Table 4 combination numbers 7, 8, 11 and 12)	885	42%	3,140	15%
A-level size within the combination is at least three grades (sum of Table 4 combination numbers 3 and 10)	170	8%	1,695	8%
Overall total holding an A-level and BTEC combination	2,100	100%	21,000	100%

49. Figure 4 shows that the increases observed in Table 4 among those achieving an A-level and BTEC combination equivalent in overall size to three A-level grades have been building consistently year-on-year during the period considered. These changes were particularly steep for those achieving one one-grade BTEC in combination with two A-level grades, and for those achieving two one-grade BTECs in combination with one A-level grade.

Figure 4: Changes in A-level and BTEC combinations, 2005-06 to 2012-13



Grade profiles

50. Paragraphs 54 to 66 focus on those who achieved, typically at the age of 18, an IB Diploma or the equivalent of at least three A-level grades. We consider specific categorisations of the Level 3 population as shown in Tables 1 and 2.

51. With regard to A-level achievement, the best three grades of pupils who passed at least three A-levels are examined. This includes those who passed at least three A-levels having achieved A-levels alone, as well as pupils who obtained at least three A-level grades as the A-level component of an A-level and BTEC combination or an A-level and Other combination. This population will be referred to as the 'three-grade A-level cohort' for the remainder of this report.

52. BTEC achievement is considered in terms of those who achieved the equivalent of at least three A-level grades from BTECs alone or from the BTEC component of an A-level and BTEC combination. This includes those who achieved the equivalent of at least three A-level grades from a mixture of BTEC types. This population will be referred to as the 'three-grade BTEC cohort' for the remainder of this report.

53. Those who achieved other Level 3 qualifications, or one of the combinations of Level 3 qualifications not mentioned in paragraphs 51 or 52, are not included in consideration of the grade profiles achieved. This is because of either the small cohort sizes involved, or complexities associated with profiling the combinations of qualifications.

A-level achievement

54. The numbers reported here relate to the best three grades of pupils who passed at least three A-levels. This includes the 178,590 pupils shown in Table 1 who passed at least three A-level grades in 2012-13 having achieved A-levels alone. It also includes 1,695 pupils shown in Table 3 to have obtained at least three A-level grades in 2012-13 within a combination involving both A-level and BTEC qualifications. Additionally, there were 880 pupils within the 2012-13 A-level and Other combination category (shown in Table 2) who achieved three A-level grades and are included within the figures reported here.

55. For the purpose of this report, A* grades have been counted as A grades to allow for consistency across the time series, as A* grades did not exist prior to 2008-09. For instance, somebody with A*A*B will here appear as AAB. To simplify the grade boundary categorisations we consider achievement at equivalent grades: for example, someone with ABC would here be classed as BBB. The complete list of A-level grade equivalences is available at Annex C. Table 5 displays proportions of the A-level populations (with three or more grades) achieving each grade boundary as part of a pupil's best three grades.

Table 5: A-level achievement by grade for the 2005-06 and 2012-13 cohorts who obtained at least three A-level grades

Best three A-level grades achieved	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
AAA	25,385	16%	30,975	17%
AAB	15,440	10%	19,125	11%
ABB	16,395	10%	19,715	11%
BBB	16,570	10%	20,085	11%
BBC	16,300	10%	19,535	11%
BCC	16,005	10%	18,835	10%
CCC	14,775	9%	16,830	9%
CCD	13,055	8%	13,610	8%
CDD	10,410	7%	10,280	6%
DDD	7,730	5%	6,615	4%
DDE	4,780	3%	3,675	2%
DEE	2,390	1%	1,500	1%
EEE	665	<0.5%	385	<0.5%
Total	159,900	100%	181,160	100%

56. Table 5 shows that around a sixth of each cohort achieved the highest grades (this includes A*A*A*, A*A*A and A*AA for cohorts after 2008-09). Around 10 per cent achieved the next lowest grade boundary of AAB, with the proportion falling steadily to less than half of one per cent of the cohort achieving the grade boundary of EEE. The table might imply a very slight

shift towards the higher grades over the time period, but generally the grade profile has remained largely static.

BTEC achievement

57. For the remainder of this report, references to the 'three-grade BTEC cohort' will refer to those who obtained BTEC qualifications equivalent to three A-levels. As noted at paragraph 52, this cohort includes those who achieved the equivalent of at least three A-level grades from BTECs alone or from the BTEC component of a combination involving both A-levels and BTECs.

58. The numbers reported here therefore incorporate:

- 31,795 pupils shown in Table 1 to have achieved the equivalent to three A-levels from a three-grade BTEC as the only qualification type they obtained in 2012-13¹⁰
- 655 pupils reported to hold only BTEC qualifications and to have achieved three one-grade BTECs in 2012-13, as shown in Table 3
- 3,140 pupils shown in Table 4a whose BTEC achievement within the A-level and BTEC combination is equivalent in overall size to three A-level grades
- 17,480 pupils seen in Table 3 to have achieved a BTEC mixture that is equivalent in overall size to three A-level grades.

59. Similarly to the treatment of the A-level cohort, BTEC Distinction* grades, which were introduced for those finishing the qualification in 2010-11, are here interpreted as Distinctions to allow for consistency over time. Where a pupil is found to have obtained a single three-grade BTEC as well another one- or two-grade BTEC qualification, we take the highest results achieved from the three-grade BTEC. Otherwise, the results listed in Table 6 are taken from the highest results achieved by the BTEC cohort defined above.

¹⁰ These pupils made up 60 per cent of the overall BTEC cohort in 2012-13, a proportion that had declined steadily from around 90 per cent of the 2005-06 cohort.

Table 6: BTEC achievement by grade for the 2005-06 and 2012-13 cohorts who obtained the equivalent of at least three A-level grades

BTEC grades achieved	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
DDD	3,725	17%	20,270	38%
DDM	3,145	14%	5,800	11%
DDP	5	<0.5%	235	<0.5%
DMM	1,545	7%	5,835	11%
DMP	10	<0.5%	255	<0.5%
DPP	0	0%	40	<0.5%
MMM	3,405	15%	5,125	10%
MMP	2,425	11%	4,250	8%
MPP	3,370	15%	4,430	8%
PPP	4,620	21%	6,830	13%
Total	22,245	100%	53,065	100%

Note: D = Distinction, M = Merit, P = Pass.

60. Table 6 shows that the proportion of the three-grade BTEC cohort achieving the highest grades of DDD (including above DDD, for 2010-11 onwards) more than doubled between 2005-06 and 2012-13, from 17 per cent to 38 per cent. Growth in the overall size of the three-grade BTEC cohort appears to be concentrated among those achieving the highest grades, with smaller growth in the numbers achieving the lower grades.

IB Diploma achievement

61. IB Diplomas involve pupils studying six subjects, the results of which are graded from 1 to 7 (7 being the highest), with a further 3 points available from an additional component. Pupils who achieve at least 24 points in total (out of a possible 45) are awarded the IB Diploma. In this study, IB point totals of 26 or under have been removed to allow for consistency across the time series as prior to 2009-10, only point totals of 27 or above were recorded in the National Pupil Database. Points have also been grouped for clarity, because of the wide range of point scores available and the small cohort sizes. Table 7 displays the proportions of the IB Diploma cohorts in 2005-06 and 2012-13 who achieved each points grouping.

Table 7: IB Diploma achievement by grouped point score for the 2005-06 and 2012-13 cohorts

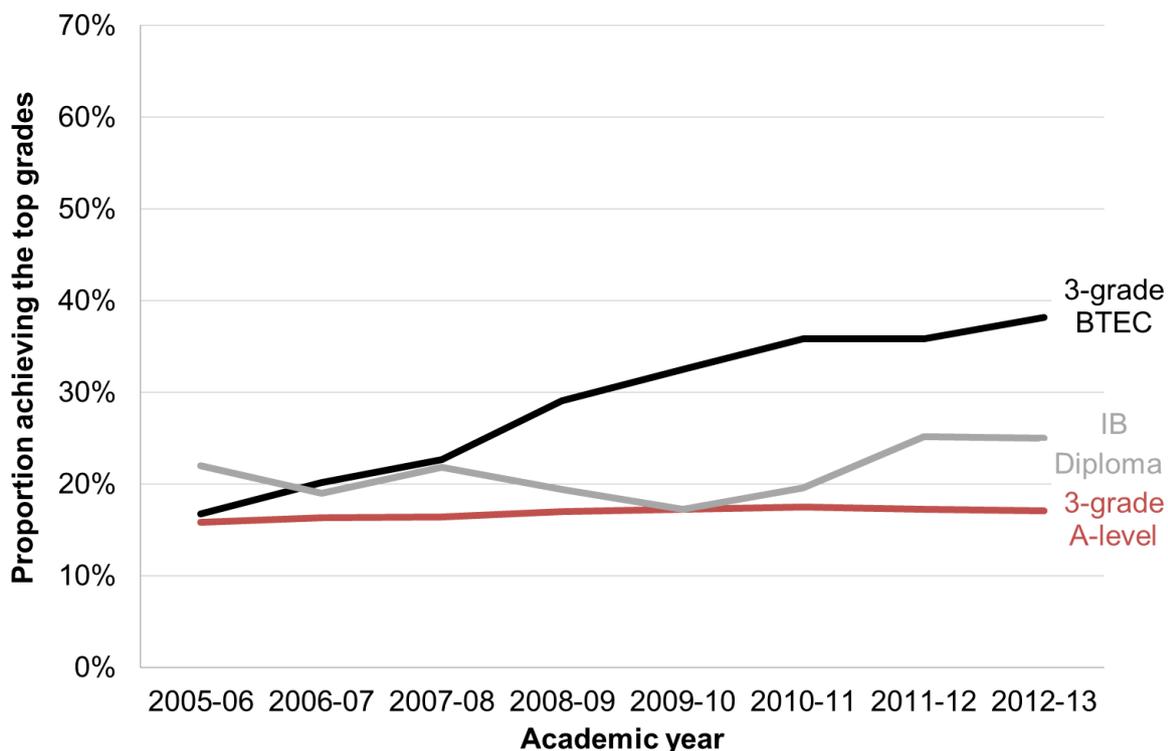
IB Diploma grade achieved	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
45-43	100	8%	195	8%
42-40	185	14%	385	16%
39-37	245	19%	480	20%
36-34	270	21%	535	22%
33-31	255	20%	420	17%
30-27	235	18%	400	17%
Total	1,290	100%	2,420	100%

62. Table 7 shows that 8 per cent of both cohorts achieved the highest points of 43 and above. Aside from this, the proportion of pupils achieving each grade grouping is broadly similar. It indicates little change overall in the proportions of the cohort achieving each grade grouping over time, although there are some apparent fluctuations due to small numbers.

Top grades achievement

63. The 'top grade' groupings are, for the purpose of this report, considered to be AAA or above, DDD or above and 40 or above for the three-grade A-level, three-grade BTEC and IB Diploma cohorts respectively. Figure 5 observes the changes in proportions of pupils within each of these Level 3 cohorts who achieved the best possible grades over time.

Figure 5: Proportions of three-grade A-level, three-grade BTEC and IB Diploma cohorts achieving the 'top grades'



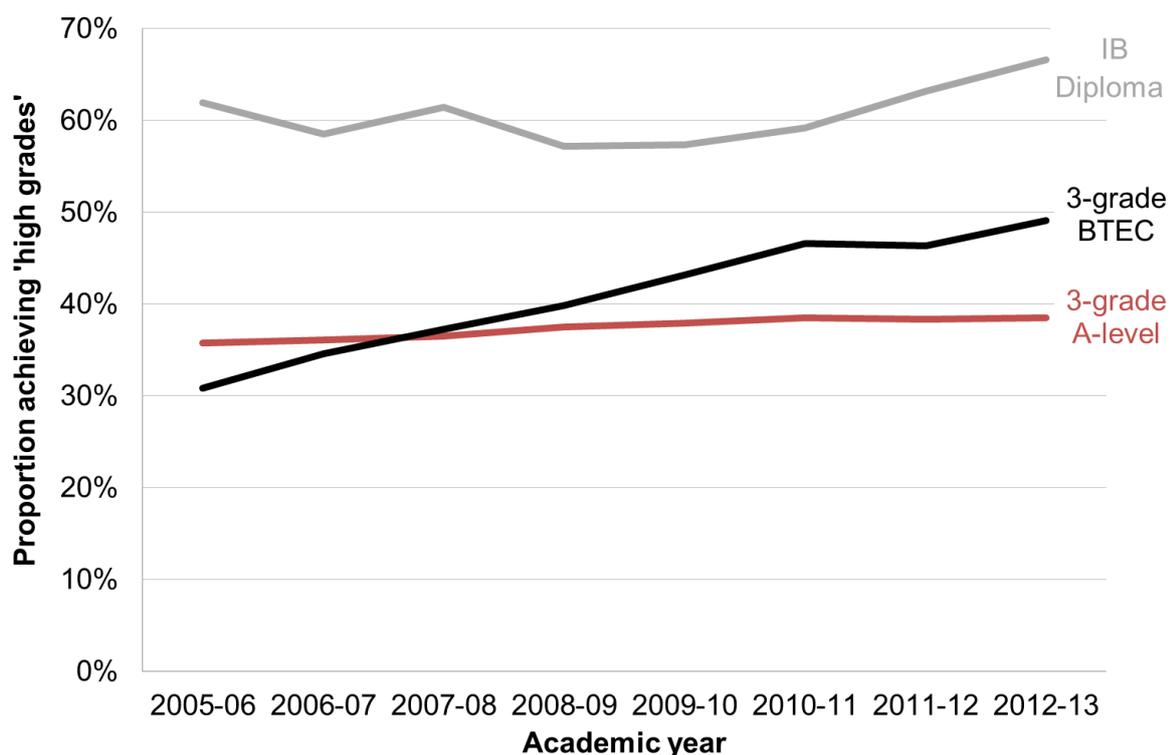
64. Figure 5 shows that over the time series considered the proportions of those with three-grade A-levels or an IB Diploma achieving top grades have increased slightly, by roughly one or two percentage points (with some apparent fluctuation due to the small numbers of those with the IB Diploma). Figure 5 also indicates that the proportion of those with three-grade BTECs achieving DDD or above has increased from 17 per cent in 2005-06 to 38 per cent in 2012-13 (an increase of more than 125 per cent).

High grades achievement

65. According to government policy as of academic year 2013-14, students with at least ABB at A-level, at least DDM from BTECs or at least 34 points from an IB Diploma are considered to have 'high grades'¹¹. Figure 6 shows the proportions of each cohort achieving these grades.

¹¹ More information on the high-grades policy is available on the HEFCE web-site at www.hefce.ac.uk/whatwedo/lt/howfund/studentgrades/

Figure 6: Proportions of three-grade A-level, three-grade BTEC and IB Diploma cohorts achieving 'high grades'



66. When comparing the proportions of the three-grade A-level, three-grade BTEC and IB Diploma cohorts who achieved high grades in Figure 6 (a combination of the top 3, 2 and 4 rows from Table 5, Table 6 and Table 7 respectively), it is clear that IB Diploma pupils consistently have the highest proportion achieving high grades. It also shows that while three-grade A-level and IB Diploma cohort proportions achieving high grades have risen slightly and gradually (aside from fluctuations in IB Diploma proportions due to small numbers), the proportion of three-grade BTEC pupils achieving high grades has increased more rapidly, from around 30 per cent to 50 per cent over the seven-year period.

Subject profiles

67. Paragraphs 71 to 92 will look at the subjects studied as part of a pupil's achievement equivalent to at least three A-level grades. Because of a lack of comparable information on the subjects studied within an IB Diploma, as well as small numbers within subsets, these cohorts are not considered in this section.

68. As with analysis of the grade profiles, the subjects studied as part of a pupil's highest three A-level grades are examined for all those within the three-grade A-level cohort defined at paragraph 51. The subjects studied by the three-grade BTEC cohort (defined at paragraph 52) are also examined.

69. Paragraphs 46 to 49 discussed the substantial growth observed in the numbers achieving an A-level and BTEC combination equivalent in overall size to at least three A-level grades. Pupils holding this combination of qualifications will only be included in the three-grade A-level or the three-grade BTEC cohort if their attainment within this combination comprises achievement

equivalent to at least three A-level grades in the relevant component qualification. While it has not been possible to provide a meaningful analysis of the grade profiles achieved by pupils with an A-level and BTEC combination, their subject profiles are considered separately at paragraphs 90 to 92. The analysis in these paragraphs considers all Level 3 pupils achieving an A-level and BTEC combination equivalent in overall size to at least three A-level grades.

70. With regard to BTEC and combined A-level and BTEC achievement, we place a particular focus on the study of science, technology, engineering and mathematics (STEM) subjects¹². In consideration of the three-grade A-level cohort, we place a particular focus on the study of facilitating subjects.

Facilitating subjects

71. In 2011, the Russell Group defined 'facilitating subjects' as those A-level subjects required more often than others for entry to degree courses at Russell Group universities¹³. This definition has since been assumed for use in the Department for Education's annual publication of National Statistics on 'A-level and other Level 3 results in England'¹⁴, and has become widely established and recognised more widely across the sector as a binary distinction of A-level subject areas.

72. Most importantly, our analysis finds that those A-level subjects considered facilitating form a natural grouping with respect to the rates at which pupils in the Level 3 population participate in HE while young (aged 18 or 19 upon entry). The young participation rates of A-level pupils within the Level 3 population, including by subject area, are explored in more detail in paragraphs 126 to 128. However, there seems to be a clear, natural divide between the young participation rates associated with the A-level subject areas considered to be facilitating, and the young participation rates associated with other A-level subject areas. It is this understanding of the facilitating subjects sharing a common characteristic that leads us to apply this binary distinction between A-level subject areas.

73. The subjects considered to be facilitating are:

- Biology
- Chemistry
- Physics
- Mathematics
- Further mathematics
- Geography
- History
- English literature
- Classical and modern foreign languages.

A-level subject profiles

74. Table 8 shows the proportions of the three-grade A-level cohort that studied one, two, three or no facilitating subjects as part of their highest three grades. It shows that, among both

¹² Subject areas defined with regard to BTEC qualifications are shown in Annex D.

¹³ More information is available at www.russellgroup.ac.uk/informed-choices/

¹⁴ For further information, see <https://www.gov.uk/government/collections/statistics-a-as-levels-key-stage-5>

cohorts, approximately one in three pupils held one facilitating subject among their highest three A-levels, while around a quarter of pupils held two such subjects.

Table 8: Proportion of the 2012-13 cohort holding numbers of facilitating subjects among their highest three A-levels

Number of facilitating subjects	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
0	34,835	22%	37,245	21%
1	52,110	33%	52,005	29%
2	43,975	28%	49,710	27%
3	28,980	18%	42,200	23%
Total	159,900	100%	181,160	100%

75. Table 8 also indicates that the proportion of pupils with three facilitating subjects among their highest three A-levels has increased by five percentage points since 2005-06, while the proportions with two, one or none have all fallen.

76. Table 9 shows the individual subject areas making up the highest three grades of those within the three-grade A-level cohort. Considering subject information in this way may seem to inflate the size of the cohort being examined. For instance, the 2012-13 cohort has 181,160 pupils within the three-grade A-level cohort: taking the best three grades for each individual gives 543,485 subject achievements in total ($181,160 \times 3 = 543,485$; after rounding).

Table 9: Subject profile of pupils' highest three A-levels

Subject area	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
Mathematics	36,160	8%	57,040	11%
Further mathematics	3,350	1%	7,530	1%
Biology	34,920	7%	43,185	8%
Chemistry	25,900	5%	35,830	7%
Physics	17,330	4%	22,955	4%
English literature	35,710	7%	34,235	6%
History	32,160	7%	36,100	7%
Geography	21,790	5%	22,580	4%
French	9,120	2%	7,375	1%
German	3,810	1%	2,510	<0.5%
Spanish	3,865	1%	4,735	1%
Other modern languages	1,745	<0.5%	2,880	1%
Classical languages	1,135	<0.5%	1,070	<0.5%
Subtotal: Facilitating subjects	226,990	47%	278,030	51%
Non-facilitating subjects	252,705	53%	265,455	49%
Total subject count*	479,695	100%	543,485	100%

Note: Numbers are proportionate to those in the Table 8 (3 per pupil)

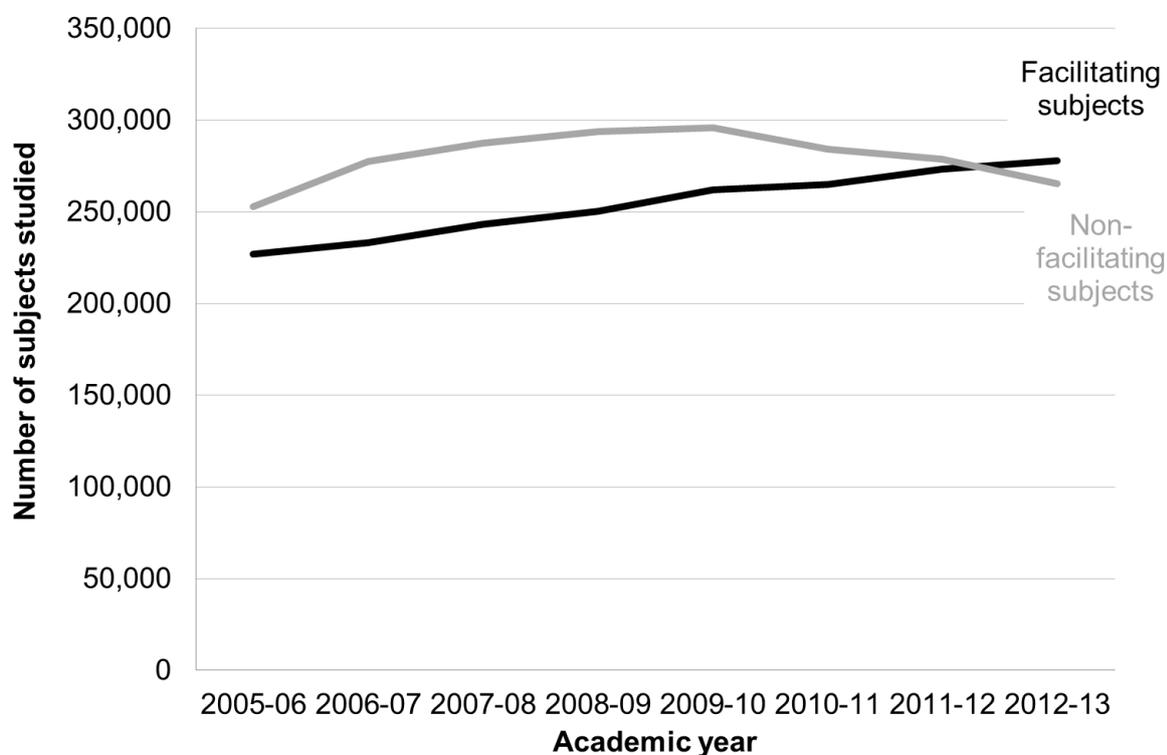
77. Table 9 shows that 51 per cent of the total number of subjects studied in 2012-13 (by those within the three-grade A-level cohort, considering the subjects in which their highest three grades were achieved) were facilitating subjects.

78. Mathematics has been seen to be the most frequently studied facilitating subject: Table 9 shows that 11 per cent of the 2012-13 cohort, and 8 per cent of the 2005-06 cohort, studied it. With almost 14,000 more awards than the next most frequently studied subject area in 2012-13, Mathematics appears to have grown in popularity since 2005-06. For the earlier cohort, the difference between Mathematics and the next most frequently studied subject area was much smaller in terms both absolute (fewer than 1,000) and proportional (one percentage point).

79. Among the three-grade A-level cohorts in 2012-13, Biology was the second most frequently studied facilitating subject, followed by History. When compared with the 2005-06 cohort, Chemistry has overtaken English literature to become the fourth most frequently studied facilitating subject in 2012-13. Languages are consistently the least frequently studied subjects, with all languages making up only 4 per cent and 3 per cent of the 2005-06 and 2012-13 cohorts respectively.

80. Figure 7 illustrates the change over time in the overall numbers of facilitating and non-facilitating subjects studied as part of a pupil's highest three A-levels.

Figure 7: Number of facilitating and non-facilitating subjects studied by the three-grade A-level cohort, 2005-06 to 2012-13



81. Figure 7 shows that until 2011-12, the overall number of non-facilitating subjects studied as part of a pupil's highest three A-levels was greater than the overall number of facilitating subjects. The number of facilitating subjects studied appears to have steadily increased since 2005-06, whereas the number of non-facilitating has fallen in each year since 2009-10. This means that in 2012-13 the number of facilitating subjects that were studied within a three-grade A-level pupil's highest three grades was for the first time larger than the overall number of all non-facilitating subjects; facilitating subjects made up 51 per cent of the total number of subjects in 2012-13 compared with 47 per cent in 2005-06. Table 10 provides a more detailed breakdown of the changes in the number of facilitating subjects studied, split by broad subject grouping.

Table 10: Change in the facilitating subjects studied by the three-grade A-level cohort, 2005-06 and 2012-13

Subject group	2005-06 cohort	2012-13 cohort	% change 2005-06 to 2012-13
Mathematics	39,510	64,570	63%
Sciences	78,150	101,970	30%
Humanities	89,660	92,915	4%
Languages	19,675	18,570	-6%
Subtotal: Facilitating subjects	225,285	278,030	22%
Non-facilitating subjects	254,410	265,455	5%
Total subject count	479,695	543,485	13%

Note: 'Mathematics', in this instance, also includes Further mathematics. 'Humanities' groups English literature, History and Geography.

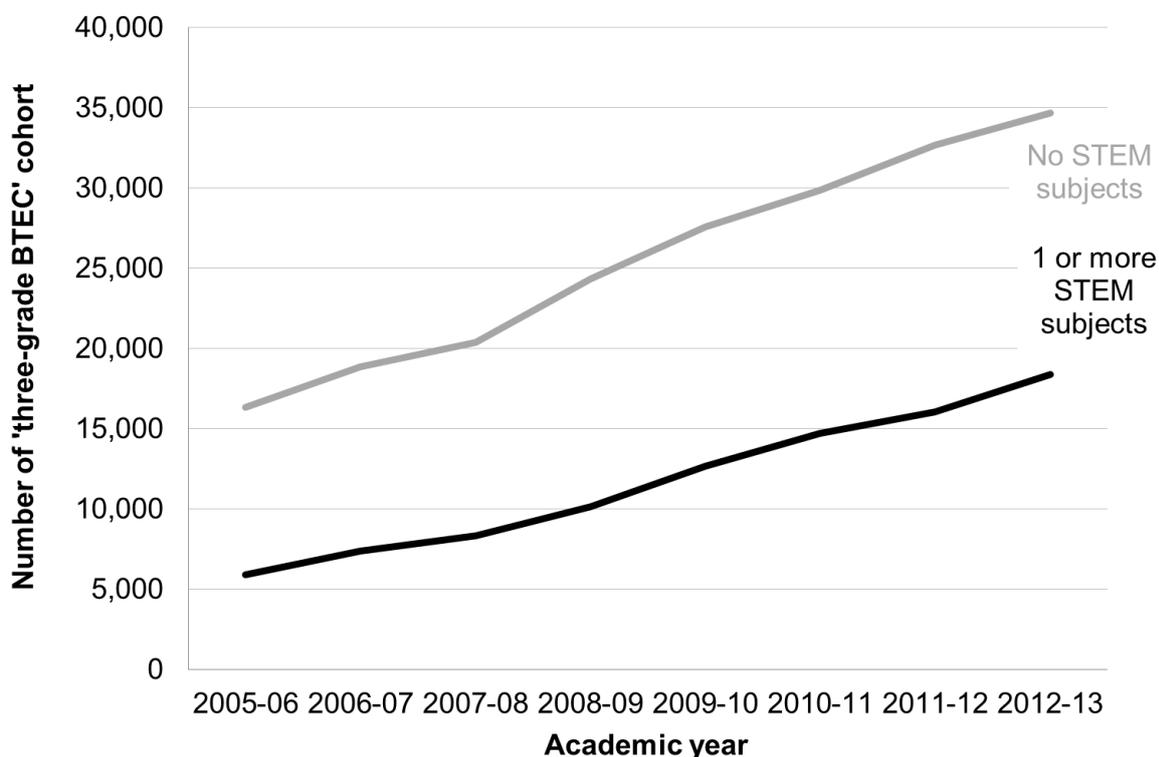
82. Table 10 shows the changes in the facilitating subjects studied within a three-grade A-level pupil's highest three A-levels between 2005-06 and 2012-13. Subjects have been grouped together for clarity. The table shows that the overall number of facilitating subjects studied by pupils in this cohort has increased by 22 per cent since 2005-06, nine percentage points more than the overall change in the size of the cohort. It also suggests that previously, Humanities accounted for the largest proportion of subjects in the cohort whereas in 2012-13, the Sciences were the most commonly undertaken facilitating subjects.

83. According to Table 10, Mathematics (including Further mathematics) and the Sciences have seen similar increases in absolute numbers of around 25,000 between 2005-06 and 2012-13. Mathematics has seen numbers increase by 63 per cent from around 39,500 to over 64,500. The Sciences saw growth of 30 per cent since 2005-06. Languages are the only facilitating subject grouping to decline in numbers, seeing a decrease of more than 1,000 or 6 per cent since 2005-06.

BTEC subject profiles

84. As described in paragraph 70, our consideration of subject profiles focuses on the study of STEM subjects among the three-grade BTEC cohort. Figure 8 shows that the number of this cohort who studied a STEM subject increased more than threefold between 2005-06 and 2012-13, such that in the most recent year they numbered around the same as non-STEM BTEC pupils at the start of the time series. Numbers holding BTECs in non-STEM subject areas more than doubled in the same period.

Figure 8: Number of the three-grade BTEC cohort studying STEM subjects, 2005-06 to 2012-13



85. Figure 8 shows that over a third (35 per cent) of all three-grade BTEC qualifiers in 2012-13 held a BTEC in a STEM subject, a proportion that has increased from around a quarter (27 per cent) of the equivalent 2005-06 cohort. The individual subject areas held by those within the three-grade BTEC cohort are considered in Table 11.

86. As with A-level subject information, examining the individual subjects studied by the BTEC cohort may seem to inflate the size of the cohort being examined. For instance, in 2012-13 53,065 pupils were in the three-grade BTEC cohort. Within this cohort, we know that 45,645 pupils held a minimum of one three-grade BTEC (which would most likely have been achieved in a single subject area). However, others in the cohort who held a mixture of BTEC qualifications amounting to three grades in overall size may hold a mixture of smaller BTEC qualifications which span multiple subject areas. Considering the subjects studied as part of each individual's best three BTECs gives a total of 61,265 subject achievements among the three-grade BTEC cohort.

Table 11: Subject profile of pupils' highest three BTEC grades

Subject area	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
Computer sciences	1,970	9%	4,485	8%
Engineering and technology	925	4%	1,950	4%
Sports sciences	3,305	15%	9,570	17%
Other sciences	335	1%	2,515	5%
Total STEM	6,265	29%	18,520	35%
Agriculture and related subjects	1,175	5%	2,235	4%
Business, management and related subjects	1,535	7%	7,920	13%
Caring and childcare	1,325	6%	8,085	13%
Construction and built environment	335	1%	525	1%
Creative arts and design	3,765	17%	6,075	10%
Mass communications and documentation	1,075	5%	3,910	6%
Performing arts	3,745	16%	7,005	11%
Public services	2,875	13%	4,200	7%
Hair and beauty	405	2%	0	0%
Law	0	0%	85	<0.5%
Total non-STEM	16,230	71%	40,035	65%
Unknown subject area	10	<0.5%	25	<0.5%
Total subject count	22,765	100%	61,265	100%

87. Table 11 shows that, in 2012-13, 35 per cent of the total number of subjects studied (in which the highest three grades of those within the three-grade BTEC cohort were achieved) were STEM subjects. Of the subjects classified as STEM, the subject area of Computer sciences accounts for 9 per cent and 8 per cent of the total number of subjects studied among the 2005-06 and the 2012-13 cohorts respectively. Similarly, Engineering and technology continues to account for 4 per cent in the 2012-13 cohort. This suggests that growth in these two subjects has occurred at broadly the same rate as the overall growth in this cohort.

88. Meanwhile, growth in the Sports science subject area has outstripped the overall growth rate, such that this has become the most frequently studied subject among the three-grade BTEC cohort. Accounting for 17 per cent (or almost 10,000) of the total subjects studied in 2012-13, Sports science has overtaken both Creative arts and design and Performing arts as the most frequently studied. While Creative arts and design accounted for 17 per cent of the total

subjects studied in 2005-06, this proportion fell to 10 per cent for 2012-13. Similarly, Performing arts fell from 16 per cent for 2005-06 to 11 per cent for 2012-13.

89. Two other subject areas, Caring and childcare, and Business, management and related subjects, have seen notable increases in their share of the total number of subjects studied by this cohort. Caring and childcare accounted for 6 per cent, and Business, management and related subjects accounted for 7 per cent of the total subjects studied in 2005-06, these proportions approximately doubled for 2012-13 when they each accounted for 13 per cent of the total.

Combination of A-level and BTEC: subject profiles

90. As described in paragraph 70, information in this section relates to the study of STEM subjects by those Level 3 pupils holding a combination of A-level and BTEC qualifications whose achievement in that combination is equivalent in overall size to at least three A-level grades. This will include pupils who have already also been included in analysis of the three-grade A-level or the three-grade BTEC cohort on the basis that their attainment within the A-level and BTEC combination is equivalent to at least three A-level grades in either of the component qualifications.

91. For the A-level and BTEC cohort we consider the study of STEM subjects within either of the component qualifications of this combination. Table 12 shows that 12 per cent of the 2012-13 cohort held a minimum of one A-level in a STEM subject in conjunction with one BTEC in a STEM subject. This proportion has increased from 8 per cent among the 2005-06 cohort.

Table 12: Subject profile of the best grades achieved within an A-level and BTEC combination

Type of STEM study within A-level and BTEC combination	2005-06 cohort	Proportion of cohort	2012-13 cohort	Proportion of cohort
STEM A-level(s) and STEM BTEC(s)	140	8%	2,110	12%
STEM A-level(s) and non-STEM BTEC(s)	120	7%	2,055	11%
Non-STEM A-level(s) and STEM BTEC(s)	400	22%	5,480	30%
Non-STEM A-level(s) and non-STEM BTEC(s)	1,160	64%	8,555	47%
Total	1,825	100%	18,205	100%

92. Table 12 also shows an increase in the proportion of A-level and BTEC pupils whose A-level study was entirely non-STEM and whose BTEC achievement included the study of STEM subjects, from 22 per cent of the 2005-06 cohort to 30 per cent of the 2012-13 cohort. Pupils whose achievements included no STEM subjects in either of the component qualification types accounted for the largest proportion of both cohorts, but this proportion declined from almost two thirds of the 2005-06 cohort (64 per cent) to just under half of the 2012-13 cohort (47 per cent).

Emerging pictures of qualification types

93. The findings described in paragraphs 35 to 92 lead us to consider some emerging pictures in relation to the qualification types considered in this analysis.

94. In terms of BTEC qualifications in particular, the previous section of this report demonstrates that a notable expansion in numbers taking three-grade BTEC qualifications is coupled with substantial growth in the attainment of the top grades among those pupils. Alongside this, we have observed A-level ling-off in the numbers gaining three grades or more from A-level qualifications alone since 2009-10. At the same time attainment of the top grades has remained largely flat among this cohort.

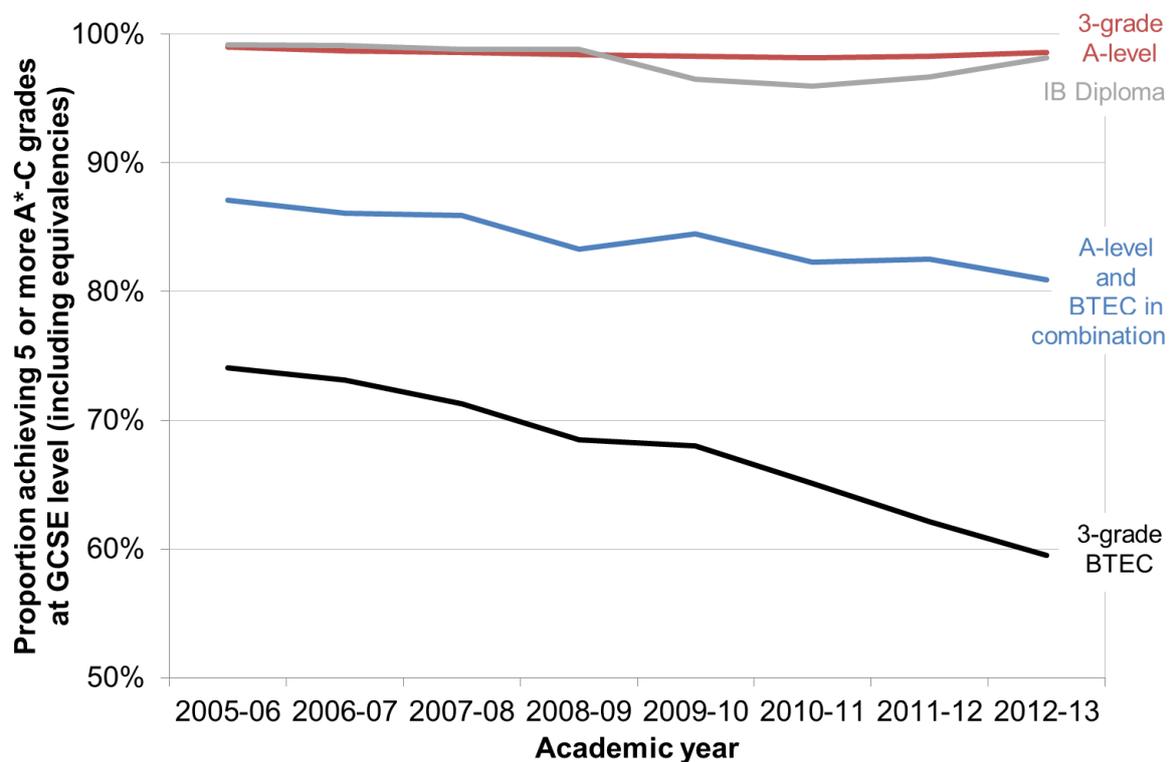
95. These findings lead us to consider whether they can be explained in full or in part by changes in the attainment of these pupils at GCSE level, prior to their commencement of Level 3 BTEC, A-level or IB Diploma study.

96. To this end, each of the three-grade BTEC and three-grade A-level cohorts have been linked back at the individual level to their Key Stage 4 (Level 2) records. We have done the same for the Level 3 cohort holding IB Diplomas, and for those holding a combination of A-level and BTEC qualifications. Our analysis is then able to examine the proportions of those pupils whose attainment at Key Stage 4 is equivalent to the achievement of five or more full Level 2 qualifications at grades A* to C. This measure includes attainment from GCSE qualifications and GCSE equivalencies such as BTEC Firsts: the measure itself, and its coverage of Level 2 qualifications, is consistent with that used in the Department for Education's annual publication of National Statistics on 'GCSE and equivalent results in England'¹⁵.

97. Figure 9 shows that levels of prior attainment do not help to explain increases in the numbers of pupils obtaining the top grades in three-grade BTECs.

¹⁵ These qualifications are described in the technical notes included in the statistical first releases here: <https://www.gov.uk/government/collections/statistics-gcses-key-stage-4>

Figure 9: Proportions of A-level, BTEC and IB cohorts with prior attainment equivalent to five or more full GCSE qualifications at grades A* to C



Young participation of Level 3 qualifications

98. This section explores the progression into HE of the Level 3 populations profiled in paragraphs 35 to 92. The main focus of this report has so far been the 2012-13 cohort, but this does not allow enough time to establish what proportion of the cohort entered HE while young (typically aged 18 or 19). To allow young participation to be properly evaluated, the focus for the remaining part will be the 2010-11 (or summer 2011) cohort, the most recent data available that give pupils two years in which to enter HE.

99. As noted in paragraph 32, the 'young participation' considered in this report is that of pupils who entered an HE course within two academic years of completing their Level 3 qualifications. On the basis that the Level 3 population considered by this report comprises those who were aged 16, 17 or 18 at the start of the academic year on 31 August **and** who were in, or deemed to be in, school year 13, this means that our cohorts were typically aged 18 in the summer of school year 13 when their qualifications were awarded. Examining their HE entry within two academic years of completing their Level 3 qualifications means that the young participation considered by this report typically refers to pupils who entered an HE course aged 18 or 19.

100. Throughout the remainder of this report, references to a pupil's age upon progression into HE refer to school-aligned age groups, and make the following assumptions:

- a. That a pupil who enters HE in the academic year immediately following the one in which they obtained Level 3 qualifications does so at a 'standard' point of admission in September or October, and was aged 18 at the time of both their Level 3 qualifications being awarded and their HE entry.

b. Further, that the age of pupils entering HE in each successive year thereafter increases by an increment of one: a pupil who enters HE in the second academic year after the one in which they gained Level 3 qualifications is assumed to be aged 19 at the point of HE entry, in the third academic year 20, and so on.

Overall participation

101. Table 13 shows the proportions of the overall cohort who achieved one or more Level 3 qualifications in summer 2011 who entered HE young.

Table 13: Young HE participation by age of entry (2010-11 cohort)

School year	18 year-old Level 3 cohort	Number who entered HE young	Young participation rate	Proportion who entered HE	
				in 2011-12, aged 18	in 2012-13, aged 19
2010-11	296,960	208,385	70%	58%	12%

102. Table 13 shows that 58 per cent of those who completed their Level 3 qualifications in summer 2011 went on to HE immediately afterwards, starting their studies in autumn 2011. A further 12 per cent of this cohort entered aged 19, meaning that they started HE study in autumn 2012. This results in a 70 per cent young participation rate for that cohort.

103. Table 14 shows the same information as Table 13, but for all cohorts achieving Level 3 qualifications between 2005-06 and 2011-12. It gives a more complete picture of the ages at which pupils within the cohorts entered HE. It should be noted that greater opportunity exists for earlier cohorts' participation in HE while mature (aged 20 and over) to be included in this analysis. For instance, the data for the 2005-06 cohort have information on those entering HE for the first time in autumn 2012 at the age of 24.

Table 14: Overall Level 3 progression to HE, broken down by age of HE entry

School year	Level 3 cohort	Number who entered HE young	Young participation rate	Number entering HE before 01/08/2013	Overall participation rate	Proportion who entered HE							Number of years tracked
						aged 18	aged 19	aged 20	aged 21	aged 22	aged 23	aged 24	
2005-06	248,365	183,200	74%	198,200	80%	55%	19%	3%	1%	1%	0.5%	0.3%	7
2006-07	254,455	187,645	74%	201,545	79%	55%	19%	3%	1%	1%	0.4%		6
2007-08	265,965	197,420	74%	209,925	79%	56%	19%	3%	1%	1%			5
2008-09	279,515	206,565	74%	217,195	78%	55%	19%	3%	1%				4
2009-10	295,655	212,070	72%	219,120	74%	53%	19%	2%					3
2010-11	296,960	208,385	70%	208,385	70%	58%	12%						2
2011-12	305,585	n/a	n/a	159,990	52%	52%							1
Total (2005-06 to 2010-11)	1,640,925	1,195,285	73%	1,254,360	76%								

Note: Populations and participation rates shown in the Total line exclude the 2011-12 cohort, as there is no information on entry at age 19 among this cohort.

104. Table 14 displays a breakdown of the entire Level 3 population for each cohort by giving the proportions of each cohort who entered HE at a specific age between 18 and 24. It shows that the young participation rate fell from 74 per cent in 2005-06 to 70 per cent in 2010-11. Across all pupils from the 2005-06 to 2010-11 cohorts, it suggests that around 73 per cent of the Level 3 cohort had entered HE by age 19, with around only a further 6 per cent likely to enter HE between the ages of 20 and 24.

105. Table 14 also shows an increase of 5 per cent in the proportions entering HE aged 18 for the 2010-11 cohort (58 per cent in academic year 2011-12), compared with the 2009-10 cohort (53 per cent). The proportion falls back to 52 per cent in 2011-12 (entering HE in academic year 2012-13), a rate lower than that for the 2009-10 cohort.

106. Table 15 gives the young participation rates for the 2010-11 cohort by type of Level 3 qualification held.

Table 15: Young participation rates for each Level 3 qualification (2010-11 cohort)

Level 3 qualification type	2010-11 cohort	Young participation rate
A-level	212,545	79%
3 grades	180,845	85%
1 or 2 grades	31,700	45%
BTEC	49,280	41%
3-grade	33,650	47%
1- or 2-grade	15,635	27%
IB	2,755	80%
Other Level 3	2,210	39%
Combination	30,170	58%
Combination of A-level and BTEC	13,925	64%
Overall	296,960	70%

107. Table 15 indicates that A-level and IB pupils have the highest young participation rates, with those holding at least three A-level grades (as their only Level 3 qualifications) having the highest overall rate at 85 per cent. Those with BTECs equivalent to one or two A-levels appear to have the lowest participation rate, followed by pupils with other Level 3 qualifications. It is interesting to note that the young participation rate of the cohort holding a combination of A-level and BTEC qualifications is approximately midway between those of the cohorts holding A-levels or BTECs as their only Level 3 qualifications.

108. Table 16 shows the same information as Table 14, but only for those within the three-grade A-level cohort. The same information for pupils within the three-grade BTEC cohort, the IB Diploma cohort and the combined A-level and BTEC cohort is available at Annex E.

Table 16: Progression to HE for pupils within the three-grade A-level cohort, broken down by age of HE entry

School year	Three-grade A-level cohort	Number who entered HE young	Young participation rate	Number entering HE before 01/08/2013	Overall participation rate	Proportion who entered HE							Number of years tracked
						aged 18	aged 19	aged 20	aged 21	aged 22	aged 23	aged 24	
2005-06	159,900	135,440	85%	142,035	89%	65%	20%	2%	1%	0.5%	0.3%	0.2%	7
2006-07	170,155	143,800	85%	150,415	88%	64%	20%	2%	1%	0.4%	0.3%		6
2007-08	176,905	150,595	85%	156,515	88%	65%	20%	2%	1%	0.3%			5
2008-09	181,370	154,800	85%	159,675	88%	65%	21%	2%	1%				4
2009-10	185,915	158,270	85%	161,300	87%	65%	21%	2%					3
2010-11	183,090	155,340	85%	155,340	85%	73%	12%						2
2011-12	183,955	n/a	n/a	120,765	66%	66%							1
Total (2005-06 to 2010-11)	1,057,955	898,245	85%	925,285	88%								

Note: Populations and participation rates shown in the Total line exclude the 2011-12 cohort, as there is no information on entry at age 19 among this cohort.

109. Table 16 shows a much higher proportion of 18 year-old entry to HE among the three-grade A-level cohort than for the overall Level 3 cohort, leading to greater young and overall participation rates. Generally, those with at least three A-level grades seem to have a marginally lower proportion who enter as mature students than the overall Level 3 cohort. For the 2005-06 cohort, 4 per cent of those within the three-grade A-level cohort entered HE aged between 20 and 24, compared with 6 per cent among the over-all Level 3 population. Like Table 13, Table 16 indicates that there is a shift towards 18 year-old entry for the 2010-11 cohort; an equivalent increase in entry at 18 and decrease in entry at 19 (9 per cent), means that the overall young participation rate for this cohort is unchanged from previous years.

Young participation rates by Level 3 attainment

110. Paragraphs 111 to 123 observe the young participation rates within the Level 3 populations we have considered. These participation rates are examined for those who achieved an IB Diploma or the equivalent of at least three A-level grades, focusing specifically on the grades achieved. For achievement equivalent to at least three A-level grades, we consider specific categorisations of the Level 3 population whose grade and subject profiles were previously examined. These categorisations are defined at paragraphs 50 to 53 and 70.

Young participation among pupils with A-levels

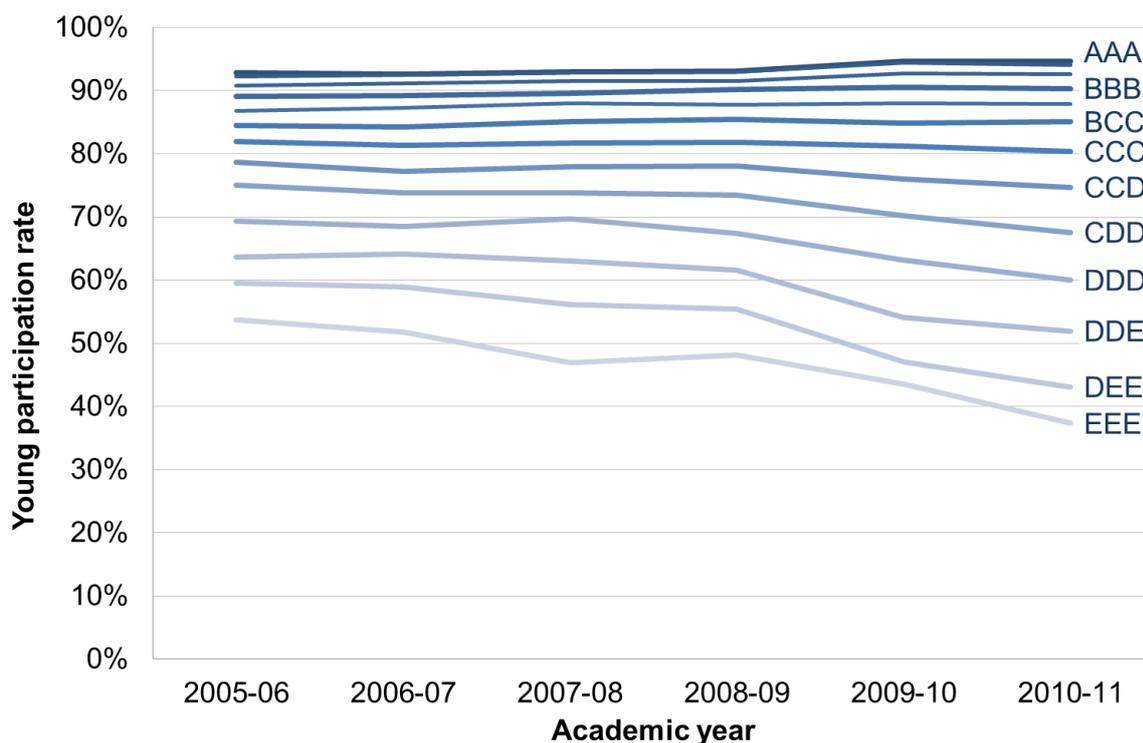
111. Table 17 shows the young participation rates among pupils in the three-grade A-level cohort, broken down by grade equivalence of their highest three A-level grades (explained further in paragraph 51). It shows that pupils achieving any grade boundary above BBB have a young participation rate greater than 90 per cent.

Table 17: Young participation by A-level achievement (2010-11 three-grade A-level cohort)

Best three A-level grades achieved	2010-11 cohort	Young participation rate
AAA	32,045	95%
AAB	18,975	94%
ABB	19,525	93%
BBB	19,725	90%
BBC	18,930	88%
BCC	18,700	85%
CCC	17,115	80%
CCD	13,975	75%
CDD	10,740	68%
DDD	7,110	60%
DDE	4,025	52%
DEE	1,755	43%
EEE	470	37%
Total	183,090	85%

112. Table 17 suggests that the higher the grades at A-level, the higher the chance of a pupil entering HE while young. It implies that differences between young participation rates become larger further down the grade boundaries. Thus, the difference between the rate for those with AAA and BBB is five percentage points, the difference between BBB and CCC is 10 percentage points, between CCC and DDD it is 20 percentage points and so on. Figure 10 observes these participation rates for all grade equivalences listed above, and for each of the three-grade A-level cohorts from 2005-06 to 2010-11.

Figure 10: Changes in young participation rate by A-level grade boundary¹⁶



113. Figure 10 implies that young participation rates remain fairly stable for pupils with higher grades, with the rates for those with ABB and above increasing slightly for the 2009-10 cohort. For pupils with grades below CCC, it would appear that the young participation rates start to fall in the later years of the time series, with a more noticeable decrease for the lowest grades. For example, the young participation rate for those with EEE grades was 54 per cent for the 2005-06 cohort, dropping to 37 per cent for the 2010-11 cohort (a decline of 17 percentage points). There is also a clear and consistent relationship between A-level achievement and young participation: pupils with higher grades have a higher likelihood of entering HE while young than those who achieved lower grades.

Young participation among pupils with BTECs

114. Table 18 shows a similar picture to Table 17, in that pupils in the three-grade BTEC cohort who achieved higher grades have higher rates of young participation in higher education than equivalent pupils achieving lower grades. Table 18 indicates that 66 per cent of the three-grade BTEC cohort who achieved the top grades of DDD in 2010-11 progressed into HE within two academic years.

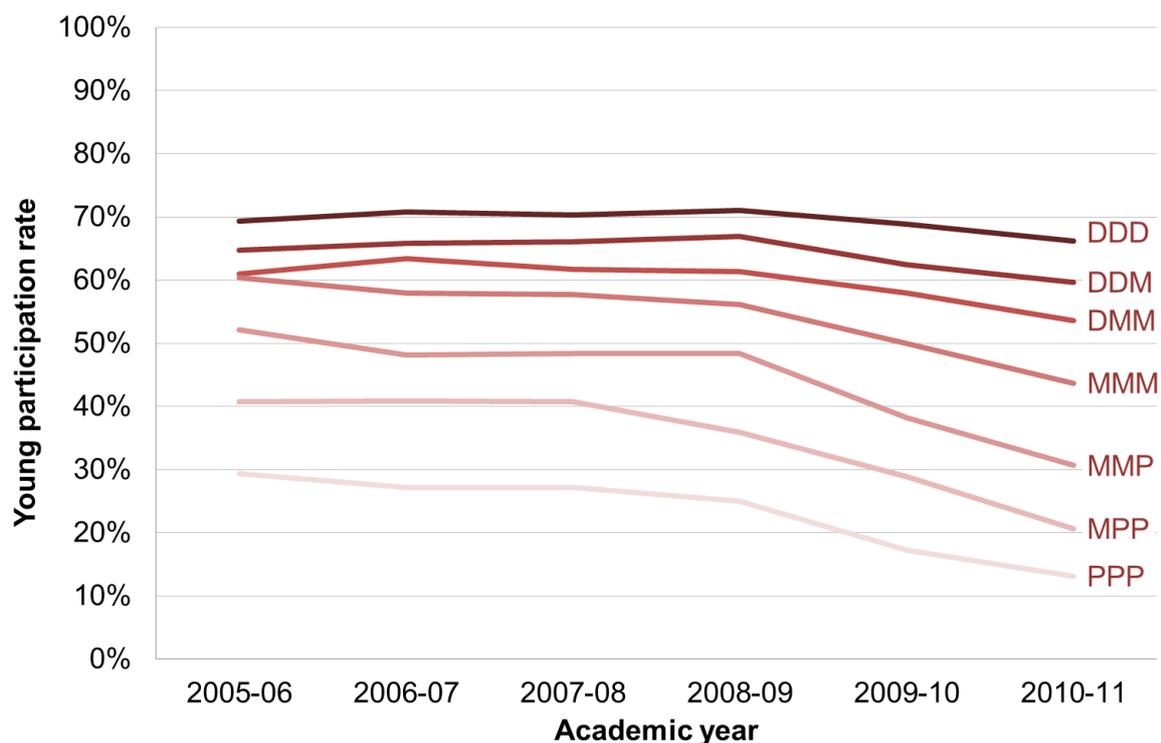
¹⁶ Grade profiles for two- and one-grade A-level and BTEC populations are available at www.hefce.ac.uk/whatwedo/wp/ourresearch/ypalevel/.

Table 18: Young participation by BTEC grade achievement (2010-11 three-grade BTEC cohort)

BTEC grades achieved	2010-11 cohort	Young participation rate
DDD	16,010	66%
DDM	4,795	60%
DDP	135	58%
DMM	5,025	54%
DMP	135	44%
DPP	300	30%
MMM	4,935	44%
MMP	3,810	31%
MPP	3,905	21%
PPP	5,850	13%
Total	44,615	48%

115. Comparing Tables 17 and 18, it appears that those who achieved DDD or above at BTEC in 2010-11 had a young participation rate most similar to A-level pupils with CDD grades or equivalent (66 per cent and 68 per cent, respectively). Figure 11 displays the same information as Table 18, but shows the changes in the young participation rates of the three-grade BTEC cohorts rates from 2005-06 onwards.

Figure 11: Changes in young participation rate by BTEC grade boundary



116. Figure 11 shows that the young participation rates for three-grade BTEC pupils range from a maximum of 71 per cent to a minimum of 13 per cent, across the grade boundaries and across all years of the time series considered. These young participation rates are much lower than the equivalent rates for the three-grade A-level cohorts, which range from 95 per cent to 37 per cent across all years examined. Most grade groupings of pupils seem to have reasonably steady young participation rates until 2008-09, when most appear to experience a decline in young participation. The decrease is clearest for those with lower grades: pupils with MPP had a young participation rate of 40 per cent in 2005-06, falling to just 20 per cent among the 2010-11 cohort.

IB Diploma achievement

117. The approach we have taken to considering the points achieved in an IB Diploma was described in paragraph 61. Table 19 shows the young participation rates for pupils from the 2010-11 cohort of IB Diploma pupils, split by the number of points they achieved.

Table 19: Young participation by IB Diploma achievement (2010-11 IB Diploma cohort)

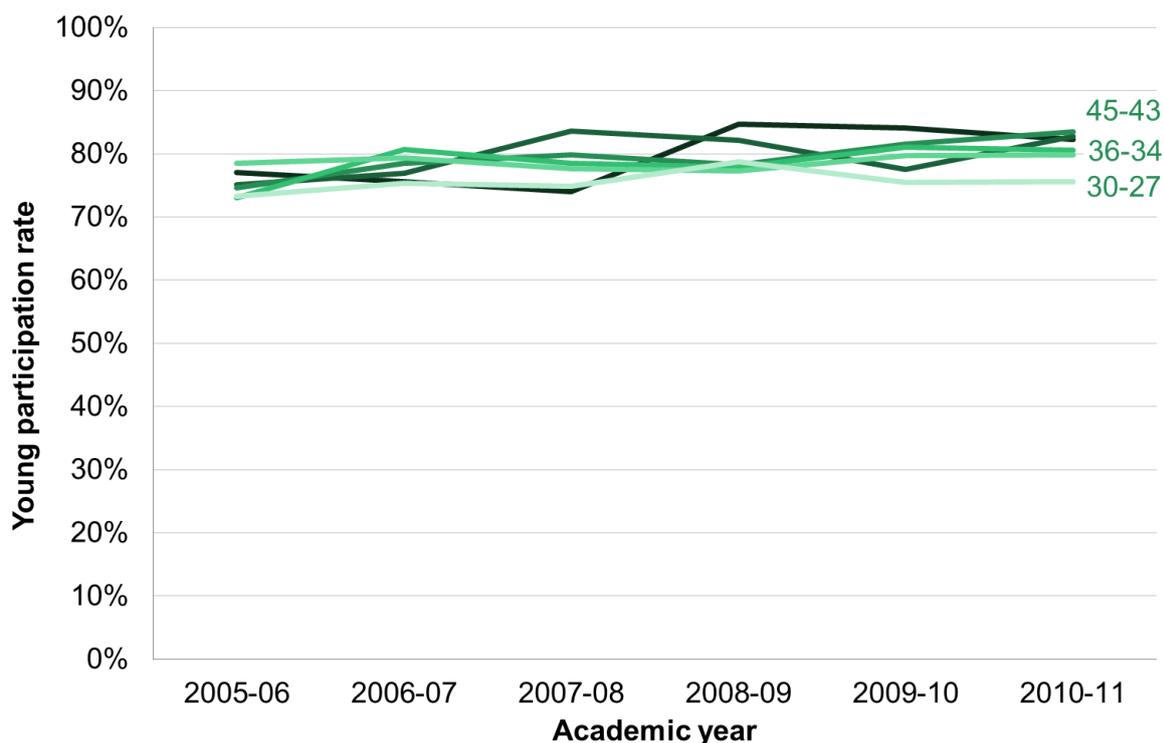
IB Diploma grade achieved	2010-11 cohort	Young participation rate
45-43	180	82%
42-40	360	83%
39-37	520	83%
36-34	570	81%
33-31	555	80%
30-27	570	76%
Total	2,755	80%

118. Table 19 indicates that, other than for pupils with the lowest grouping of grades (30 to 27 points), the young participation rates of pupils with an IB Diploma are very similar regardless of the number of points achieved. When comparing pupils achieving the top point scores with those achieving the lowest, the difference in young participation rates is shown to be only 6 per cent, a small figure compared with the range of 58 per cent for the three-grade A-level cohort, and 53 per cent for the three-grade BTEC cohort in the same year.

119. Figure 12 displays the same information as Table 19, but for all cohorts considered in the study of young participation rates. We acknowledge the reader's inability to differentiate between the young participation rates of IB Diploma pupils at different achievement boundaries on the basis of this graph. Indeed, the lack of distinction is precisely what we seek to demonstrate in Figure 12. For those that seek it, the interactive graphs accompanying this document provide the distinction not included here¹⁷.

¹⁷ Grade profiles of IB Diploma pupils can be accessed on the HEFCE web-site at www.hefce.ac.uk/whatwedo/wp/ourresearch/ypalevel/.

Figure 12: Changes in young participation rate by IB Diploma points group



120. Overall, there appears to have been a slight increase in young participation across pupils with all IB Diploma point scores. Figure 12 shows much less variation in young participation rates across IB Diploma points groups than was observed across A-level and BTEC grade boundaries in Figures 10 and 11. While Figure 12 shows fluctuation in those rates for pupils in all grade groupings (most likely driven by the smaller cohort sizes involved), young participation rates were seen to vary by a maximum of 10 percentage points between grade groupings. This compares with differences of more than 50 percentage points between the highest and lowest young participation rates when the three-grade A-level and three-grade BTEC cohorts were considered split by the grades they achieved.

High grade achievement

121. Table 20 shows the young participation rates of the 2010-11 cohorts of three-grade A-level, three-grade BTEC and IB Diploma pupils who achieved at least ABB, DDM or 34 points, respectively (that is, those considered to have achieved 'high grades'). This comparison shows the proportions of pupils with each qualification type who progress to HE within two academic years of completing Level 3 qualifications.

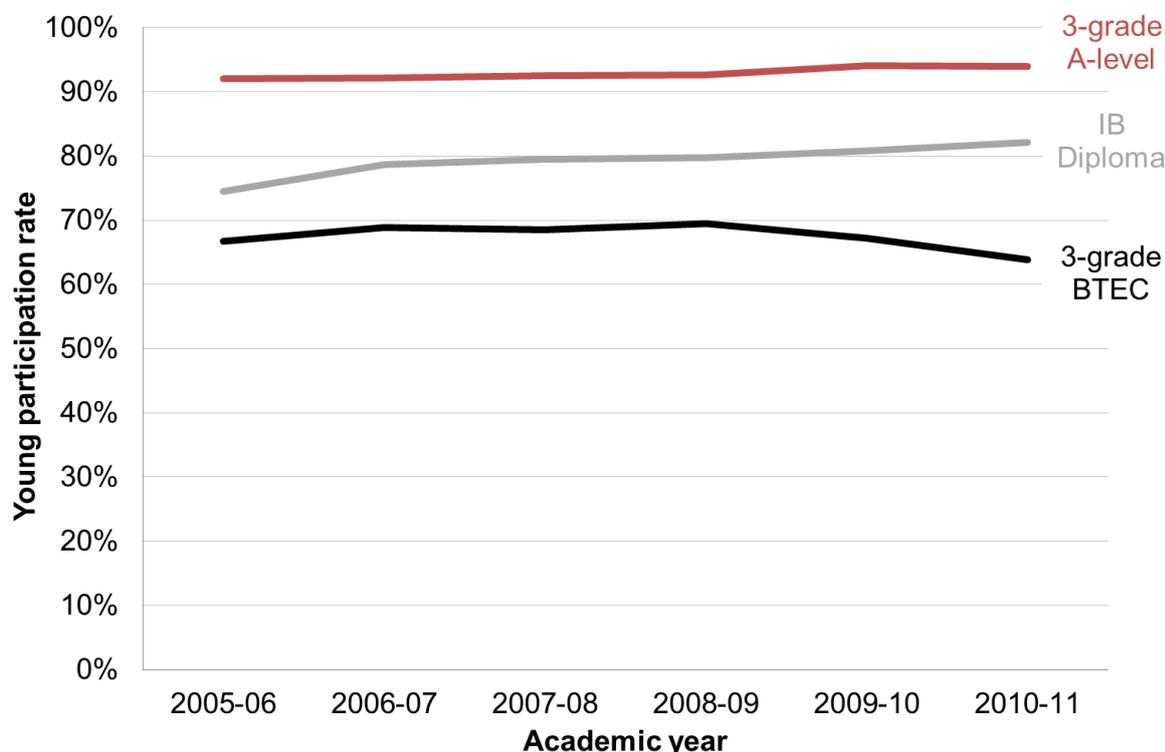
Table 20: Young participation of high-grade Level 3 pupils (2010-11 cohorts)

Level 3 qualification type	2010-11 cohort with high grades	Young participation rate
3-grade A-level	70,550	94%
3-grade BTEC	20,800	65%
IB Diploma	1,630	82%

122. Table 20 shows that, among the high grade Level 3 pupils, those with at least three A-level grades have the highest rate of young participation, at 94 per cent. High-grade BTEC pupils appear to have the lowest proportion of pupils entering HE while young, with a young participation rate 30 percentage points lower than their A-level counterparts.

123. Figure 13 displays the differences in young participation rates among pupils achieving high grades in A-level, BTEC and IB Diploma over time. It shows that the differences remain fairly consistent across the time series considered, with the largest being seen among the 2010-11 cohorts. It appears that the increasing difference is due to the young participation rates falling for high grade BTEC pupils and rising simultaneously for high grade IB Diploma pupils.

Figure 13: Changes in young participation rates of Level 3 pupils with high grades



Young participation by subject

124. The young participation rates associated with the subjects studied as part of a pupil's achievement equivalent to at least three A-level grades are examined in paragraphs 126 to 134. As with analysis of the subject profiles considered earlier in this report, we do this for each of the three-grade A-level, three-grade BTEC and A-level and BTEC cohorts, which are defined at paragraphs 50 to 53 and 70. Because of a lack of comparable information on the subjects studied in IB Diplomas, as well as small numbers within subsets of these cohorts, they are not considered within this section.

125. Again, we place a particular focus on the young participation rates associated with the study of STEM subjects among BTEC and combined A-level and BTEC pupils. Similarly, we consider the young participation rates associated with studying facilitating subjects when examining the three-grade A-level cohort.

Young participation by A-level subject

126. The young participation rates of pupils within the three-grade A-level cohort in 2010-11 are shown in Table 21, split by the number of facilitating subjects that feature within their highest three A-level grades: three, two, one or no facilitating subjects. It shows that those with more facilitating subjects in their highest three A-levels have higher rates of young participation in HE than those with fewer facilitating subjects.

Table 21: Young participation rates of the 2010-11 cohort holding numbers of facilitating subjects among their highest three A-levels

Number of facilitating subjects	2010-11 cohort	Young participation rate
0	41,910	76%
1	54,885	83%
2	48,735	89%
3	37,565	92%
Total	183,090	85%

127. Table 21 indicates that there is a total difference of 16 percentage points between the young participation rates of those with three facilitating subjects among their best three A-levels and those with no facilitating subjects. Table 22 considers the young participation rates for those within the three-grade A-level cohort, based on the individual subject areas making up each pupil's highest three grades. As with consideration of the subject profiles earlier in this report (see paragraph 69), we note that considering subject information in this way may seem to inflate the size of the cohort being examined as we consider a total count of the number of subjects studied.

Table 22: Young participation rates of A-level subjects (taken as part of a pupil's highest three A-levels)

Subject area	2010-11 cohort	Young participation rate
Mathematics	53,440	90%
Further mathematics	6,215	92%
Biology	41,295	90%
Chemistry	32,220	91%
Physics	20,900	90%
English literature	34,275	87%
History	35,350	88%
Geography	21,705	87%
French	8,440	89%
German	2,995	87%
Spanish	4,580	88%
Other modern languages	2,585	82%
Classical languages	1,045	91%
Subtotal: Facilitating subjects	265,045	89%
Non-facilitating subjects	284,225	81%
Total subject count	549,275	85%

128. Table 22 shows that 92 per cent of those who held Further mathematics as one of their highest three A-level grades went on to higher education in a UK HEI or English FEC. This is the highest young participation rate observed among the facilitating subjects, and compares with a young participation rate of 82 per cent among those who studied a modern foreign language other than French, Spanish or German. Pupils with Mathematics, Science subjects and Classical languages all have young participation rates over 90 per cent, with humanities and language subjects (aside from 'Other modern languages') all having a rate above 87 per cent. This is higher than the overall rate of young participation for pupils with at least three A-levels (85 per cent). Analysis has shown that the participation rates of the individual facilitating subjects have not changed notably over time.

Young participation by BTEC subject

129. As described at paragraph 125, our consideration of young participation by BTEC subject focuses on the study of 'STEM subjects' among the three-grade BTEC cohort. The young participation rates of pupils within the three-grade BTEC cohort in 2010-11 are shown in Table

23, split according to whether or not these pupils held STEM subjects among the highest three grades they achieved.

Table 23: Young participation rates of the 2010-11 three-grade BTEC cohort holding STEM subjects among their highest three BTEC grades

STEM subjects among highest three BTEC grades	2010-11 cohort	Young participation rate
No	29,875	46%
Yes	14,745	51%
Total	44,615	48%

130. Table 23 shows that three-grade BTEC pupils who held STEM subjects among their highest three grades had a young participation rate of 50 per cent. This was only four percentage points higher than the equivalent rate for three-grade BTEC pupils who did not hold STEM subjects among their highest three grades. Table 24 considers the young participation rates for those within the three-grade BTEC cohort, based on the individual subject areas making up each pupil's highest three grades.

Table 24: Young participation rates of BTEC subjects (taken as part of a pupil's highest three BTEC grades)

Subject area	2010-11 cohort	Young participation rate
Computer sciences	4,165	53%
Other sciences	1,750	60%
Engineering and technology	1,550	47%
Sports sciences	8,920	47%
Total STEM	16,385	50%
Agriculture and related subjects	2,290	31%
Business, management and related subjects	5,330	45%
Caring and childcare	5,845	45%
Construction and built environment	500	69%
Creative arts and design	5,685	58%
Mass communications and documentation	2,530	59%
Performing arts	6,020	49%
Public services	4,030	26%
Hair and beauty	280	9%
Law	40	n/a
Total Non-STEM	32,550	46%
Unknown subject area	50	n/a
Total subject count	48,985	47%

Note: Young participation rates are not shown for cohorts smaller than 100.

131. Table 24 shows that young participation rates in five BTEC subject areas exceeded the overall rate for the cohort. While 'computer sciences' and 'other sciences' had young participation rates of 53 per cent and 60 per cent respectively, the non-STEM subject areas of 'creative arts and design', 'mass communications and documentation' and 'construction and built environment' had similar rates, of 58 per cent, 59 per cent and 69 per cent respectively.

Combination of A-level and BTEC: young participation by subject

132. This report provides information on the young participation rates associated with the study of STEM subjects by those Level 3 pupils whose achievement in a combination of A-level and

BTEC qualifications is equivalent in overall size to at least three A-level grades. This will include pupils who have already also been included in analysis of the three-grade A-level and three-grade BTEC cohorts, on the basis that their attainment within the A-level and BTEC combination comprises achievement equivalent to at least three A-level grades in either one of the component qualifications.

133. For the A-level and BTEC cohort, we consider the study of STEM subjects within either of the component qualifications of this combination. Table 25 shows the young participation rates observed on this basis.

Table 25: Young participation rates of the 2010-11 A-level and BTEC cohort holding STEM subjects among their highest three BTEC grades

Type of STEM study within A-level and BTEC combination	2010-11 cohort	Young participation rate
STEM A-level(s) and STEM BTEC(s)	1,380	72%
STEM A-level(s) and non-STEM BTEC(s)	1,460	73%
Non-STEM A-level(s) and STEM BTEC(s)	3,475	66%
Non-STEM A-level(s) and non-STEM BTEC(s)	5,515	67%
Total	11,830	68%

134. Table 25 shows that rates of young participation in higher education were higher among those pupils whose A-level and BTEC combination involved one or more A-levels in STEM subjects. While pupils with one or more STEM A-levels and one or more non-STEM BTECs were observed to have the highest rate of young participation, at 73 per cent, those with the opposite combination of non-STEM A-level(s) and one or more STEM BTECs had the lowest rate, at 66 per cent. However, this range of seven percentage points between the highest and lowest suggests less variation in participation rates among this cohort than the 16 percentage points observed among the three-grade A-level cohort when subject areas were considered.

Young participation of Level 3 pupils by other characteristics

135. Paragraphs 137 to 201 look at the young participation rates of the Level 3 cohort in terms of a number of different characteristics, relating to the schools in which the Level 3 study was undertaken, the HE into which the pupils progressed, and pupils themselves. The profiles that we are able to consider in further detail are limited to those pupils recorded in the National Pupil Database, and vary according to the qualification type being considered. For example, pupils in the three-grade BTEC cohort obtain their qualifications almost exclusively from maintained schools, which means that there is little value in further considering their young participation by the type of school attended.

136. The characteristics, and cohorts, considered in further detail are as follows. Considered for each of the three-grade A-level, three-grade BTEC, combination of A-level and BTEC, and IB Diploma cohorts:

- Sex (paragraphs 137 to 152)
- Region in which Level 3 qualification was obtained (paragraphs 172 to 184)
- Region in which HE was undertaken (paragraphs 185 to 193)
- Institution type in which HE was undertaken (paragraphs 194 to 201).

Considered for the three-grade A-level cohort only:

- Area based measure of disadvantage (POLAR3) (paragraphs 153 to 159)
- School type (paragraphs 160 to 171).

Young participation by sex

137. Paragraphs 137 to 152 examine the differences in young participation rates between male and female pupils within the Level 3 cohort. In 2010-11, 54 per cent of the cohort were female. Table 26 indicates that 62 per cent of female and 58 per cent of male pupils held A-levels, while a larger proportion of the male cohort had studied BTECs (18 per cent of male pupils compared with 13 per cent of female pupils)¹⁸.

138. Table 26 shows the young participation rates of pupils holding the various types of Level 3 qualifications split by sex. From this, it can be seen that female pupils have a higher rate of young participation overall, by four percentage points, and across almost all of the different Level 3 qualification types. Only the qualifications grouped as one- or two-grade BTECs, and other Level 3 have higher rates of young participation among male than female pupils, and for 'three grades at A-level' and 'three-grade BTEC', male and female pupils have the same young participation rates.

¹⁸ Further information regarding population breakdowns by type of Level 3 qualification or grade profile (split by gender) is available in Annex F.

Table 26: Young participation rates by sex and Level 3 qualification type (2010-11 cohort)

Level 3 qualification type	Female		Male	
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate
A-level	116,985	80%	95,560	75%
3 grades	100,885	85%	79,960	85%
1 or 2 grades	16,100	46%	15,600	43%
BTEC	23,695	41%	25,585	40%
3-grade	17,200	47%	16,450	47%
1- or 2-grade	6,495	27%	9,135	28%
IB Diploma	1,520	82%	1,235	78%
Other Level 3	1,215	37%	1,000	41%
Combination	15,435	60%	14,735	57%
Combination of A-level and BTEC	7,315	66%	6,610	62%
Total	158,845	72%	138,115	68%

Note: Table F1 at Annex F shows the proportion of the cohort holding each type of Level 3 qualification from each sex, as opposed to young participation rates.

Three-grade A-level cohort

139. Table 27 provides a breakdown of the three-grade A-level cohort by sex, categorising pupils by their best three grade equivalences. Once grades are taken into account, it would appear that male pupils have slightly higher participation rates than female pupils (by between zero and two percentage points) for the majority of grade boundaries, aside from those with the very highest or lowest grades. The large difference in participation rates seen here for pupils with grades of EEE is possibly due to the small numbers achieving these grades.

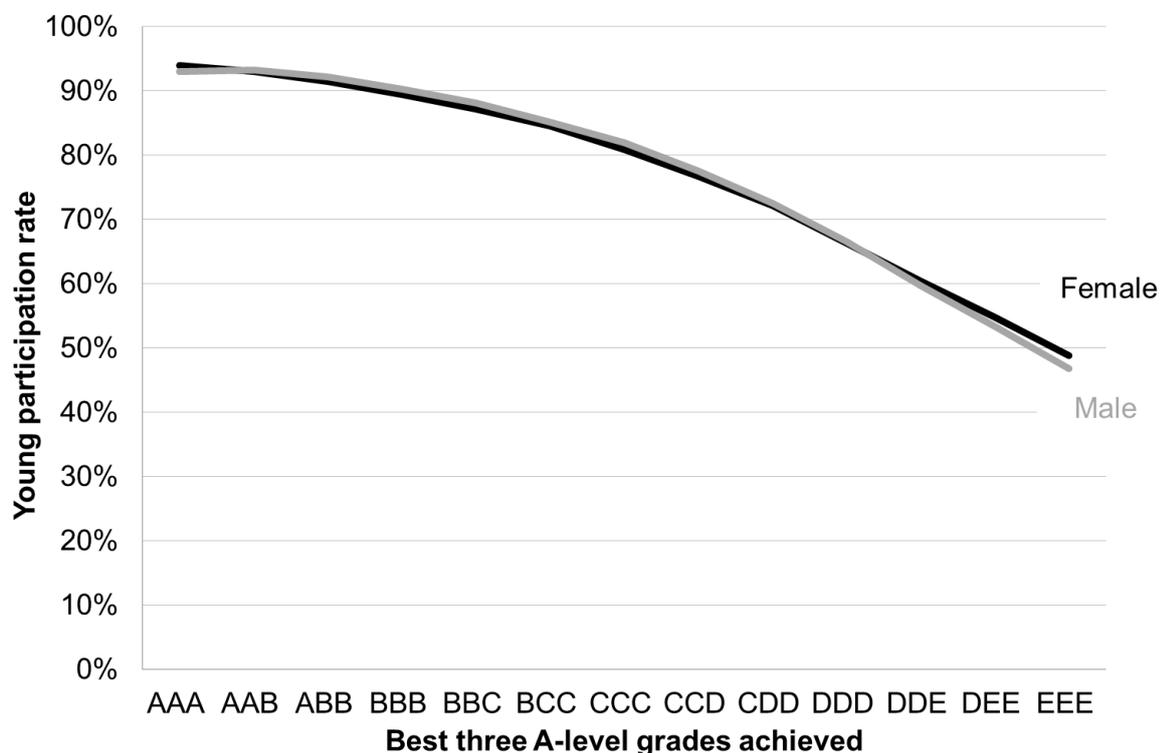
Table 27: Differences in young participation by sex and A-level achievement (2010-11 three-grade A-level cohort)

Best three A-level grades achieved	Female		Male		Percentage point (pp) difference in rates
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate	
AAA	17,060	95%	14,990	94%	-1pp
AAB	11,140	94%	7,835	94%	0pp
ABB	11,415	92%	8,110	94%	2pp
BBB	11,675	90%	8,050	91%	1pp
BBC	11,185	87%	7,745	89%	2pp
BCC	10,685	84%	8,015	86%	1pp
CCC	9,555	80%	7,565	81%	1pp
CCD	7,490	74%	6,480	75%	1pp
CDD	5,570	67%	5,170	68%	1pp
DDD	3,470	61%	3,640	59%	-2pp
DDE	1,900	51%	2,125	53%	2pp
DEE	785	45%	970	41%	-4pp
EEE	160	32%	310	40%	8pp
Total	102,085	85%	81,005	85%	-0.5pp

Note: Table F2 at Annex F shows the proportions from each sex that achieved each A-level grade grouping, as opposed to young participation rates by grade.

140. When observing the specific age of HE entry for pupils within the three-grade A-level cohort, there is little difference in the patterns of 18 and 19 year-old entry between male and female pupils. Figure 14 displays the same information as Table 27, but with all cohorts observed in the time series aggregated together to smooth out any anomalies arising from the relatively small numbers achieving the lowest grade boundaries. It shows a clearer relationship between A-level achievement and young participation: when prior attainment at A-level is considered, there is very little difference between male and female pupils in terms of young participation rates.

Figure 14: Relationship between A-level achievement and young participation by sex (aggregated 2005-06 to 2010-11 three-grade A-level cohorts)



141. In 2010-11, 9 per cent of male pupils achieved DDD or lower, compared with 6 per cent of female pupils. This could possibly explain the why the overall young participation rate among three-grade A-level pupils is 5 per cent higher for female pupils: as a larger proportion of male pupils achieve lower grades, this may contribute to lowering their overall young participation rate.

142. Tables F3 and F3a at Annex F show the equivalent information as Tables 27 and F2 but for the three-grade A-level cohort obtaining their qualifications in 2005-06. These tables indicate that young participation rates among both male and female pupils achieving the higher A-level grades have increased slightly between 2005-06 and 2010-11, in line with the overall changes observed in Figure 10 and paragraph 113. Overall, male pupils' young participation rate increased by one percentage point between the 2005-06 and 2010-11 cohorts, from 84 per cent to 85 per cent, while female pupils saw their rate remain the same at 85 per cent.

Three-grade BTEC cohort

143. Table 28 provides a breakdown of the three-grade BTEC cohort by sex, categorising pupils by their best three grade equivalences. It shows that male pupils within the 2010-11 three-grade BTEC cohort consistently have a higher rate of young participation in HE than female pupils, across each of the grade equivalences. It also shows that a greater proportion of female pupils (42 per cent, compared with 30 per cent of male pupils) achieved the top grades of DDD. This concentration leads to male and female pupils having the same overall rates of young participation, of 48 per cent.

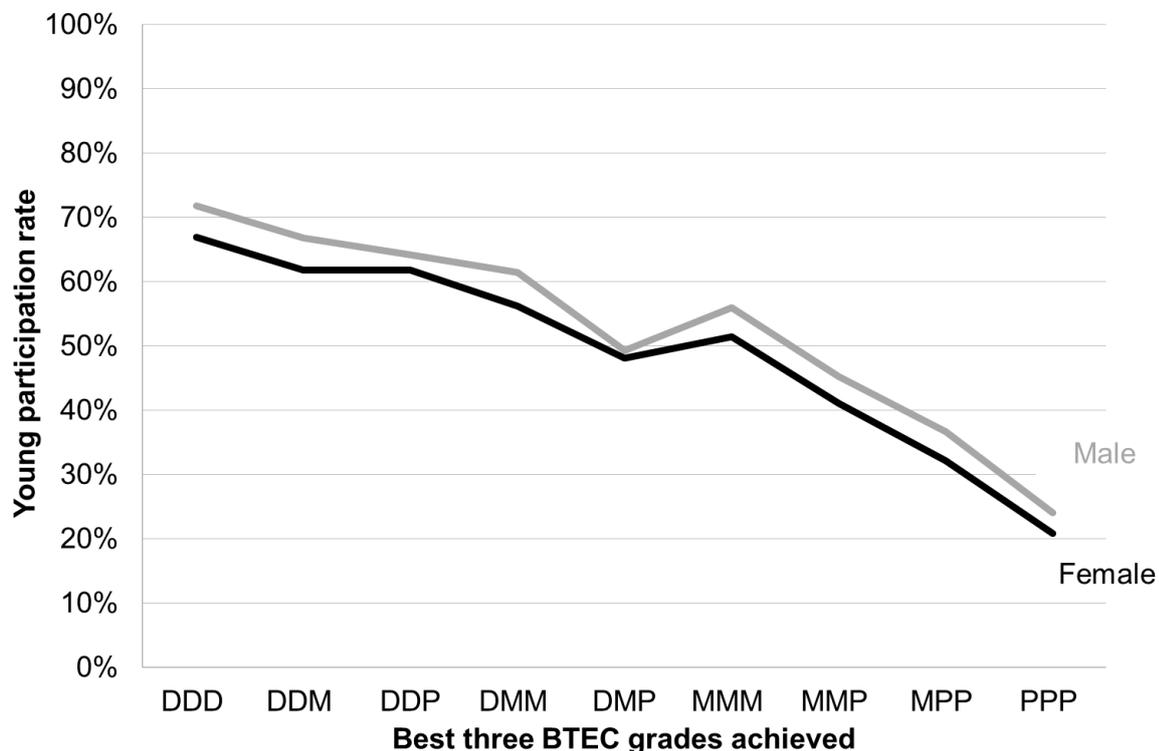
Table 28: Differences in young participation by sex and BTEC achievement (2010-11 three-grade BTEC cohort)

BTEC grades achieved	Female		Male		Percentage point (pp) difference in rates
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate	
DDD	9,425	64%	6,585	70%	6pp
DDM	2,560	57%	2,235	63%	6pp
DDP	50	n/a	85	n/a	n/a
DMM	2,475	51%	2,550	56%	6pp
DMP	50	n/a	80	n/a	n/a
DPP	10	n/a	10	n/a	n/a
MMM	2,255	40%	2,675	47%	6pp
MMP	1,740	28%	2,070	33%	5pp
MPP	1,690	19%	2,215	23%	4pp
PPP	2,260	11%	3,590	15%	4pp
Total	22,515	48%	22,105	48%	0pp

Notes: Young participation rates are not shown for cohorts smaller than 100. Table F4 at Annex F shows the proportions from each sex that achieved each BTEC grade grouping, as opposed to young participation rates by grade.

144. Figure 15 displays the same information as Table 28, but with all cohorts observed in the time series aggregated together to smooth out any anomalies arising from the relatively small numbers achieving some of the grade boundaries. When compared with Figure 14, it shows that when prior attainment at BTEC is considered, there is a difference of around five percentage points between the young participation rates of male and female pupils.

Figure 15: Relationship between BTEC achievement and young participation by sex (aggregated 2005-06 to 2010-11 three-grade BTEC cohorts)



145. Tables F5 and F5a at Annex F show the equivalent information as Tables 28 and F4 but for the three-grade BTEC cohort obtaining their qualifications in 2005-06. Tables F4 and F5 indicate that numbers of both male and female pupils holding three-grade BTEC qualifications increased between 2005-06 and 2010-11, with larger proportional growth observed for male than for female pupils. Numbers of female pupils obtaining grades below DDM have seen the smallest change between the 2005-06 and 2010-11 cohorts (growth of 2,700 pupils or 35 per cent), while numbers of male pupils obtaining grades of DDM or higher have seen the largest growth (having more than tripled).

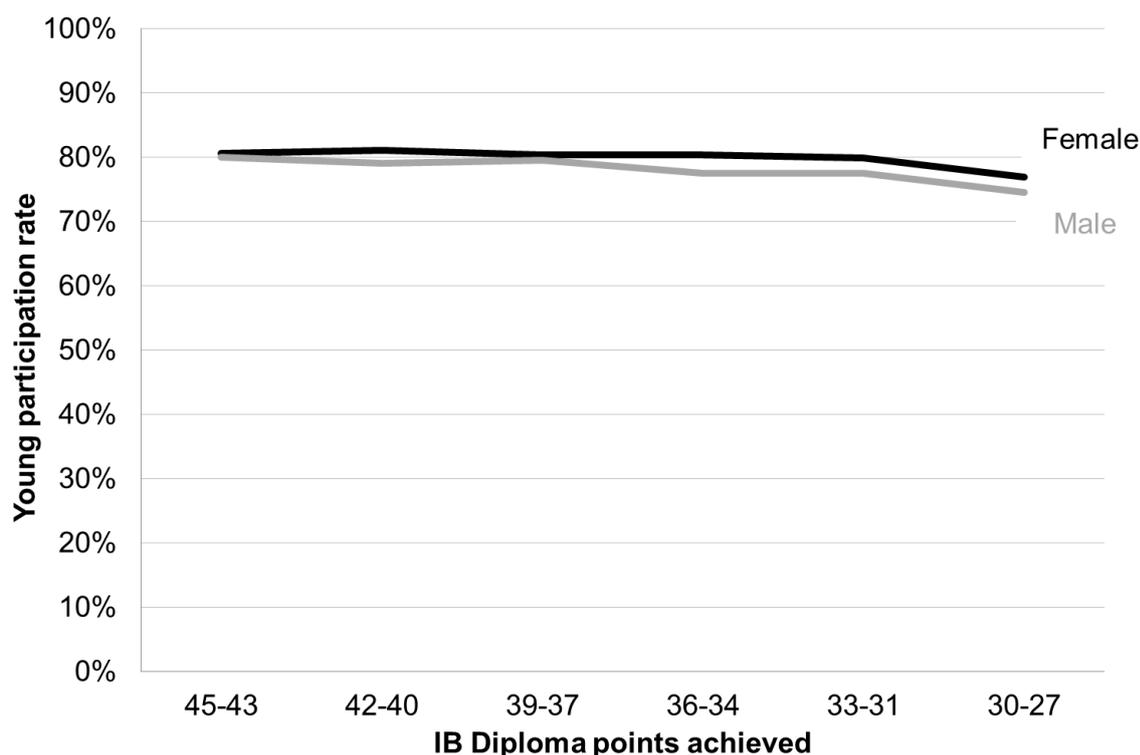
146. However, Tables 28 and F5a show that young participation rates have generally fallen slightly between the 2005-06 and 2010-11 cohorts: this is true across each of the grade equivalences (including DDM and above), but particularly among the lower grade equivalences. Overall, male pupils saw their young participation rate fall by six percentage points between the 2005-06 and 2010-11 cohorts, from 54 per cent to 48 per cent. Similarly, female pupils saw a fall of three percentage points taking them to the same young participation rate as male pupils in 2010-11.

147. The changes described in paragraphs 145 and 146 result in minimal changes in the absolute numbers of pupils who obtained grades below DDM and progressed into HE while young. Meanwhile, the absolute numbers of three-grade BTEC pupils who obtained grades DDM or higher and progressed to HE while young have increased in a similar way to the overall distribution of these cohorts.

IB Diploma cohort

148. Because of the relatively small cohort sizes observed across the time series among IB Diploma pupils when split by their points score (see Table 7), we do not attempt to further disaggregate them by either sex or by academic year. To understand the young participation of male and female pupils within the IB Diploma cohorts, Figure 16 aggregates all cohorts observed in this study, to smooth out any anomalies arising from the relatively small numbers in each individual year.

Figure 16: Relationship between IB Diploma achievement and young participation by sex (aggregated 2005-06 to 2010-11 IB Diploma cohorts)



149. Figure 16 shows that male pupils holding IB Diplomas have young participation rates marginally lower than those of their female counterparts, but this difference is very small. Even at the lower points scores where the difference is greatest, only 2.5 percentage points separate the young participation rates of male and female pupils in these cohorts.

Combination of A-level and BTEC

150. Because it has not been possible meaningfully to analyse of the grade profiles achieved by pupils with an A-level and BTEC combination, we do not consider this cohort in the same way as those discussed in the previous paragraphs. Instead we examine the young participation rates of male and female pupils in this cohort, split by the academic year in which they obtained their Level 3 qualifications.

151. Table 29 shows that, in contrast with the changes observed in the three-grade A-level and three-grade BTEC cohorts, the differences between overall young participation rates for male and female pupils have increased over the time series considered.

Table 29: Differences in young participation by sex (2005-06 to 2010-11 cohorts of A-level and BTEC combination)

Academic year	Female		Male		Percentage point (pp) difference in rates
	Number in cohort	Young participation rate	Number in cohort	Young participation rate	
2005-06	1,015	72%	810	71%	0pp
2006-07	2,015	70%	1,755	67%	-4pp
2007-08	2,715	71%	2,395	69%	-2pp
2008-09	3,895	74%	3,530	71%	-3pp
2009-10	5,270	72%	4,815	68%	-4pp
2010-11	6,355	70%	5,475	66%	-3pp

152. Overall young participation rates for male and female pupils within the three-grade A-level cohort were consistent (at around 85 per cent among both sexes) and remained so across successive cohorts. The overall young participation rates among the three-grade BTEC cohort fell between 2005-06 and 2010-11, and the difference between male and female pupils in that cohort diminished over time (such that each sex had a rate of 48 per cent in 2010-11). However, Table 29 shows that differences between male and female pupils in the combined A-level and BTEC cohort increased over time. As in the three-grade BTEC cohort, young participation rates have declined, and more so for male than female pupils. While female pupils had a young participation rate of 72 per cent in 2005-06, the rate had fallen to 70 per cent among female pupils in 2010-11. For male pupils, a rate of 71 per cent in 2005-06 fell to one of 66 per cent in 2010-11, a difference of three percentage points compared with their female counterparts.

Young participation by an area-based measure of disadvantage (POLAR3): three-grade A-level cohort

153. Paragraphs 153 to 159 observe the differences between young participation rates of pupils from areas which have been classified as having high and low rates of young participation in HE. This classification of areas is known as POLAR3. Only the three-grade A-level cohort will be examined in this section, because of lack of information on, and small numbers of, pupils holding other Level 3 qualifications.

154. POLAR3 is a classification of small areas within the UK, showing the chances of people aged 18 to 20 entering HE based on where they live. It is seen as one way of measuring 'disadvantage' for young students. It consists of five quintiles, which each account for 20 per cent of the cohort of young people in the UK. Those from quintile 1 wards have the lowest participation rates, while those from quintile 5 wards have the highest.

155. Among the 2010-11 three-grade A-level cohort, 42 per cent had unknown POLAR3 quintile information. From the 'known' population, 34 per cent came from a POLAR3 quintile 5 ward and

only 8 per cent came from a POLAR3 quintile 1 ward¹⁹. Table 30 shows the overall young participation rates of pupils within each POLAR3 quintile in 2010-11.

Table 30: Young participation rates by POLAR3 quintile (2010-11 three-grade A-level cohort)

POLAR3 quintile	2010-11 cohort	Young participation rate
1 (most disadvantaged)	8,415	82%
2	14,390	83%
3	20,310	84%
4	26,545	86%
5 (least disadvantaged)	36,225	89%
Unknown	77,210	84%
Total	183,090	85%

Note: Table F6 at Annex F shows the proportion of the cohort from each POLAR3 quintile, as opposed to young participation rates. Table F7 at Annex F shows the equivalent information for the 2005-06 cohort.

156. Table 30 shows that young participation rates are lower for three-grade A-level pupils from more disadvantaged areas. It finds the young participation rate for POLAR3 quintile 5 pupils to be 4 per cent higher than for those from POLAR3 quintile 4 areas. The difference between POLAR3 quintile 5 and POLAR3 quintile 1 pupils' young participation rate is 8 per cent, meaning that the difference between quintiles 4 and 5 accounts for half of the overall participation difference between all of the quintiles.

157. When looking at the specific year in which pupils entered HE, we have found little difference in the proportions entering HE at age 18 when comparing POLAR3 quintile 1 with quintile 5 pupils. However there is, in general, a difference of around four percentage points between the two quintiles when looking at 19 year-old entry. Around 21 per cent of POLAR3 quintile 5 pupils entered at 19 compared with 17 per cent of those from POLAR3 quintile 1, in every cohort other than 2010-11²⁰.

158. Table 31 provides a breakdown of the young participation rates of the three-grade A-level cohort for those from POLAR3 quintiles 1 and 5, split by their highest three A-level grades. Given their A-level attainment, it would appear that POLAR3 quintile 5 pupils have higher rates of young participation than POLAR3 quintile 1 pupils. This is most noticeable towards the lower end of the grade spectrum. For example, 51 per cent of POLAR3 quintile 1 pupils with grades DDE progress to HE while young, compared with 59 per cent of quintile 5 pupils with the same grades. Table 31 also implies that larger proportions of POLAR3 quintile 5 pupils achieved high grades

¹⁹ Further information regarding population breakdowns by type of Level 3 qualification or grade profile (split by POLAR3 quintile) is available in Annex F.

²⁰ More information on age-specific entry by POLAR3 quintile is available at www.hefce.ac.uk/whatwedo/wp/ourresearch/ypalevel/.

compared with quintile 1 pupils (42 per cent achieved ABB and above from quintile 5 while only 25 per cent from quintile 1 had the same level of attainment).

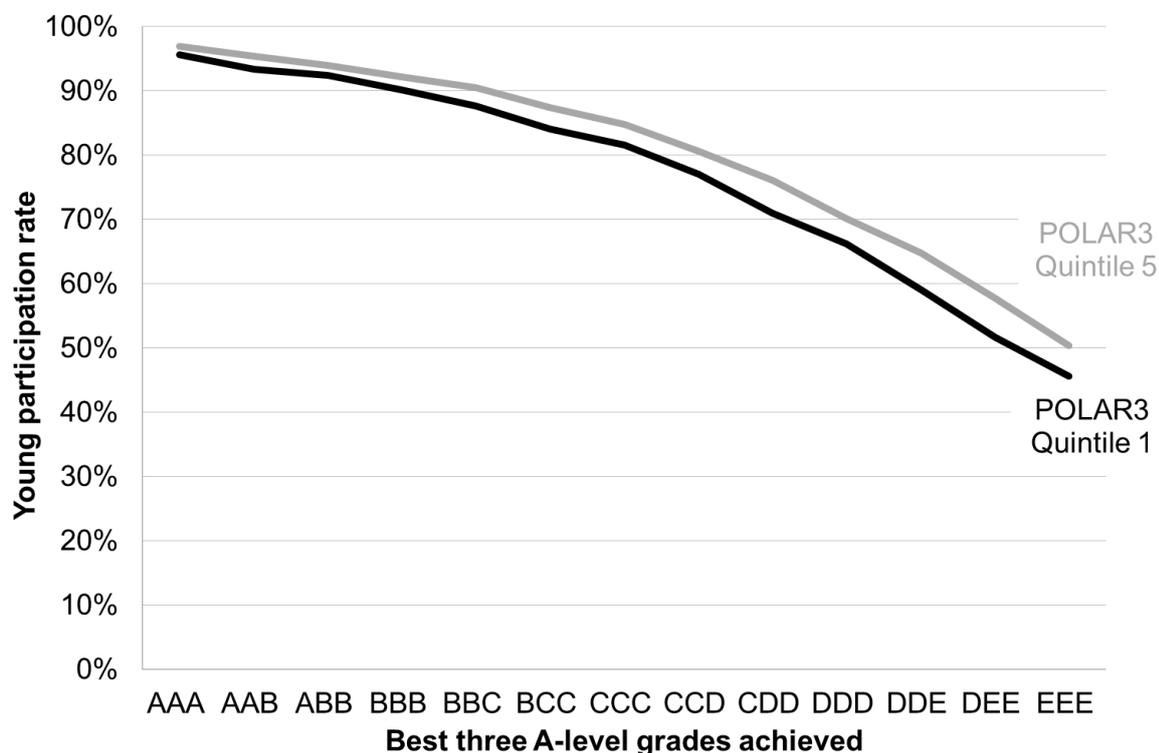
Table 31: Differences in young participation by POLAR3 quintile and A-level achievement (2010-11 three-grade A-level cohort)

Best three A-level grades achieved	POLAR3 quintile 1		POLAR3 quintile 5		Percentage point (pp) difference in rates
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate	
AAA	745	97%	7,125	97%	0pp
AAB	620	93%	4,235	96%	3pp
ABB	705	91%	4,170	95%	4pp
BBB	875	91%	3,975	92%	1pp
BBC	915	89%	3,615	90%	1pp
BCC	955	85%	3,615	87%	2pp
CCC	980	82%	3,130	85%	3pp
CCD	910	75%	2,485	78%	3pp
CDD	740	68%	1,730	71%	4pp
DDD	500	58%	1,135	63%	5pp
DDE	280	52%	645	59%	7pp
DEE	140	44%	290	47%	3pp
EEE	40	n/a	80	n/a	n/a
Total	8,415	82%	36,225	89%	7pp

Notes: Young participation rates are not shown for cohorts smaller than 100. Table F8 at Annex F shows the proportions from each POLAR3 quintile that achieved each A-level grade grouping, as opposed to young participation rates by grade.

159. Figure 17 shows the same information as Table 31 but with all cohorts observed in the time series aggregated together to smooth out any anomalies arising from the relatively small numbers in splits by this characteristic. This suggests that the difference in young participation rates widens at the lower grades, with POLAR3 quintile 5 pupils having consistently higher participation rates for all grades. When looking at specific grades, there is a one percentage point difference in the young participation rate among those with AAA or above, but a difference of four percentage points among those with EEE grades. This suggests that the area in which a pupil lives may be a more influential factor on young HE entry for pupils with lower A-level grades.

Figure 17: Relationship between A-level achievement and young participation by POLAR3 quintile (aggregated 2005-06 to 2010-11 three-grade A-level cohorts)



Young participation by school type

160. Analysis of A-level 3 pupil's 'school type' looks at whether a pupil completed their Level 3 qualifications in the broad groupings of maintained and independent sector schools (or colleges). Again, this analysis looks predominantly at the 2010-11 cohort (the most recent year which provides a complete picture of young participation), and at the three-grade A-level cohort (because of lack of information on, and small numbers of, pupils holding other Level 3 qualifications).

161. Approximately 90 per cent of the overall Level 3 cohort gained their qualifications from maintained schools, with 92 per cent of the independent cohort studying only A-levels, compared with 69 per cent of the maintained school pupils. The maintained school cohort has considerably a higher proportion who studied BTECs, other Level 3 qualifications or a combination of Level 3 qualifications. The independent school cohort has a much greater proportion who were awarded an IB diploma (around 4 per cent for independent schools, compared with less than 1 per cent for maintained school pupils)²¹.

162. Table 32 provides the young participation rates of the 2010-11 cohort for each type of Level 3 qualification, split by school type. It shows that the cohort of pupils from independent schools had a higher overall young participation rate than the maintained school cohort, as well as a higher rate for all Level 3 qualifications except among pupils holding a BTEC or an IB diploma. As young participation, in this instance, refers to those who entered a higher education

²¹ Further information regarding population breakdowns by type of Level 3 qualification or grade profile (split by school type) is available in Annex F.

course in a UK HEI or English FEC, international entries to HE study are not counted. This perhaps contributes to the lower rate of young participation for independent school pupils with an IB (71 per cent) than maintained pupils (90 per cent).

Table 32: Young participation rates by school type and Level 3 qualification type (2010-11 cohort)

Level 3 qualification type	Maintained school		Independent school	
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate
A-level	184,025	78%	28,520	79%
3 grades	154,435	84%	26,405	87%
1 or 2 grades	29,585	44%	2,115	48%
BTEC	49,190	41%	90	n/a
3-grade	33,620	47%	25	n/a
1- or 2-grade	15,565	27%	65	n/a
IB Diploma	1,375	90%	1,380	71%
Other Level 3	2,095	37%	115	77%
Combination	29,140	58%	1,030	74%
Combination of A-level and BTEC	13,725	64%	200	52%
Total	265,825	69%	31,130	83%

Notes: Young participation rates are not shown for cohorts smaller than 100. Table F10 at Annex F shows the proportion of the cohort from each school type holding each type of Level 3 qualification, as opposed to young participation rates.

163. Table 30 show that pupils in the three-grade BTEC and A-level and BTEC cohorts obtain their qualifications almost exclusively from maintained schools. The following breakdowns in relation to school types therefore focus on the three-grade A-level cohort.

164. When observing the specific year in which three-grade A-level pupils enter HE, a higher proportion of maintained than independent school pupils entered aged 18. The opposite is true for entry at 19. In 2010-11, 18 per cent of pupils from independent schools entered HE at 19, compared with 11 per cent of maintained school pupils. This is also a change from previous years, as this was the first cohort in which pupils who entered HE aged 19 would pay considerably higher tuition fees than those who entered at 18.

165. Prior to 2010-11, 19 year-old entry accounted for around 29 per cent of independent pupils and 19 per cent of maintained school pupils. Around 58 per cent of independent school pupils and 66 per cent of maintained school pupils entered HE at 18. In 2010-11 this increased to 69 per cent and 74 per cent respectively for independent and maintained school pupils. In 2011-12

(the first year of the tuition fee reforms), 18 year-old entry fell back to 66 per cent for maintained, and 64 per cent for independent, school pupils. This means that there was no difference in 18 year-old entry between 2009-10 and 2011-12 for maintained school pupils, but a 6 per cent increase for independent school pupils over the two-year period. This means that in 2011-12, a higher proportion of independent school pupils entered HE aged 18 than in any year previously (excluding 2010-11)²².

Table 33: Differences in young participation by school type and A-level achievement (2010-11 three-grade A-level cohort)

Best three A-level grades achieved	Maintained school		Independent school		Percentage point (pp) difference in rates
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate	
AAA	22,170	97%	9,875	90%	-7pp
AAB	14,970	95%	4,010	91%	-4pp
ABB	16,245	93%	3,280	89%	-4pp
BBB	17,035	91%	2,690	87%	-4pp
BBC	16,920	88%	2,010	84%	-4pp
BCC	17,095	85%	1,605	82%	-3pp
CCC	15,880	81%	1,235	75%	-6pp
CCD	13,135	75%	835	75%	1pp
CDD	10,190	67%	545	69%	2pp
DDD	6,785	59%	325	70%	11pp
DDE	3,875	52%	150	52%	0pp
DEE	1,690	43%	65	n/a	n/a
EEE	455	36%	15	n/a	n/a
Total	156,450	85%	26,640	87%	2pp

Notes: Young participation rates are not shown for cohorts smaller than 100. Table F11 at Annex F shows the proportions that achieved each A-level grade grouping from each school type, as opposed to young participation rates by grade.

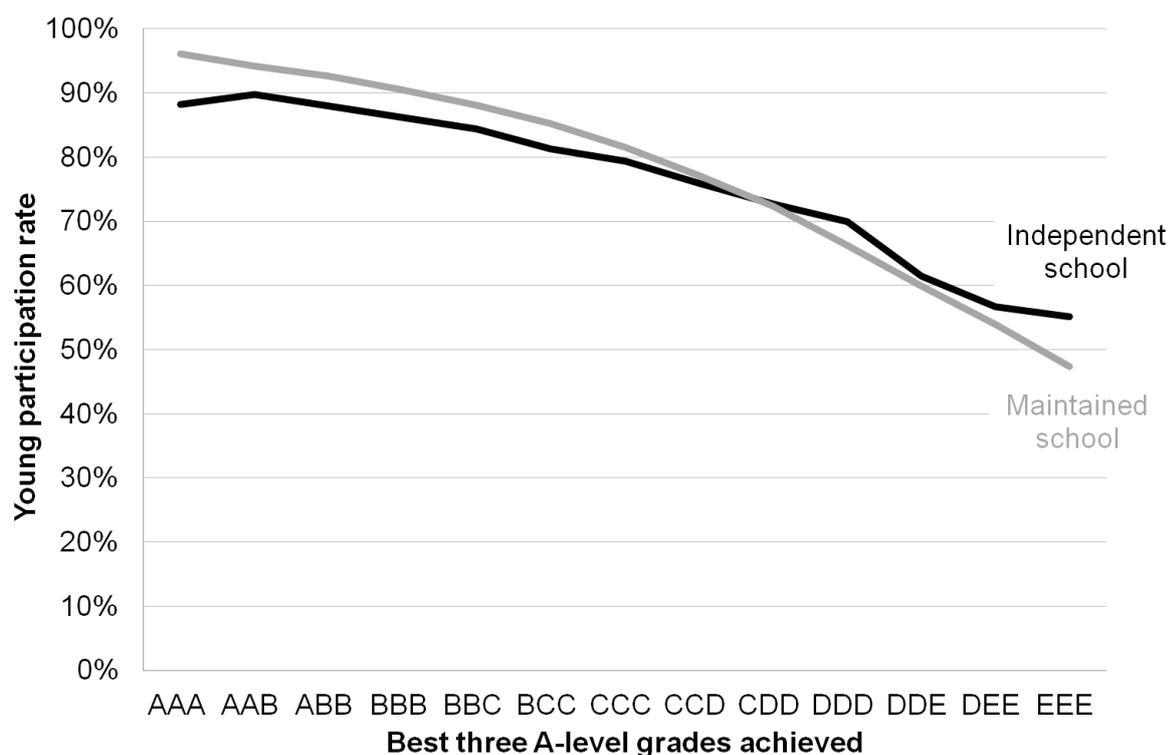
166. Table 33 shows the young participation rates of the three-grade A-level cohort, split by school type and level of achievement (when pupils are categorised by their best three A-level grades). It suggests that in 2010-11, maintained school pupils achieving CCC grades or above had higher rates of young participation than their independent school counterparts. For grades of CCD and below, the opposite was true. Of the cohort from independent schools, 37 per cent

²² More information regarding the change in 18 and 19 year-old entry by school type and other characteristics is available at www.hefce.ac.uk/whatwedo/wp/ourresearch/ypalevel/.

achieved grades of AAA or above, compared with only 14 per cent of maintained school pupils in the same year.

167. Figure 18 shows the same information as Table 33, with all cohorts observed in the time series aggregated together to smooth out any anomalies arising from the relatively small numbers achieving the lowest grade boundaries.

Figure 18: Relationship between A-level achievement and young participation by school type (aggregated 2005-06 to 2010-11 three-grade A-level cohorts)



168. When the overall young participation rate for each grade boundary is considered across all years in Figure 18, a slightly smoother relationship can be seen. Those from maintained schools with grades of CCD and above have higher young participation than those from independent schools with the same grades; the largest difference (of eight percentage points) can be seen for those with AAA. The opposite seems to occur among those with grades of CDD and below, where independent school pupils have higher participation rates than maintained school pupils with the same grades. This difference is clearest for the lowest grade of EEE and equivalent, where 55 per cent and 47 per cent of independent and maintained school pupils, respectively, progressed to HE by the age of 19.

169. The overall difference in young participation between maintained and independent school pupils (two percentage points higher for those from independent schools) is perhaps mainly attributable to the fact that considerably more students from independent schools achieve high grades: 64 per cent of independent school pupils, compared with 34 per cent of maintained school pupils, achieved ABB or above in 2010-11. However, when participation rates are examined across grades, maintained school pupils appear to have higher proportions entering HE young for most grade boundaries. The difference in young participation for the higher grades (in favour of maintained school pupils) could feasibly be associated with larger proportions of

independent school pupils choosing to study HE at international institutions, meaning that their progression does not appear in this analysis.

170. Tables F12 and F12a at Annex F show the equivalent information to Tables 33 and F11, but for the three-grade A-level cohort obtaining their qualifications in 2005-06. These tables indicate that the overall young participation rate for three-grade A-level pupils from maintained schools remained consistent, at 85 per cent of both the 2005-06 and 2010-11 cohorts, and that rates across each of the grade equivalences also remained fairly stable, with young participation rates falling only in grades DDD and below. Comparing Tables F11 and F12 shows that the distribution of three-grade A-level pupils from maintained schools across each of the grade equivalences remains consistent across both cohorts.

171. The overall young participation rate for pupils from independent schools has increased, from 84 per cent among the 2005-06 cohort to 87 per cent among those obtaining their qualifications in 2010-11. Here young participation rates have generally increased among those achieving grades BCC and above, but fallen for those with grades lower than BCC. It is interesting to note that this increase occurs in the context of a slight shift in the distribution of pupils from independent schools across the grade equivalences. Those achieving the top grades of AAA (or above) accounted for 37 per cent of the 2010-11 cohort of three-grade A-level pupils from independent schools, an increase from 32 per cent of the 2005-06 cohort.

Young participation by region

Region in which Level 3 qualification was obtained

172. The analysis in this section is necessarily restricted to considering the Level 3 achievements of the pupils in our cohorts in terms of a binary split, rather than broken down by their individual grade equivalences as previously. For simplicity we have defined this split on the basis of the high grades definition provided at paragraph 65: at least ABB at A-level, at least DDM from BTECs, or at least 34 points from an IB Diploma.

Three-grade A-level cohort

173. Table 34 shows the young participation rates for pupils within the 2010-11 three-grade A-level cohort, split by their achievement at A-level and by the region in which they obtained their qualifications. It shows that young participation rates among pupils with high grades ranged from 93 per cent (for those gaining their qualifications from schools and colleges in London, the South East or the South West), to 96 per cent (for those gaining their qualifications in the North East).

Table 34: Young participation by region and A-level achievement (2010-11 three-grade A-level cohort)

Region in which Level 3 qualification was obtained	Cohort with high grades		Cohort with achievement lower than high grades	
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate
East Midlands	5,215	95%	10,070	79%
East of England	8,690	94%	13,300	77%
London	11,270	93%	15,630	82%
North East	2,395	96%	5,050	82%
North West	9,095	95%	15,225	82%
South East	14,805	93%	20,265	75%
South West	7,265	93%	10,910	75%
West Midlands	6,410	95%	11,610	81%
Yorkshire and the Humber	5,460	95%	10,420	80%
Total	70,610	94%	112,485	79%

Note: Table F13 at Annex F shows the proportions from each region with each A-level achievement, as opposed to young participation rates by region.

174. Bigger differences are observed among the cohort achieving A-level grades lower than ABB. The lowest young participation rates, of 75 per cent, were seen among those gaining their A-levels in the South East and South West. The highest rate was 82 per cent, among equivalent pupils from London, the North East and the North West: a difference of seven percentage points compared with the lowest young participation rate.

175. Table 34 also indicates that in London the smallest difference (10 percentage points) occurs between the young participation rates of those who achieve high grades and those with lower grades. The largest difference is found among those gaining their qualifications in the South East, where the young participation rates of those with high grades is 18 percentage points higher than that for three-grade A-level pupils with attainment lower than high grades.

176. Tables F14 and F14a at Annex F provide the same information as Tables 34 and F13, but consider the 2005-06 cohort of three-grade A-level pupils. These tables show that the distribution of three-grade A-level pupils across regions remains consistent between 2005-06 and 2010-11, among both the cohort with high grades and that without. The differences between the highest and lowest young participation rates were larger for the 2005-06 than for the 2010-11 cohort. Among those with high grades, young participation rates ranged from 91 per cent to 95 per cent, a difference of four percentage points. Among those with attainment lower than high grades, young participation rates ranged from 76 per cent to 88 per cent, a difference of 12 percentage points.

Three-grade BTEC cohort

177. The young participation rates for pupils in the 2010-11 three-grade BTEC cohort are shown in Table 35, split by their BTEC achievement and the region where they obtained their qualifications. It shows that young participation rates among pupils with high grades were observed to range from 56 per cent (for those gaining their qualifications from schools and colleges in the South East), to 74 per cent (for those gaining their qualifications in the North East), a difference of 18 percentage points. For those achieving lower grades, participation rates were observed to have a range of 27 percentage points: from 23 per cent (in the South East) to 50 per cent (in London).

Table 35: Young participation by region and BTEC achievement (2010-11 three-grade BTEC cohort)

Region in which Level 3 qualification was obtained	Cohort with high grades		Cohort with achievement lower than high grades	
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate
East Midlands	1,530	63%	1,815	29%
East of England	2,165	59%	3,055	28%
London	1,935	70%	2,255	50%
North East	1,170	74%	1,130	33%
North West	4,155	69%	3,730	37%
South East	3,145	56%	3,700	23%
South West	2,150	59%	2,510	24%
West Midlands	2,545	68%	3,145	37%
Yorkshire and the Humber	2,010	68%	2,475	35%
Total	20,805	65%	23,815	33%

Note: Table F15 at Annex F shows the proportions from each region with each BTEC achievement, as opposed to young participation rates by region.

178. Table 35 indicates that London is again the region in which the smallest difference (20 percentage points) occurs between the young participation rates of those three-grade BTEC pupils who achieve high grades and those with lower grade. The largest difference is found among those gaining their qualifications in the North East, where the young participation rates of three-grade BTEC pupils with high grades is 41 percentage points higher than for those with attainment lower than high grades.

179. Tables F16 and F16a at Annex F provide the same information as Tables 35 and F15, but consider the 2005-06 cohort of three-grade BTEC pupils. These tables show that numbers of pupils holding three-grade BTEC qualifications have increased across all nine English regions. The North West has seen the largest shift in terms of its share of high grades three-grade BTEC

pupils, which increased from 15 per cent among the 2005-06 cohort to 20 per cent in 2010-11. Indeed, overall numbers of three-grade BTEC pupils in this region have experienced some of the largest growth of all regions: these numbers more than doubled, increasing by 4,540 between 2005-06 and 2010-11. Only London saw larger proportional growth in this period, while the East and West Midlands also saw overall numbers of these pupils more than double. Changes in the regional distribution of pupils achieving high grades were more pronounced, with numbers of such pupils in all nine English regions at least doubling between 2005-06 and 2010-11. Again, the North West region saw a particularly noteworthy increase, with numbers increasing fourfold in this period.

180. When considering both the region in which the BTEC qualification was obtained and the grades obtained, we find that all regions except one have seen a fall in the young participation rate for their high grade BTEC pupils. The exception is London: the region which has seen the largest growth in numbers has also seen the young participation rate for BTEC students holding grades of DDM or higher increase from 63 per cent among the 2005-06 cohort, to 70 per cent among the 2010-11 cohort. All regions have seen a fall in the young participation rate for three-grade BTEC pupils who hold grades below DDM.

IB Diploma cohort

181. Table 36 shows the young participation rates for pupils within the 2010-11 IB Diploma cohort, split by their achievement and by the region in which they obtained their qualifications. It shows that young participation rates among pupils with high grades ranged from 73 per cent (for those gaining their qualifications from schools and colleges in the East of England), to 89 per cent for those gaining their qualifications in the South West, a difference of 16 percentage points. For those achieving lower grades, participation rates ranged by 15 percentage points from 65 per cent (in the West Midlands) to 80 per cent (in the South East).

Table 36: Young participation by region and IB Diploma achievement (2010-11 IB Diploma cohort)

Region in which Level 3 qualification was obtained	Cohort with high grades		Cohort with achievement lower than high grades	
	2010-11 cohort	Young participation rate	2010-11 cohort	Young participation rate
East Midlands	55	n/a	35	n/a
East of England	205	73%	165	77%
London	300	82%	150	79%
North East	5	n/a	10	n/a
North West	80	n/a	70	n/a
South East	690	85%	405	80%
South West	195	89%	135	77%
West Midlands	75	n/a	105	65%
Yorkshire and the Humber	25	n/a	45	n/a
Total	1,630	82%	1,125	78%

Notes: Young participation rates are not shown for cohorts smaller than 100. Table F17 at Annex F shows the proportions from each region with each IB Diploma achievement, as opposed to young participation rates by region.

182. Tables F18 and F18a at Annex F provide the same information as Tables 36 and F17, but consider the 2005-06 cohort of IB Diploma pupils. These tables show that numbers of pupils holding IB Diplomas have increased across all nine English regions, to more than twice the 2005-06 levels in most regions.

Combined A-level and BTEC cohort

183. The young participation rates for pupils in the 2010-11 cohort who held a combination of A-level and BTEC qualifications are shown in Table 37, split by the region in which they obtained their qualifications. It shows that young participation rates among these pupils ranged from 61 per cent (for those gaining their qualifications from schools and colleges in the South East), to 74 per cent (for those gaining their qualifications in the North East). This difference of 13 percentage points is smaller than for three-grade BTEC pupils, but wider than that for three-grade A-level pupils.

Table 37: Young participation by region (2010-11 combined A-level and BTEC cohort)

Region in which Level 3 qualification was obtained	2010-11 cohort	Proportion of cohort	Young participation rate
East Midlands	930	8%	70%
East of England	1,195	10%	66%
London	1,295	11%	69%
North East	655	6%	74%
North West	1,840	16%	72%
South East	2,105	18%	61%
South West	1,020	9%	62%
West Midlands	1,370	12%	73%
Yorkshire and the Humber	1,435	12%	71%
Total	11,830	100%	68%

Note: Table F19 at Annex F shows the equivalent information for the 2005-06 cohort.

184. Table F19 at Annex F provides the same information as Tables 37 but considers the 2005-06 cohort. It shows that numbers of pupils holding a combination of A-level and BTEC qualifications have increased substantially across all nine English regions. The West Midlands has seen the largest shift in terms of its share of these pupils, which increased from 7 per cent among the 2005-06 cohort to 12 per cent in 2010-11. At the same time, young participation rates have fallen across all regions, with the largest fall of nine percentage points observed for the North East.

Region in which HE was undertaken

185. Analysis reported in this section is necessarily restricted to consideration of those Level 3 pupils who were found to have progressed to HE while young, within two academic years of obtaining their Level 3 qualifications. It has also been necessary to consider the Level 3 achievements of the pupils in our cohorts in terms of a binary split, rather than broken down by their individual grade equivalences as previously. For simplicity we have defined this split on the basis of the 'high grades' definition provided at paragraph 65: at least ABB at A-level, at least DDM from BTECs, or at least 34 points from an IB Diploma.

Three-grade A-level cohort

186. Table 38 shows the regions into which pupils within the three-grade A-level cohort progressed to HE while young, split by their achievement at A-level. It shows that pupils in the 2010-11 three-grade A-level cohort were distributed fairly evenly across the English regions in terms of the institutions they attended for HE. Relatively small proportions of this cohort attended higher education institutions in the other UK countries.

Table 38: Young participation in HE by A-level achievement and region of institution entered for HE (2010-11 three-grade A-level cohort)

Region of institution	Number entering HE	Proportion of number entering HE	Of which, proportion with high grades
East Midlands	16,725	11%	40%
East of England	9,420	6%	39%
London	19,060	12%	43%
North East	9,175	6%	52%
North West	19,545	13%	38%
South East	21,755	14%	44%
South West	15,220	10%	46%
West Midlands	13,855	9%	44%
Yorkshire and the Humber	20,925	13%	43%
Northern Ireland	160	<0.5%	44%
Scotland	2,205	1%	73%
Wales	6,565	4%	32%
Open University	735	<0.5%	24%
Total	155,340	100%	43%

Note: Table F20 at Annex F shows the equivalent information for the 2005-06 cohort.

187. Table 38 shows that despite having one of the smallest shares of this cohort, the North East has the highest proportion of high grades pupils among the three-grade A-level cohort who progress to HE, at 52 per cent. This compares with 38 per cent of those entering institutions in the North West.

188. Table F20 at Annex F suggests that all English regions but one have seen an increase in the proportion of high grades pupils included in the cohorts of three-grade A-level pupils who progress to HE in that region while young. The exception is the East of England, where the proportion has fallen from 46 per cent among the 2005-06 cohort to 39 per cent for the 2010-11 cohort.

Three-grade BTEC cohort

189. Whereas pupils in the three-grade A-level cohort who progressed to HE while young were distributed fairly evenly across the English regions in terms of the institutions they then attended, Table 39 indicates that a slightly larger concentration of three-grade BTEC pupils progressed to HE at institutions in the North West (20 per cent). Table 39 also shows that the proportion of pupils who progressed and who held high grades ranged from 55 per cent (among those progressing to HE in the East of England) to 70 per cent (for the North East).

Table 39: Young participation in HE by BTEC achievement and region of institution entered for HE (2010-11 three-grade BTEC cohort)

Region of institution	Number entering HE	Proportion of total entering HE	Of which, proportion with high grades
East Midlands	1,730	8%	63%
East of England	1,530	7%	55%
London	2,645	12%	57%
North East	1,245	6%	70%
North West	4,150	20%	67%
South East	2,455	12%	66%
South West	1,850	9%	68%
West Midlands	2,380	11%	59%
Yorkshire and the Humber	2,550	12%	63%
Northern Ireland	5	<0.5%	n/a
Scotland	45	<0.5%	n/a
Wales	505	2%	70%
Open University	115	1%	52%
Total	21,215	100%	63%

Note: Table F21 at Annex F shows the equivalent information for the 2005-06 cohort.

190. Table F21 at Annex F shows that institutions across all of the English regions recruited notably larger numbers of three-grade BTEC pupils in the 2010-11 than in the 2005-06 cohort, with the increase in absolute numbers ranging from 7 per cent to 31 per cent (not including the Open University). However, analysis has shown that HEIs in each of the nine English regions recruited similar proportions of the 2010-11 cohort as of the 2005-06.

IB Diploma cohort

191. While the numbers of IB Diploma students who progress to HE while young are relatively small overall, Table 40 shows that there was a slightly larger concentration progressing to HE at institutions in London and the South East (17 per cent and 18 per cent respectively). Among those who progressed to HE in the North East, (who accounted for only 7 per cent of the IB Diploma pupils who did so), Table 40 shows that 81 per cent held high grades. This proportion was 38 percentage points higher than the equivalent in the East Midlands, where 43 per cent held high grades.

Table 40: Young participation in HE by IB Diploma achievement and region of institution entered for HE (2010-11 IB Diploma cohort)

Region of institution	Number entering HE	Proportion of total entering HE	Of which, proportion with high grades
East Midlands	190	9%	43%
East of England	145	6%	63%
London	385	17%	70%
North East	150	7%	81%
North West	140	6%	48%
South East	395	18%	49%
South West	260	12%	66%
West Midlands	175	8%	69%
Yorkshire and the Humber	190	8%	62%
Northern Ireland	0	0%	n/a
Scotland	90	4%	n/a
Wales	90	4%	n/a
Open University	5	<0.5%	n/a
Total	2,215	100%	61%

Note: Table F22 at Annex F shows the equivalent information for the 2005-06 cohort.

192. Accounting for the variation that arises from the small cohorts observed in relation to IB Diploma pupils who progress to HE while young, Table F22 at Annex F shows that both the profile of such pupils across the English regions, and the proportions of those pupils holding high grades, have remained broadly stable across the 2005-06 and 2010-11 cohorts considered.

Combined A-level and BTEC cohort

193. Table 41 shows the number and proportions of the 2005-06 and 2010-11 cohorts of pupils who held a combination of A-level and BTEC qualifications and progressed into HE while young, split by the region of the institution they entered for HE. It shows that the East Midlands, North West and the West Midlands each increased their share of these pupils, and that all nine English regions saw substantial increases in entrant numbers from these cohorts between 2005-06 and 2010-11.

Table 41: Young participation in HE by region of institution entered for HE (cohort holding A-level and BTEC in combination, 2005-06 and 2010-11)

Region of institution	2005-06 cohort		2010-11 cohort		Percentage change in entrants
	Number entering HE	Proportion of entrants	Number entering HE	Proportion of entrants	
East Midlands	80	6%	790	10%	899%
East of England	70	5%	520	7%	643%
London	180	14%	915	12%	412%
North East	95	7%	5485	6%	406%
North West	185	14%	1,415	17%	666%
South East	210	16%	1,020	13%	389%
South West	145	11%	675	8%	373%
West Midlands	85	7%	820	10%	843%
Yorkshire and the Humber	215	16%	1,135	14%	434%
Northern Ireland	0	0%	0	0%	n/a
Scotland	5	<0.5%	20	<0.5%	n/a
Wales	35	3%	215	3%	478%
Open University	5	<0.5%	45	1%	n/a
Total	1,305	100%	8,065	100%	518%

Note: Percentage changes are not shown for cohorts smaller than 100 in both 2005-06 and 2010-11.

Young participation by type of institution in which HE was undertaken

194. Analysis reported in this section is necessarily restricted to consideration of those Level 3 pupils who progressed to HE while young, within two academic years of obtaining their Level 3 qualifications.

Three-grade A-level cohort

195. Table 42 shows the cohort of three-grade A-level pupils who progressed to HE within two academic years, split by the type of institution they entered when this was in England. It shows that while 40 per cent of the overall 2010-11 three-grade A-level cohort progressed into HE at HEIs with high average tariff scores, this proportion was almost twice as high among the high grades pupils within this cohort, at 77 per cent²³. Among the cohort achieving grades lower than ABB, 43 per cent entered HE at HEIs with medium average tariff scores.

²³ A specialist higher education institution in England has been defined as one that has 60 per cent or more of its provision concentrated in one or two subjects (HESA academic cost centres) only – examples include music or

Table 42: Young participation in HE by type of institution entered (2010-11 three-grade A-level cohort)

Institution country and type		Share of the three-grade A-level cohort who progressed into HE while young		
		Overall	High grades A-level	Non-high grades A-level
England	Specialist HEI	5%	4%	5%
	HEI with high average tariff scores	40%	77%	13%
	HEI with medium average tariff scores	29%	10%	43%
	HEI with low average tariff scores	19%	4%	30%
	English FEC	1%	0%	2%
	Alternative provider	0%	0%	0%
Northern Ireland		0%	0%	0%
Scotland		1%	2%	1%
Wales		4%	3%	5%
Total		100% 155,340	100% 66,295	100% 89,045

Note: Table F23 at Annex F shows the equivalent information for the 2005-06 cohort. Alternative providers recorded in administrative data in or before 2012-13 only.

196. Table F23 at Annex F shows the equivalent information to Table 42, but for the 2005-06 cohort of three-grade A-level pupils who progressed to HE within two academic years. It shows that the distribution of high grades pupils across institution types is similar in both cohorts. However, there has been a notable change in the profile of those achieving lower grades across institution types, where higher proportions of the cohort gaining their qualifications in 2010-11 than in 2005-06 entered HEIs with medium or low average tariff scores.

Three-grade BTEC cohort

197. Table 43 shows the cohort of three-grade BTEC pupils who progressed to HE within two academic years, split by the type of English institution they entered. It shows that the three-grade BTEC pupils who entered HE did so predominantly at HEIs with medium or low average tariff

art colleges. The remaining non-specialist institutions are ranked by the average tariff score of their young (under 21) UK-domiciled undergraduate entrants in the 2011-12 academic year. The average tariff score calculation considers all such entrants holding Level 3 qualifications which are subject to the UCAS Tariff. (Note that both this population and this calculation are consistent with those from which tariff information is drawn with respect to Unistats data.) Institutions in the top third of the ranking by average tariff score form the 'Higher education institutions with high average tariff scores' group, and those in the bottom third comprise the 'Higher education institutions with low average tariff scores' group.

scores. Additionally, and in comparison with the three-grade A-level cohort, Table 43 shows that there is a much smaller difference between the profile of the overall cohort and the high grades cohort in terms of the institution types that they progress into. In a further difference by comparison with the three-grade A-level cohort, we note the higher proportions (12 per cent overall) of three-grade BTEC pupils who progress into HE at English FECs.

Table 43: Young participation in HE by type of institution entered for HE (2010-11 three-grade BTEC cohort)

Institution country and type	Share of the three-grade BTEC cohort who progressed into HE while young		
	Overall	High grades BTEC	Non-high grades BTEC
Specialist HEI	7%	7%	7%
HEI with high average tariff scores	7%	9%	2%
HEI with medium average tariff scores	33%	37%	26%
HEI with low average tariff scores	39%	36%	46%
English FEC	12%	9%	17%
Alternative provider	0%	0%	0%
Northern Ireland	0%	0%	0%
Scotland	0%	0%	0%
Wales	2%	3%	2%
Total	100%	100%	100%
	21,215	13,455	7,760

Note: Table F24 at Annex F shows the equivalent information for the 2005-06 cohort. Alternative providers recorded in administrative data in or before 2012-13 only.

198. Table F24 at Annex F shows the equivalent information to Table 43, but for the 2005-06 cohort of three-grade BTEC pupils who progressed to HE within two academic years. It shows that specialist HEIs and HEIs with high average tariff scores have accounted for similar proportions of the three-grade BTEC cohorts in 2005-06 and 2010-11, with the concentration of these pupils in HEIs with medium or low average tariff scores increasing.

IB Diploma cohort

199. The IB Diploma pupils who progressed to HE within two academic years of gaining their Level 3 qualifications are shown in Table 44, split by the type of English institution they entered. It shows that 70 per cent of all such pupils in the 2010-11 cohort entered HEIs with high average tariff scores. The equivalent figure among the high grades IB Diploma pupils was 84 per cent, the highest proportion observed across any Level 3 qualification type considered in this report.

Table 44: Young participation in HE by type of institution entered for HE (2010-11 IB Diploma cohort)

Institution country and type	Share of the IB Diploma cohort who progressed into HE while young		
	Overall	High grades IB Diploma	Non-high grades IB Diploma
Specialist HEI	4%	4%	4%
HEI with high average tariff scores	70%	84%	48%
HEI with medium average tariff scores	12%	4%	25%
HEI with low average tariff scores	5%	1%	12%
English FEC	0%	0%	0%
Alternative provider	0%	0%	1%
Northern Ireland	0%	0%	0%
Scotland	4%	6%	1%
Wales	4%	2%	8%
Total	100% 2,215	100% 1,340	100% 875

Note: Table F25 at Annex F shows the equivalent information for the 2005-06 cohort. Alternative providers recorded in administrative data in or before 2012-13 only.

200. Table F25 at Annex F shows the equivalent information to Table 44 for the 2005-06 cohort of IB Diploma pupils who progressed to HE while young. It shows that the concentration across institution types of the 2010-11 cohort at HEIs with high average tariff scores is consistent with a very similar distribution of the 2005-06 cohort.

Combination of A-level and BTEC

201. As previously, it is not possible to split the combined A-level and BTEC cohort by their achievement at Level 3, so Table 45 provides the distribution by institution type of those from the 2005-06 and 2010-11 cohorts of these pupils who progressed into HE while young. As with the distributions observed among the three-grade BTEC cohort, Table 45 shows that these pupils typically progress to HEIs with medium or low average tariff scores, and to English FECs in higher numbers than the three-grade A-level and IB Diploma cohorts. It also shows that while in absolute terms across all types of institution the numbers of these pupils entering HE have increased markedly between 2005-06 and 2010-11, the concentrations of these pupils in HEIs with medium or low average tariff scores has also increased over the period considered.

Table 45: Young participation in HE by type of institution entered for HE (combined A-level and BTEC cohort, 2005-06 and 2010-11)

Institution type	Share of the combined A-level and BTEC cohort who progressed into HE while young		Percentage change 2005-06 to 2010-11
	2005-06 cohort	2010-11 cohort	
Specialist HEI	11%	7%	256%
HEI with high average tariff scores	11%	9%	431%
HEI with medium average tariff scores	36%	41%	604%
HEI with low average tariff scores	30%	35%	643%
English FEC	9%	4%	190%
Alternative provider*	0%	0%	n/a
Northern Ireland	0%	0%	n/a
Scotland	0%	0%	n/a
Wales	3%	3%	478%
Total	100%	100%	n/a
	1,305	8,065	518%