

Applied General User Research

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Important information about this report

Applied General qualifications were introduced in 2014 and met the Department for Education's interim requirements for inclusion in performance tables. A new set of Applied General qualifications, meeting the Department for Education's full requirements, became available for first teaching from September 2016. These qualifications contain at least 40% must-pass external assessment — a hurdle that is unique to the reformed qualifications. The timing of this research dictated that both types of Applied General qualification have been in scope. Specifically:

- At the time of the research, HEIs had not received any students that had completed the new Applied Generals (introduced in 2016). Therefore, the staff and students in the HEIs involved in the research were, by definition, only able to provide views on the older or 'interim' set of qualifications.
- Some of the schools and colleges in the research sample were delivering the new Applied Generals, but others had decided to defer their introduction until 2017/18.
 Examples of a blended approach were also found, with schools and colleges delivering the new Applied Generals in some subjects but not in others. In the main, however, the findings presented in the report are based upon the consultees' views of the interim qualifications.

It is also possible that the feedback provided by some consultees may have included views on qualifications that pre-dated the introduction of Applied Generals as a category. However, the researchers' view is that this only happened by exception.

The researchers sought to converse with consultees specifically about Applied General qualifications. To assist this, briefing materials were issued to the participating institutions in advance and the researchers explained the focus of the study (i.e. Applied Generals) at the start of each consultation. Even so, while all of the consultees were familiar with the term 'Applied General qualifications', they often spoke collectively about 'BTECs' and/or 'vocational qualifications' when giving their feedback. This was particularly true of teaching staff in HEIs, although it also applied to their counterparts in schools and colleges.

These points should be kept in mind when reading the report. In particular, the findings articulated in the main text are, on occasion, supported by short, anonymised excerpts from the qualitative consultations. In some of these, the consultee referred to BTECs or vocational qualifications, despite the specific subject of the research being Applied General qualifications.

EXECUTIVE SUMMARY

Research overview

- 1. This is the final report from an independent qualitative research study into how Applied General qualifications are viewed and used by key stakeholders.
- 2. Applied General qualifications are described by the Department for Education as "rigorous advanced (Level 3) qualifications that allow 16 to 19 year-old students to develop transferable knowledge and skills". Aimed at students who want to continue their education through applied learning, they allow entry to a range of Higher Education (HE) courses, either by meeting entry requirements in their own right or by being accepted alongside other qualifications at Level 3, such as A-levels.
- 3. BTEC and OCR Cambridge Technical Qualifications account for approximately three quarters of the Applied General qualifications included in the Department for Education's 2018 16-19 Performance Tables, i.e. for courses taught from September 2016. Applied General qualifications in these Performance Tables must have at least 40% external assessment.
- 4. The number of young people in England entering HE with a BTEC is rising. BTECs are now taken by around a quarter of all English university entrants, while the combination of BTECs and A-levels is the fastest growing route into university. Each year since 2010, the acceptance rate for university applicants holding BTECs has increased.
- 5. This research study was commissioned by Ofqual to enable a better understanding of how Applied General qualifications are perceived. The specific objectives of the study were to:
 - Improve Ofqual's understanding of the key issues and concerns of those who use Applied General qualifications.
 - Identify the ways in which Applied General qualifications are, and/or are not, fit for purpose in preparing students to progress to HE.
 - Identify the key features of Applied General qualifications that are particularly valued by users.
 - Identify any specific areas where stakeholders believe that improvements could be made to the standards of current Applied General qualifications (based on their experience predominantly of qualifications that met the interim requirements).
- 6. The study has been based around a programme of primary research involving in-depth, semi-structured consultations with more than 725 staff and learners at a combined total of 70 schools, Further Education (FE) colleges and Higher Education Institutions (HEIs). Key findings from the research are presented in the sub-sections that follow.

¹ 2018 16-19 performance tables: qualifications in the Applied General category (Department for Education, 2016).

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Preparing students for HE

- 7. Staff in schools, colleges and HEIs across the research sample reported that Applied General qualifications are effective at developing students' teamworking, organisation, time management, practical, interpersonal and presentation skills, all of which they agreed can be beneficial to HE study.
- 8. Views were more mixed on how effectively Applied Generals develop students' independent research, critical thinking and analysis skills. Students with, or studying for, Applied Generals tended to be quite positive about this, yet HEI staff regularly said that these skills are under-developed amongst new undergraduates that had entered HE with Applied Generals.
- 9. More broadly, most of the HEI staff in the sample said that students with Applied Generals are less well prepared for HE study than those entering through an A-level route (noting that, at the time of the research, HEIs had not received any students that had completed the new Applied Generals featuring the must-pass external assessment). Differences between the two cohorts are reportedly most evident in numeracy skills, academic writing, the theory underpinning various practical skills/activities and examination and revision skills.
- 10. However, there are significant differences by subject area. HEI staff delivering courses in creative arts, sport and ICT, together with some aspects of health and social care, were more positive about the preparedness for HE of Applied General students than those delivering more traditionally academic subjects and those with significant mathematical content.
- 11. Eight HEIs in the sample shared with the researchers the results of analysis they had undertaken comparing the retention and/or degree outcomes of Applied General/BTEC students with those of A-level students. Six of the eight HEIs had found that the Applied General/BTEC students were more likely to drop out and less likely to obtain first-class and upper-second class degrees (they also acknowledged that a range of other factors, including socio-economic background, can influence a student's likelihood of dropping out). The other two HEIs found there to be no significant difference.

Assessing Applied General qualifications

12. The vast majority of consultees in the research held the view that increases in average grades in BTECs, and, by extension, Applied Generals, have had a negative impact on the image and perceived integrity of the qualifications. This applies in particular to the growing proportion of students achieving Distinction and Distinction* grades. Several reasons were offered as to why grades have risen, including improvements in teaching and a growth in the number of more able students selecting non-A-level qualifications at Key Stage 5. HEI staff were more likely to question whether the qualifications have allowed for too much direction and supervision. They also remarked that the prevalence of top grades has made it more difficult to differentiate between applicants.

- 13. The introduction of must-pass external assessments on Applied General qualifications (from September 2016) has been widely welcomed by the HEI and college staff in the research sample. In the main they believe that this change will lead to a strengthening of the reputation of the qualifications and will provide a truer reflection of students' abilities. However, this view is less prevalent amongst those delivering creative arts, sports and ICT courses.
- 14. Staff in the schools and colleges in the sample understand the rationale for the changes but are concerned about the potential impacts on take-up and, more significantly, outcomes. There is a widely held expectation amongst these staff that the grade distribution for Applied General qualifications will change (namely that there will be fewer Distinctions) and that pass rates will fall.

Supporting learners to succeed

15. Staff in 12 HEIs provided examples of additional support which, whilst typically not targeted specifically at students with Applied Generals/vocational qualifications, tends to be accessed or needed by an above average proportion of those students. This support included peer assisted learning schemes, 'preparation for exams' sessions and 'summer camps' to help learners develop skills and knowledge in key areas prior to the start of their undergraduate programme.

Conclusions

- 16. Applied Generals are seen to fulfil an important role in providing pathways for students not suited to, or not inclined towards, more academic or more vocational programmes at Level 3. In creative arts, ICT and sports related subjects, they can be preferred by HEIs over A-levels. However, the common view is that Applied General students enter HE with a comparative disadvantage in terms of their skills in mathematics and academic learning.
- 17. Students are enthused by the 'applied' nature of Applied General qualifications. The absence of significant examination components has also been a central part of their appeal. There is some concern amongst schools and colleges about how the assessment/examination related changes to Applied Generals may affect students who struggle to perform well under examination conditions.
- 18. HEI teaching staff delivering academic and mathematical subjects would tend to advocate a reduction in the UCAS points attached to Applied Generals. Whilst this research study identified some support for this within schools and colleges, it comes with the caveat that it should not impact upon the opportunities that students have to progress to HE.
- 19. School and college staff are keen to see the results from the Applied Generals studied in 2016/17 before making any other recommendations as to how the qualifications might be changed or improved. HEI staff will be very interested to compare the preparedness for HE of those learners with those that have enrolled with Applied Generals in the past.

1 RESEARCH OVERVIEW

Introduction

- 1.1 This is the final report from an independent qualitative research study into how Applied General qualifications are viewed and used by key stakeholders. Undertaken between February and July 2017, the study was commissioned by Ofqual the Office of Qualifications and Examinations Regulation.
- 1.2 Ofqual is the independent statutory body responsible for the regulation of general and vocational qualifications in England. Ofqual was set up in April 2010 under the Apprenticeships, Skills, Children and Learning Act 2009 and is also covered by the Education Act 2011. Ofqual is responsible for ensuring that:
 - Regulated qualifications reliably indicate the knowledge, skills and understanding that students have demonstrated.
 - Assessments and exams show what a student has achieved.
 - People have confidence in qualifications.
 - Students and teachers have information on the full range of qualifications available to them.

What are Applied General qualifications?

- 1.3 Applied General qualifications are described by the Department for Education as *"rigorous advanced (Level 3) qualifications that allow 16 to 19 year-old students to develop transferable knowledge and skills"*². Aimed at students who want to continue their education through applied learning, they allow entry to a range of Higher Education (HE) courses, either by meeting entry requirements in their own right or by being accepted alongside other qualifications at Level 3, such as A-levels.
- 1.4 As a category of qualifications, Applied Generals are relatively new. They have existed formally since 2014, having been introduced as part of the government's response to a 2013 consultation on vocational qualifications³. However, qualifications that met the Department for Education's full criteria for Applied Generals were introduced for first teaching in September 2016.
- 1.5 Unlike Tech Level qualifications, which focus on hands-on practical training and are designed to lead to recognised occupations, Applied Generals focus on the broader study of a technical area and are not directly linked to a specific occupation.
- 1.6 Transferable skills such as teamworking and communication are included in the assessment of Applied Generals to help students prepare for employment, a higher or

² 2018 16-19 performance tables: qualifications in the Applied General category (Department for Education, 2016).

³ https://www.gov.uk/government/consultations/government-proposals-to-reform-vocational-qualifications-for-16-to-19-year-olds

advanced apprenticeship, or further academic study. Applied Generals have been designed with the help of employers and professional bodies and all attract UCAS points.

- 1.7 Pearson and OCR have the highest proportion of qualifications which are recognised as Applied Generals. Together they account for:
 - 80 of the 107 Applied Generals (75%) included in the Department for Education's 2017 16-19 Performance Tables (i.e. for courses taught from September 2015)⁴.
 - 62 of the 86 Applied Generals (72%) included in the Department for Education's 2018 16-19 Performance Tables (i.e. for courses taught from September 2016)⁵.
- 1.8 Other awarding organisations, including AQA, WJEC, NCFE and LIBF, also have qualifications in the aforementioned Performance Tables. A summary of those tables, showing the number of Applied Generals and awarding organisations per subject area, together with the average Guided Learning Hours⁶ (GLH) per subject area, is provided in Table 1.1 (2017 Performance Tables) and Table 1.2 (2018 Performance Tables). The key messages from this data are that:
 - The number of Applied Generals has reduced from 107 in the 2017 tables to 86 in the 2018 tables. Several of the subject areas have also been re-categorised or regrouped.
 - In the 2017 tables, over three quarters (76%) of the Applied Generals were accounted for by three subject areas: a) Performing Arts, Arts, Craft, Media and Publishing; b) Finance, Enterprise, Business and Law; and c) Leisure, Sport, Travel and Tourism.
 - It is a different picture in the 2018 tables. Finance/Business and Performing Arts/Media remain the largest subject areas in terms of number of qualifications, but there are more Science and Mathematics qualifications (in 2018, this subject area also has the highest average GLH) and fewer Sport qualifications.
 - In most subject areas, the GLH of Applied Generals are in multiples of 180 (one Alevel is equivalent to 360 GLH). There are some exceptions to this: in the 2017 tables, for example, there is a WJEC Level 3 Certificate in Statistical Problem Solving Using Software with 150 GLH, while in the 2018 tables, the TLM Level 3 Diploma for Design, Engineering and Constructing a Sustainable Built Environment has 300 GLH.
- 1.9 A full list of qualifications included in the 2017 and 2018 Performance Tables is provided at Appendix 1.

⁴ https://www.gov.uk/government/publications/technical-and-vocational-qualifications-for-14-to-19-year-olds

⁵ https://www.gov.uk/government/publications/2018-performance-tables-technical-and-vocational-qualifications

⁶ Guided Learning is an estimate of the number of supervised and assessment hours required for a learner to complete a qualification.

Table 1.1: Summary of 2017 16-19 Performance Tables: Applied General Qualifications (AGQs)						
	No. AGQs	No. AOs*	Min. GLH	Max. GLH	Ave. (mean) GLH	
Performing Arts, Arts, Crafts, Media and Publishing	29	5	160	1,110	580	
Finance, Enterprise, Business and Law	21	5	180	1,080	488	
Leisure, Sport, Travel and Tourism	21	3	180	1,080	563	
Health and Social Care and Child Development and Wellbeing	9	2	180	1,080	620	
Science and Mathematics	8	2	150	1,080	587	
Information and Communication Technology	5	2	180	540	324	
Agriculture, Horticulture Environmental Conservation and Animal Care	4	1	180	1,080	585	
Construction, Planning and the Built Environment	3	2	180	300	220	
Engineering, Manufacturing Technologies and Transport Operations	3	2	180	360	240	
Retail, Hospitality and Commercial Enterprise	3	2	249	360	323	
Sociology and Social Policy	1	1	360	360	360	
Totals	107	10	150	1,110	-	

Source: York Consulting *Awarding Organisations

Table 1.2: Summary of 2018 16-19 Performance Tables: Applied General Qualifications (AGQs)						
	No. AGQs	No. AOs*	Min. GLH	Max. GLH	Ave. (mean) GLH	
Finance and Business	17	5	180	1,080	432	
Performing Arts and Media	16	3	180	1,080	512	
Science and Mathematics	14	4	180	1,080	520	
Sport	12	4	180	1,080	618	
Health and Social Care	10	2	180	1,080	501	
ICT	8	2	180	1,080	443	
Engineering	4	2	180	540	360	
Construction, Planning and the Built Environment	2	1	180	300	240	
Sociology and Social Policy	2	1	180	360	270	
Hospitality	1	1	360	360	360	
Totals	86	10	180	1,080	-	

Source: York Consulting
*Awarding Organisations

1.10 Both lists are relevant to this study as qualifications from both were being delivered at the time that the research was undertaken. For example, in many of the schools and colleges that were visited, Year 13 students were undertaking qualifications from the 2017 lists, while Year 12 students in the same institution were undertaking qualifications from the 2018 lists.

Trends in participation and achievement

- 1.11 The number of young people in England entering HE with a BTEC (used here as a proxy for Applied Generals) is rising. BTECs are now taken by around a quarter of all English university entrants, while the combination of BTECs alongside A-levels is the fastest growing route to university.
- 1.12 Looking at this in more detail shows that:
 - Between 2010/11 and 2012/13, there was a 300% increase in the number of university students holding a combination of BTEC and academic qualifications.
 Over the same period, the number of university students holding BTECs without academic qualifications increased by 183%⁷.
 - Each year since 2010, the acceptance rate⁸ for university applicants holding BTECs has increased. In 2015, the acceptance rate for BTEC-only students was 82%, while for students with a combination of BTECs and A-levels it was 86%. This compares with 88% for 'A-level only' students⁹.
 - The number of 18 year-olds accepted into HE with a combination of A-Levels and BTECs increased by 10% between 2015 and 2016¹⁰.
- 1.13 As the number of young people studying BTECs at Key Stage 5 has increased, there has been a notable shift in the subjects they are most likely to study. For example, research presented in HEFCE's 'Young participation in higher education: A-levels and similar qualifications' 11 found that:
 - Just over one third (35%) of the subjects studied by students achieving BTEC Extended Diplomas are in the Science, Technology, Engineering and Mathematics (STEM) family. However, within this group, the growth in Sports Science has outstripped all other subjects. The number of pupils achieving high grades¹² in Sports Science tripled between 2005/06 and 2012/13.
 - The second most popular STEM subject Computer Sciences more than doubled in uptake over the same period, but as a proportion of all the BTECs that were started, it fell from 9% to 8%.

⁷ Reforming BTECs: Applied General qualifications as a route to higher education (Higher Education Policy Institute, 2017).

⁸ Defined as the proportion of applicants who are offered a university place and who accept and meet the conditions of that offer.

⁹ Reforming BTECs: Applied General qualifications as a route to higher education (Higher Education Policy Institute, 2017).

¹⁰ End of Cycle Report 2016: UCAS Analysis and Research (UCAS, 2016).

¹¹ HEFCE, 2015.

 $^{^{\}rm 12}$ Defined by HEFCE as being at least 'Distinction, Distinction, Merit' in BTECs.

- 1.14 Previous research has demonstrated the impact of BTEC students progressing to HE on widening participation. In 2012/13, 19% of students with a BTEC came from neighbourhoods with the lowest rate of university participation, compared with 12% of university entrants overall. In the same year, more than one third of students holding BTECs 36% came from less advantaged socio-economic groups and 42% came from a family where neither parent had gone to university¹³.
- 1.15 On average, BTEC students achieve fewer first-class and upper-second class degrees than traditional entry students. In 2012/13, 54% of students holding BTECs achieved a first or upper-second class degree, compared with 72% of traditional entry students ¹⁴. Similar findings emerged from research by Cambridge Assessment ¹⁵, which found that undergraduates who obtain 360 UCAS points via BTECs had a 5% probability of obtaining a first-class degree, compared with a 20% probability amongst A-level students with the same tariff score. BTEC students covered by the study had a 46% chance of obtaining an upper-second class degree, compared with an 80% probability for their A-level counterparts. The research also found that differences in degree outcomes remain even when demographic factors such as background and gender are taken into consideration, i.e. the changes in outcomes associated with vocational qualifications are statistically significant and of a higher magnitude than factors such as entry tariff and social class.

New specifications and other recent developments

- 1.16 Applied General qualifications that are in the 2018 Performance Tables (referred to in this report as being the 'new specifications') must have at least 40% external assessment and this must be passed to avoid a failed qualification outcome. This change was introduced by the Department for Education in response to concerns over assessment quality and the development of a 'resit culture'. External assessment has also been advocated in numerous government or government-endorsed publications since 2011. For example:
 - The Wolf Review in 2011 stated that external assessment is able to "safeguard against downward pressure on standards".
 - The Department for Education subsequently emphasised the connection between external assessment and the rigour and esteem of qualifications ¹⁶.
 - External assessment was highlighted as an important feature of the Post-16 Skills Plan, where it was described as essential for "comparability and reliability" 17.
- 1.17 Formally, Applied Generals sit within an academic route, although many of the consultees in this research described them as vocational. The government's acceptance

¹⁵ Research Matters: 21 (Cambridge Assessment, 2016).

¹³ Vocational Progression to Selecting Universities: Comparisons and Trends 2010-13 (Western Vocational Progression Consortium, 2014).

¹⁴ Ibid

¹⁶ Technical awards for 14 to 16 year-olds. 2017 and 2018 performance tables: technical guidance for awarding organisations (Department for Education).

¹⁷ Post-16 Skills Plan (Department for Education and the Department for Business, Innovation and Skills, 2016).

and implementation of the recommendations made in the Sainsbury Review of Technical and Professional Education means that students will be expected to choose between an academic route with progression to university, and a new technical route at the age of 16. All Applied Generals (and most BTECs) are categorised as being on the academic side of this distinction and are grouped as qualifications "designed explicitly to meet the needs of universities" 18.

Objectives of this research

- 1.18 To date, published research on Applied General qualifications has been largely quantitative and has covered trends in participation and outcomes. This study has been designed to build on the existing evidence base by taking a qualitative approach to explore the perspectives of key stakeholders in further detail. Specifically, the study had the following objectives:
 - To improve Ofqual's understanding of the key issues and concerns of those who use Applied General qualifications.
 - To identify the ways in which Applied General qualifications are, and/or are not, fit for purpose in preparing students to progress to Higher Education (HE).
 - To identify the key features of Applied General qualifications that are particularly valued by users.
 - To identify any specific areas where stakeholders believe that improvements could be made to the standards of current Applied General qualifications (based on their experience predominantly of qualifications that met the interim requirements).
- 1.19 Everyone that has taken part in the research is thanked sincerely for their input.

Methodology

1.20 This was a qualitative research study undertaken by a team from York Consulting LLP. It was based around a programme of primary research involving in-depth, semi-structured one-to-one consultations and focus group sessions with staff and students at a combined total of 70 schools, Further Education (FE) colleges and HEIs¹⁹. As shown in Table 1.3, input was obtained from institutions in each English region (the intention at the outset of the work was to achieve national coverage rather than to hit specific regional quotas).

¹⁸ Report of the Independent Panel on Technical Education (Sainsbury, 2016).

¹⁹ Verbal consent was obtained at the start of each consultation and focus group. It was made clear to participants in the research that they were free to withdraw from the research at any time and without giving a reason.

Table 1.3: Regional profile of the achieved sample							
Region	Schools	FE colleges	HEIs	Total			
North East	3	2	1	6			
North West		2	6	8			
Yorkshire and Humber	4	2	5	11			
East Midlands		3	5	8			
West Midlands	2	2	3	7			
East of England	2	1	1	4			
South East	1		8	9			
South West	3	1	5	9			
London		2	6	8			
Total	15	15	40	70			

- 1.21 The researchers spent part or all of one day at each institution. Whilst the composition of the visits varied, they typically involved consultations with:
 - Teaching staff who deliver Applied General qualifications in a school or college, or HEI teaching staff who deliver to students that took an Applied General qualification(s) before entering HE.
 - Students that are undertaking one or more Applied General qualification in a school or college, or HEI students who undertook one or more Applied General before entering HE.
 - Admissions staff (HEIs only).
- 1.22 Some visits also involved consultations with senior staff at the institution, e.g. department heads, curriculum leads and head teachers. The final decisions over who was consulted were taken by the researchers' nominated point of contact in each institution. Typically this was a member of the senior management team.
- 1.23 Table 1.4 shows the number of staff and students more than 725 in total that have been consulted for the research.

Table 1.4: Consultee profile							
Consultee Type	Schools	FE colleges	HEIs	Total			
Teachers, tutors, lecturers	40	55	129	224			
Students	92	156	104	352			
Admissions staff	0	1	122	123			
Head teachers/principals	4	3	1	8			
Other senior staff	6	9	6	21			
Total	142	224	362	728			

- 1.24 Feedback has been gathered on all 10 of the subject areas²⁰ covered by the latest Applied General qualification Performance Tables, plus a selection of those covered by previous iterations of the Performance Tables. In total, 57 different Applied General qualifications have been represented in the research via the staff and student consultations (these are listed at Appendix 2). However, it is also important to note that:
 - Feedback has been gathered on two 'types' of Applied Generals: those that met the
 Department for Education's interim requirements (available for first teaching from
 September 2014) and those that met the full requirements (first taught from
 September 2016).
 - Because some consultees' feedback referred to Applied Generals, BTECs or vocational qualifications collectively, it is very likely to have encompassed other qualifications in addition to those listed in Appendix 2.

Sampling²¹

- 1.25 Alongside institution type and geographic coverage, five other criteria influenced the composition of the achieved sample:
 - Number of students with an Applied General qualification (HEIs and schools): with one exception (a small university in the South East of England), the researchers approached HEIs and schools that, based on data published by UCAS for the 2015/16 academic year, had at least 50 students that were undertaking, or who had completed, an Applied General qualification (for HEIs, data availability dictated that BTECs were used as a proxy for Applied Generals). Amongst the HEIs and schools that took part in the research, the number of students with at least one Applied General/BTEC ranged from 15 (the aforementioned small university²²) to 2,400.

²⁰ Performing Arts and Media; Finance and Business; Health and Social Care; Construction, Planning and the Built Environment; Engineering; Information and Communications Technology; Sport; Hospitality; Science and Mathematics; Sociology and Social Policy.

²¹ An overview of the research sample is provided in the main report. More detail can be found at Appendix 2.

²² No other HEI or school had fewer than 60 students with an Applied General in 2015/16.

- A-level performance (schools): the sample of participating schools includes a broad range of average points scores per A-level entry, from 20.3 (a school in the West Midlands) to 32.6 (a school in the South East). Based on Department for Education data from 2015-16, 8 of the 15 schools in the sample had average points scores per A-level entry that were above the national average, 2 were below the national average and 5 were close to the national average (within +/-0.5 points of the national average of 27.16).
- Size of institution (FE colleges): at the time of selecting the sample, the researchers did not have access to participation data for Applied General qualifications at individual college level. In the absence of that data, and with the need to progress the research in order to hit key milestones, the largest FE colleges (based on number of students) in each English region were invited to participate. By approaching the largest colleges, it was hoped and indeed proved to be the case in practice that each would have a sufficient number of Applied General qualification students to make focus groups and consultations viable.
- UCAS tariff tier (HEIs)²³: the original intention was to obtain input from at least 6 HEIs whose average UCAS tariff points per students exceed 360 ('high-tier'), at least 6 whose average tariff points are between 273 and 359 ('middle-tier') and at least 6 whose average tariff points are below 273 ('low-tier'). In practice, and as shown in Table 1.5, the achieved sample has an under-representation of low-tier institutions. This is primarily because there are relatively few low-tier universities in England. Based on UCAS data from 2016, 6 have average UCAS tariff points below 273. All 6 were invited to take part in the study, but at the time of writing only one had done so.

Table 1.5: HEI sample by UCAS tariff point tier				
Tier No. HEIs in the achieved sample				
High-tier	13			
Middle-tier	26			
Low-tier	1			
Total				

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²³ Note that a new UCAS tariff was introduced for HE courses starting from September 2017. It differs from the old tariff (which is what this report refers to) in that it is based on a simple mathematical model and provides a broad metric of a qualification's size and grading structure. HE providers are autonomous and make their own decisions regarding the suitability of qualifications for their courses. Regulated information, such as a qualification specification or information contained within the UK qualification register, is used by UCAS to confirm a qualification's size and grading structure. A qualification is then allocated size and grade band points which are multiplied to form the overall tariff score. The new tariff is accompanied by Qualification Information Profiles, designed by universities and colleges, to provide the important contextual information regarding a qualification's purpose and assessment structure, which need to be considered in deciding whether or not a qualification is suitable preparation for a HE course. The primary purpose of the new tariff is to provide a broad metric for qualifications at Level 3/SCQF Level 6 to support university and college management information needs. Some universities and colleges will also use the tariff to express entry requirements and offers. Around one third of courses on the UCAS search tool contain a tariff entry requirement. Further information about how tariff points are calculated can be found at: https://www.ucas.com/file/65976/download?token=pCsreLqo

• Willingness to participate (all institutions): participation in the research was entirely voluntary for each institution. No incentives were offered for taking part.

Research and sampling limitations

- 1.26 The timescales for the research, combined with the number of institutions in the research sample, meant that a prompt start was needed with engagement and recruitment. From a sampling perspective, the main drawback of this was the absence of Applied General participation data for FE colleges²⁴, hence the 'largest college' approach described approach.
- 1.27 Other limitations included the following:
 - **Granularity of HEI data:** it was hoped at the outset of the work that the HEI sample would be informed by data on the number of students per HEI with one or more Applied General and, ideally, the specific type/title of Applied General they had obtained. However, discussions with the Higher Education Statistics Agency (HESA) revealed that there isn't currently an Applied General 'flag' in the data they hold on students' pre-HE qualifications. Similarly, the current categorisation of qualification types in the HESA data does not enable the accurate identification of either the number or specific types of Applied Generals held at an institution or by individual students. As a result, data on the number of students per HEI with one or more BTECs, which is available publicly, was used as a proxy for sampling purposes.
 - **Student attendance:** in colleges and HEIs, it was often the case that fewer students attended a focus group for the research than had originally signed up. It was difficult for the institutions to prevent this, although the consequence was that in some institutions, fewer subject areas were represented than had been anticipated.
 - Recognition of Applied Generals: as explained in Chapter 2, it was common for
 those taking part in the research to refer collectively to 'BTECs' and 'vocational
 qualifications' when answering questions about Applied Generals. Whilst the
 researchers sought to clarify any potential confusion (for example by referencing
 the Performance Tables to confirm with consultees which qualifications were being
 discussed), it is possible that some of the participants were referring to Tech Levels
 in their answers as well as, or instead of, Applied Generals.
 - Representation: considerable efforts were made to obtain input from a varied sample of providers, both geographically and in terms of key characteristics such as average A-level grades and average UCAS tariff points. Whilst this was achieved, and whilst the study has generated a large body of qualitative evidence, it cannot be assumed that the findings contained within this report reflect the views of staff and students at institutions that were not in the research sample. In particular, it has only been possible to obtain input from one low-tier HEI.
 - Comparator information: the research scope did not include consultations with students in HEIs that had exclusively undertaken A-levels at Key Stage 5. This

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²⁴ This has since been requested and obtained from the Skills Funding Agency – see Appendix 2.

includes students who are being taught the new reformed A levels²⁵, the first results of which will be announced in August 2017. As such, it has not been possible to compare the views of Applied General students with A-level students on how well they felt prepared for HE.

Quotations and examples used in this report

- 1.28 This report includes direct quotations from the qualitative consultations as well as institution-levels examples of practice. The quotations are in blue shaded boxes and the examples of practice are in grey shaded boxes.
- 1.29 In keeping with the research protocols agreed with each of the participating institutions, all quotations and examples of practice have been anonymised.

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²⁵ The new AS and A levels includes a focus on mainly exam assessment at the end of the course; decoupling of AS and A level exams; reviewed and updated content.

2 TERMINOLOGY AND INTERPRETATION

- 2.1 The school and college staff consulted during this research were all familiar with the term 'Applied General qualifications' and all could identify the qualifications from the 2017 and 2018 Performance Tables they were delivering. In conversation, however, they typically used 'BTECs' and/or 'vocational qualifications' as collective terms when talking about Applied Generals.
- 2.2 This could be for several reasons. The relative newness of Applied Generals is one. The fact that BTECs account for a large share of Applied Generals is another. And significantly, the *only* Applied Generals that some of the schools and colleges in the sample deliver are BTECs. Whatever the reasons, it was rare for 'Applied Generals', as a specific term or category of qualifications, to be regularly used by the consultees in conversation.
- 2.3 At the HEIs in the sample, and specifically amongst teaching staff, the term 'Applied General qualifications' is less well understood and knowledge of how they differ from other non-A-level qualifications at Level 3 is mixed. Like their counterparts in schools and colleges, teaching staff in the HEIs consistently referred to 'BTECs' and 'vocational qualifications' when discussing Applied Generals. It was very rare for any of them to differentiate their views (either unprompted or when prompted by the researchers) between Applied Generals and Tech Level qualifications.
- 2.4 The HEI admissions staff consulted for the study were more familiar with the term 'Applied General qualifications', the purpose of those qualifications and how they differ from Tech Level qualifications. However, when asked for their views on how well Applied Generals prepare students for HE and the other topics covered by this research, they too spoke generically about 'BTECs' and 'vocational qualifications'. In the vast majority of cases, they were unable to offer an opinion that differentiated between Applied Generals and Tech Level qualifications.

3 APPLIED GENERALS AS A ROUTE INTO HIGHER EDUCATION

A note on the findings in this chapter

- 3.1 This chapter presents key findings from the research on how effectively Applied Generals prepare students for HE. In this context, HE is defined as an undergraduate degree programme.
- 3.2 The research has also explored how well Applied Generals prepare students for further study at Level 4, e.g. a Higher National Certificate, or equivalent. The findings from this specific line of enquiry are presented in the final sub-section of this chapter ('Preparing students for learning at Level 4').

Preparing students for HE: the headline messages

- 3.3 Across the research sample, there is no unanimous answer to the question, "how well do Applied Generals prepare students for HE?". The number and variety of subject areas in scope, the array of institutions and institution types, and the heterogeneity of the students all contribute to make it a multi-faceted picture.
- 3.4 Nonetheless, some clear headline messages have emerged. These are summarised under the following two sub-headings, after which differences in views by stakeholder type and subject area are considered.

Applied Generals are seen to instil a range of skills that are valuable in HE study

- 3.5 Staff in schools, colleges and HEIs across the research sample agreed that Applied Generals are often effective at developing students':
 - Teamworking skills.
 - Organisational and time management skills.
 - Practical skills, e.g. laboratory work and other hands-on activity.
 - Interpersonal skills, especially where the students have undertaken work experience or a work placement during their Applied General.
 - Proficiency at giving presentations and speaking in front of groups of people.
- 3.6 Staff agree that each of the above can be very beneficial to HE study. There is also a clear majority view across the research sample that Applied Generals perform well in terms of equipping students with a useful base level of subject/industry specific knowledge.

"Students who come to us with a BTEC in Health and Social Care tend to have a better understanding and familiarity with workplace language and terminology."

Health and Social Care lecturer at an HEL

3.7 Views are more mixed on how effectively Applied Generals develop students' research and analysis skills. Students themselves, and especially those in schools and colleges, tend to be quite positive about this. During the focus groups, they regularly spoke of how their research and analysis skills have developed and improved through the assignment-based nature of Applied General qualifications. Students in Year 12 that are studying for Applied Generals under the new specifications regularly gave feedback to this effect.

"I've had to do a lot of independent research [on a BTEC National Extended Certificate in IT]....a lot of planning and evaluation."

Student at an FE college

3.8 Whilst only able to comment on the legacy qualifications that met the Department for Education's interim criteria, teaching staff in HEIs acknowledge that whilst Applied Generals may well have helped to develop those skills, in their view the students entering HE with one or more Applied General tend to be less adept at independent research, critical thinking and the interpretation and analysis of data than students that have come through an 'A-level only' route. They also reported a noticeable difference, in terms of how advanced these skills are, between students that have entered HE having only undertaken Applied Generals at Key Stage 5 and those that have done so via a combination of an Applied General(s) and an A-level(s).

"We find that students that have done BTECs without any A-levels often need to be nudged towards working independently and solution-finding. Many of them don't seem to be used to it, presumably because of the nature of the qualifications they have undertaken before coming here."

Head of Science and Engineering at an HEI

In most subject areas (although not all), HEI staff report that students with Applied Generals are less well prepared for HE study than those entering through an A-level route

- 3.9 Whilst recognising the importance of Applied Generals in the post-Raising the Participation Age landscape, and whilst acknowledging the range of skills they help to develop, the majority of HEI staff in the research sample expressed reservations about the preparedness for HE of Applied General students.
- 3.10 There are some notable exceptions to this which are considered under 'Differences in view by subject area', below. But in the main, HEI teaching staff were of the view that:
 - Students with Applied Generals are not as well prepared for HE as their A-level counterparts.
 - A higher proportion of Applied General students than A-level students are inadequately prepared for HE.

- 3.11 When asked for their view on why this is the case, the HEI staff usually cited one or more of the following three reasons:
 - Numeracy and academic writing skills: an insufficient level of skill in these areas (versus the demands of an HE programme) was the most frequently raised reason and was mentioned by at least one member of teaching staff in three quarters of the 40 HEIs in the research sample. These staff frequently reported that students with Applied Generals, and especially those without Distinction grades, are more likely than 'A-level only' students to require additional support on courses that either have a high numeracy/academic writing content or where strong skills in those areas are required (although that is not to say that students that have entered HE through more traditional routes do not also require support) Many also mentioned that Applied General students are less likely to be able to reference appropriately (e.g. using Harvard referencing) or to understand the importance of referencing to develop an argument.

"All of the undergraduates in the department do a maths test at the start of the year. When we look at the results, we consistently find that students with BTECs are in the bottom third."

Head of Engineering and Manufacturing at an HEI

• Underpinning theory: HEI staff regularly praised the practical skills of first year undergraduate students with Applied General qualifications and remarked that they are often stronger in this regard than their A-level counterparts. However, with similar regularity, they stated that students with Applied Generals are less likely to have a sound grasp of the theories or principles that underpin those practical skills and activities. This was mentioned most frequently by HEI staff delivering programmes in subjects related to engineering, science and health and social care, some of whom suggested that it may have been caused, in part at least, by the modules the students had chosen during their Applied General.

"We'd prefer students to understand the theory first and then develop their practical skills. With some of the BTEC students, it feels like it's the other way around."

Chemistry tutor at an HEI

• Examination and revision skills: a large majority of the HEI staff in the sample said that students with Applied Generals are more likely, especially in the first year of their HE programme, to encounter difficulties in demonstrating their knowledge and skills under examination conditions. Examples of the additional support measures put in place by HEIs to help students in this regard are provided in Chapter 5.

Differences in views by stakeholder type

3.12 In the main:

- Staff in the schools and FE colleges covered by the research are more positive about the effectiveness of Applied Generals in preparing students for HE than staff in HEIs.
- Within HEIs, admissions staff are typically more positive than teaching staff.
- Feedback from students in HEIs on this topic is very mixed.
- 3.13 Each of the above is considered in more detail below.

Staff in schools and FE colleges

3.14 The majority of staff in the majority of schools and colleges that took part in the research said that, in their opinion, undertaking an Applied General(s) would stand students in good stead for HE. The specific skills that they identified are those listed in paragraph 3.5 and include teamworking and time management skills.

"The qualifications [BTEC Level 3 Extended Certificate in Health & Social Care and BTEC Level 3 National Foundation Diploma in Health & Social Care] provide a good breadth of knowledge and suit the modular approach they follow at uni. They've also had experience of meeting deadlines which they'll have to do at uni."

School teacher delivering Health and Social Care

- 3.15 However, during the consultations it was not always clear that staff were making a distinction between how effectively Applied Generals offer a route into HE and how well the content and structure of the qualifications actually prepare students for HE. Potentially, and certainly in the view of many HEI staff, this is an important distinction.
- 3.16 It should also be noted that the majority of school and college staff expressed a personal view on this topic, but were also candid in saying that their view was not necessarily evidence-based. Whilst some could provide information on the number and proportion of Applied General students from their institution that had applied to an HEI, and the number whose applications had been successful, they had very little insight on how the students had actually fared once in a HE setting.

Staff in HEIs

- 3.17 Admissions staff in low-tier and middle-tier institutions, and especially those where admissions functions are centralised, were, on average, more positive than their counterparts in high-tier institutions about the suitability of Applied Generals in preparing students for HE. That said:
 - The low-tier and middle-tier institutions are more reliant on Applied General students (or students that haven't come through an 'A-level only' route) than the

high-tier institutions, which may influence their views on preparedness. Across the low-tier and middle-tier institutions in the sample, a combined average of 26% of first year undergraduate students in 2016 had one or more BTEC²⁶, compared with an average across the high-tier institutions of 8%.

- The feedback from admissions staff also suggests that low-tier and middle-tier institutions are more likely than high-tier institutions to base shortlisting and recruitment decisions on a student's UCAS points (and in some cases their Personal Statement²⁷) rather than on the specific qualifications they have undertaken²⁸. High-tier institutions appear, on average, to give greater consideration to the specific qualifications, and the modules that have been chosen within those qualifications.
- At the time of the research, staff in less than a third of the HEIs were aware of any data comparing the retention rates and degree outcomes of Applied General students in their institutions with those of A-level students. In other words, at an individual institution level, it was relatively rare for staff's opinions on the preparedness for HE of different student cohorts to have been tested against outcomes data.

"We analyse retention and outcomes by whether or not students are from the local area, and in terms of widening participation, but not by the qualifications they obtained before coming here. However, we will be doing that in the future."

Member of admissions team at an HEI

- 3.18 Teaching staff in HEIs were generally less positive than admissions staff, although the spectrum of views was very wide and ranged from those who evidently believe that Applied Generals provide a solid foundation for successful HE study, through to those with an equally strong view that they do not and that the UCAS points attached to the qualifications are too high. The subject areas in which they teach appear to be linked to their views and are considered below under 'Differences in views by subject area'.
- 3.19 Teaching staff in some HEIs also claim that they observe a correlation between the preparedness for HE of new undergraduate students and the institution at which they undertook their Level 3 qualifications. Anecdotal examples were provided of how students who completed their Level 3 qualifications at one local provider will, on average, find it harder to make the transition to HE study than similar students with equivalent grades from a different local provider.

²⁶ Used here as a proxy for Applied Generals in the absence of more granular data.

²⁷ The part of the UCAS application where prospective students provide, in free text, information about themselves and why they want to study a chosen degree.

²⁸ Assuming that the student is applying for a course which has subject related relevance to the qualification(s) they have studied at Key Stage 5.

Students

- 3.20 Students in HEIs were asked to reflect upon how well they thought their Applied General qualification(s) had prepared them for HE. Whilst some common findings emerged and are listed below, the student feedback was very varied and does not lend itself to the drawing of conclusions.
- 3.21 For some students, it was evidently difficult in the focus group sessions to separate the specific effects or suitability of an Applied General qualification(s) from other factors that might influence how they view their own preparedness for HE. These other factors include other qualifications (non-Applied Generals) they have undertaken, the advice and guidance they received before entering HE, and the extent to which they were, or were not, enjoying their HE course and felt motivated by it at the time of the research. This may be reflected by the fact that when the students were asked to rank how well their Applied General(s) had prepared them for HE, their average response on a five-point scale (where 5 is high) was 3.
- 3.22 Nonetheless, a number of headline messages did emerge on this topic from the student consultations. These are:
 - Approximately three fifths of the HE students in the sample agreed that the academic/intellectual challenge of HE had proved greater than they had expected. They often remarked that the 'jump' from an Applied General to a higher level programme had been substantial.
 - The most common cause of that challenge, especially for science-based courses, had been the mathematical demands of their degree programmes compared with their proficiency in mathematics on entry to HE. For arts-based courses, students often reported that literature reviews and academic writing/referencing had initially proven difficult.
 - Students tended not to cite the content of their Applied General as a reason why they found the mathematical components of their HE course difficult. Instead they regularly said that they were "just not very good at maths".
 - By contrast, they were more likely to say that their Applied General had not prepared
 them as well as they would have liked for the essay writing and other writing-based
 requirements of their course. None said they were "just not very good at writing".
 - The fact that they had been working to deadlines throughout their Applied General was regularly said to have been helpful in their transition to HE.

"The 3-week turnaround per module that we had on the BTEC provided me with a really good foundation for the first year of my degree, where I had regular deadlines in different subjects."

University undergraduate

- Only seven of the students consulted during the research had pursued an HE programme in a subject area different to that of their Applied General. Whilst it is difficult to draw conclusions from such a small cohort, these students seemed to have found the transition to HE study more academically/intellectually challenging than students whose HE programme was in the same subject area as their Applied General(s).
- 3.23 Students in schools and colleges undertaking an Applied General provided less feedback on preparedness for HE, mainly because they had not progressed on to an HE course at the time of the research. Approximately 75% of those that were consulted intended to do so and most were upbeat about the skills and knowledge that they were developing through their Applied General(s).
- 3.24 For Year 13 students in schools and colleges, and those in Year 12 whose institutions were not delivering the new specifications for Applied Generals, the only common area of concern was examinations. The students consistently recognised that their HE courses would have examinations, and understood that their performance in examinations would be central to their HE outcomes. However, unless they were studying for an A-level(s) alongside their Applied General(s), they also recognised that they risked becoming 'out of practice' in terms of examination preparation and performance. Very few of the students identified this as a major concern, but some recognised it as an area where they may need additional support once in HE.

"There are no exams in my BTEC [Pearson BTEC Level 3 Diploma in Performing Arts]....this could hinder me when I'm at university."

Year 13 college student

Differences in views by subject area

- 3.25 Views from HEI teaching staff on the effectiveness of Applied Generals as a means of preparing students for HE typically vary by subject area. Using the subject area classifications from the 2018 Performance Tables as a structure, Table 3.1 summarises these views. Note that this is a generalisation as views from staff in the same subject areas but different institutions do not always align.
- 3.26 Nonetheless, in each case the table captures the majority view. The key message is that Applied Generals are, in most cases, seen to prepare students effectively for HE programmes in creative arts, sport (excluding courses with a high science/biology content), applied ICT and some health and social care courses. They are seen to be less effective as a means of preparation for courses in science and mathematics and engineering, due largely to the mathematical components of those courses.

Applied General User Research

Table 3.1: Summary views from HEI staff on how well Applied Generals prepare students for HE							
Subject area (from 2018 Performance Tables)	Majority view from HEI teaching staff	Main reasons behind the majority view					
Performing Arts and Media	HEI teaching staff <u>often prefer</u> students to have an Applied General (or a vocational qualification). Applied Generals were consistently said to prepare students for HE in this subject area very well.	The content and delivery/learning style of the Applied Generals are well aligned with higher level courses in this subject area.					
Sport	Students with Applied Generals are <u>often better suited</u> to HE courses in sport-related subjects than A-level students.	Applied Generals give students the skills/knowledge to transfer and apply their knowledge to 'real world' situations.					
ICT	HEI staff expressed <u>consistently positive views</u> towards Applied Generals as effective preparation for HE study in computing and game design courses.	The applied/practical nature of the Applied Generals prepares students well for undergraduate study in this subject area.					
Health and Social Care	HEI staff views <u>vary by specific HE course</u> , although there are common concerns about the preparedness of Applied General students for certain mathematical elements (e.g. drug calculations).	Mathematical elements are central to the successful completion of several Health and Social Care courses in HE.					
Finance and Business	HEI staff views <u>vary by specific HE course</u> , although common concerns exist around mathematics, academic writing and preparation for/performance at examinations.	Numeracy and academic writing skills are important to student success in this subject area.					
Hospitality	Students are generally <u>well prepared</u> for the practical elements of the HE courses but are less well prepared for the theoretical and/or science elements of hospitality (e.g. food technology).	Successful HE in this subject area typically requires a broad range of academic and applied skills.					
Science and Mathematics	Students with Applied Generals tend to be <u>less well prepared</u> for HE and are more likely to struggle with the demands of the course than A-level students.	Substantial mathematics component of the HE courses.					
Engineering	Students with Applied Generals tend to be <u>less well prepared</u> for HE and are more likely to struggle with the demands of the course than A-level students.	Substantial mathematics component of the HE courses.					
Sociology and Social Policy	Applied General students studying Criminology (the part of this subject area covered by the research) tend to have a reasonable level of familiarity with the key topics but issues can arise as they progress through their course.	Applied General students often lack an awareness of the additional depth and academic critique that needs to be applied when studying criminology at a higher level.					
Construction, Planning and the Built Environment	Not covered through the HEI consultations in the research.	-					

Comparing Applied Generals with other routes into HE

- 3.27 The equivalence and comparability of Applied General qualifications and A-levels was a much-discussed topic during the research and one which divides opinion.
- 3.28 As with the majority of topics covered by this report, it is an over-simplification to suggest that all of the views expressed can be neatly categorised, or that all of the views expressed by a certain stakeholder group are consistent. Neither is true, although here, as elsewhere in the report, there are some clear headline messages which represent the majority points of view from the research sample. These are:
 - School and college staff were generally supportive of Applied Generals (although views are mixed on the new specifications see Chapter 4) and the pathways of progression that they offer. Most do not think that 'Applied General' means 'easy', but rather that it indicates a less academic, but equally valid, alternative to A-levels that can be motivational for students who may not have excelled at Key Stage 4.

"A-level students think their course is harder. At the end of the course they don't know what grade they're going to get whereas Applied General students have a pretty good idea of what grades they're going to get."

School teacher delivering Applied General qualifications in Business (and referring to interim Applied Generals)

"Applied General students are different types of students to A-level students. The debate exists because of the UCAS points, but really I don't think we should be comparing the two."

School teacher delivering Applied General qualifications in Health and Social Care

- In tariff terms, admissions staff in low-tier and middle-tier HEIs tend to regard
 Applied General qualifications as being equivalent to A-levels. However, there is
 less confidence amongst these staff that that an Extended Diploma should be
 considered equivalent to three A-levels than there is about the equivalence of
 smaller Applied Generals. Opinions are more mixed, and generally less positive,
 amongst admissions staff in high-tier institutions.
- HEI teaching staff are the least likely to say that Applied Generals and A-levels with
 the same UCAS points should be considered equivalent. The majority of HEI
 teaching staff do not regard Applied General qualifications as equivalent to A-levels
 and think that this should be made explicit by deflating the UCAS parity. These views
 are concentrated amongst staff delivering subjects that are considered traditionally
 academic or which have significant mathematical elements. They are less prevalent,
 and in some cases are strongly opposed, amongst staff delivering in subjects related
 to art, sport (excluding courses with a high science/biology content) and applied ICT.

"Applied Generals are not comparable with A*, A and B grades at A-level and they're certainly not comparable to the reformed A-levels."

Engineering tutor at an HEI

"This is not meant as a slight on the [Applied General] students themselves, but I'm sure that the ones I teach wouldn't have got an A at A-level, yet they've got the same number of [UCAS] points."

Business studies tutor at an HEI

"The tariff points for BTECs are completely out of proportion. BTEC students can come in with 1080 points, a triple D*, but it's not comparable to A-level. The academic underpinning and transferable skills are a long way apart."

Head of Animation at an HEI

• Students demonstrated considerable pride in the Applied Generals they had undertaken or were undertaking. The students taking part in the research recognise the parity of esteem issues that exist (on social media, for example, it is easy to find examples of 'BTEC' being used as slang for 'second best'). The vast majority also acknowledge that a purely A-level route, even if they had been inclined to pursue one, would have been very challenging for them. In fact, those students that had undertaken an A-level alongside their Applied General(s) often remarked how much more knowledge it had been necessary to acquire for the A-level. Nonetheless, the students were largely unanimous in saying that the Applied General(s) had been the right qualifications for them, regardless of the UCAS points attached to those qualifications.

Are the qualitative findings reflected in the statistics?

3.29 Research focused on BTECs (used here as a proxy for Applied Generals) shows that whilst the gap is narrowing, pupils studying them have, on average, performed less well at Key Stage 4 than pupils who go on to study A-levels²⁹. BTEC students are also more likely to come from disadvantaged backgrounds (in 2015, 66% of them were eligible for Free School Meals) and be male – each of which, on average, is associated with lower attainment at school. As reported earlier, research has also shown that drop-out rates in HE remain significantly higher amongst BTEC students than A-level students.

²⁹ Passports to Progress: How do vocational qualifications help young people in building their careers? (Social Market Foundation, 2016).

At an HEI in the East of England, the number of students applying with Applied Generals (without any other Level 3 qualifications) has risen from 14% in 2011 to 23% in 2016.

Analysis undertaken by the HEI shows that the proportion of students not progressing to the second year of their course, either through dropping out or by failing their first year exams, is highest amongst students that only have Applied Generals. Students with a combination of Applied Generals and A-levels, even if they achieved low grades in their A-level(s), are more likely to progress to the second year.

- 3.30 Eight HEIs in the sample shared with the researchers the results of analysis they had undertaken comparing the degree outcomes of Applied General/BTEC students with those of A-level students. Six of the eight had found that the Applied General/BTEC were less likely to obtaine first-class and upper-second class degrees. The other two HEIs found there to be no significant difference.
- 3.31 These findings raise the question of how HEIs are supporting students with Applied Generals and other non-A-level qualifications. Chapter 5 considers this and provides a series of examples uncovered during the research.

Preparing students for learning at Level 4

- 3.32 In addition to questions on preparedness for HE, tutors at the FE colleges in the sample were asked how well they thought Applied General qualifications prepare students for successful study at Level 4 (Higher National Certificates and equivalent). Their responses were more consistent, and less subject specific, than they were when discussing preparedness for undergraduate study. In summary:
 - The tutors reported that Applied Generals provide students with a broadly appropriate set of skills and knowledge for progression to a Level 4 qualification in the same, or a related, subject area.
 - Whilst some students were said to have found the mathematical and/or scientific elements of Level 4 study challenging, this has not occurred as regularly or as severely as when they have progressed directly from an Applied General to an undergraduate degree programme.
 - Some students are also said to have found the increased requirement for independent research and study skills at Level 4 to have been a challenge, but this too has been less significant than on undergraduate degree programmes.
- 3.33 When asked to explain why they gave the above responses, the FE tutors cited two main reasons. The first, perhaps obviously, is that the jump in difficulty from an Applied General at Level 3 to a qualification at Level 4 is smaller than when progressing directly to an undergraduate degree. Tutors are of the view that, on average, students find the smaller jump more manageable.

- 3.34 The second is that students will often progress from an Applied General to a Level 4 qualification at the same institution. They may also have the same tutors on both courses. As such, they tend to be more familiar with the learning environment, with the delivery styles and with the expectations of teaching staff than in an institution that is new to them.
- 3.35 Consultations were undertaken with 28 students, in 4 different institutions, that had progressed from an Applied General to a Level 4 qualification (in all cases a Higher National Certificate in a STEM³⁰ subject). Their feedback echoed that of the tutors in that they had found the transition to Level 4 to be manageable and did not feel they were struggling with the higher level of difficulty. Half of the students said that they were having to work harder on the mathematics elements of their Higher National Certificate than they had expected (they were doing this through a combination of additional self-directed study and contact time with their tutors) but did not expect this to jeopardise the successful completion of their qualification.

³⁰ Science, Technology, Engineering and Mathematics

4 ASSESSING APPLIED GENERAL QUALIFICATIONS

Why do students choose Applied Generals?

- 4.1 Before exploring views on the assessment of Applied General qualifications, it is appropriate to consider why the students in the research sample chose to undertake them. This is because assessment is clearly a factor in the decision-making process for many of the students.
- 4.2 Aside from 'interest in the subject', the most common reason given by the students for choosing an Applied General was that they favoured qualifications without significant examination components:
 - 74% of the school and college students that took part in the research, and 79% of the HEI students, identified the absence of examinations as being one of the main reasons why they chose an Applied General.
 - 31% of the school and college students, and 34% of the HEI students, said that it was the most important reason.

"I much prefer coursework over exams. I find it much less stressful."

University undergraduate

"Exams are mostly about memorising facts and hoping they come up in the exam. BTECs make you apply the knowledge in the form of coursework. This in my opinion gives you a much better understanding of the subject."

FE college student

"I prefer coursework over exams as I find it difficult to revise for long periods of time." School student (Year 13)

"I have always wanted to go to university and this course can lead me there without doing exams."

FE college student

4.3 Table 4.1 provides further insight into why students choose Applied Generals. It shows that the pathways into HE offered by Applied Generals had been a factor for more than two thirds (71%) of those in the sample, while the opportunity to pursue vocational subjects with a focus on practical application had been a factor for just over half (56%). Against this category, as well as 'Advised to undertake an Applied General', there was a noticeable difference in the feedback from students at schools/colleges and those at

HEIs. This may indicate that there is less scope for the current school and college cohort (where they are studying for new Applied Generals with external assessments) to focus on practical application than there had been in the past. However, this was not explicitly explored through the research.

Reason	School and college students	HEI students	All students
Interest in the subject	96%	92%	95%
Preference for coursework and assessments over exams	74%	79%	76%
Offers/offered a route into HE	72%	70%	71%
Opportunity to pursue vocational subjects with a focus on practical application	49%	68%	56%
Advised to undertake an Applied General (e.g. by school staff, parents or friends)	41%	57%	47%
Other Includes: - Perceived to be easier than A-levels - Started an A-level(s) but either struggled or didn't like it - Didn't perform well at GCSE - The Applied General provides a good foundation for a specific occupation (e.g. carer)	7%	15%	10%

Source: York Consulting

Views on recent increases in attainment

- 4.4 There is widespread awareness across the research sample of the grade increases that have occurred on BTECs in recent years (between 2005/06 and 2012/13, the proportion of students who achieved top grades³¹ in BTEC qualifications equivalent in size to three A-levels, rose from 17% to 38%³²).
- 4.5 Although BTECs are not the only qualifications in which grade increases have occurred (the number of university students obtaining first-class degrees has also risen significantly over the last two decades), the vast majority of consultees in this study were of the view that there has been a negative impact on the image and perceived integrity of BTECs as a result. Given the prevalence of BTECs in the Applied General qualification Performance Tables, a similarly strong view emerged from the research that the concerns raised about the difficulty and rigour of BTECs also extend to Applied Generals.

³¹ Defined as at least 'Distinction, Distinction'.

³² 'Young participation in higher education: A-levels and similar qualifications' (HEFCE, 2015).

- 4.6 When asked why they thought the grade increases on BTECs had occurred, the consultees typically cited one or more of the following reasons:
 - **Student choice:** staff in all the schools and colleges taking part in the research said that the number of higher-ability students choosing BTECs was increasing (this supports the point made in Chapter 3 that the Key Stage 4 attainment gap between BTEC students and A-level students is closing). There are two ways of looking at this:
 - One way the more common amongst staff in schools and colleges is that students who would historically have chosen A-levels are broadening their horizons and considering other routes into HE and employment.
 - The other which is somewhat more cynical is that, over time, students have become increasingly aware of the opportunities that BTECs offer to obtain UCAS points that are equivalent to A-levels but via qualifications that are typically easier.
 - Improvements in teaching: staff in schools and FE colleges often said that they and other colleagues in their institution had "got better" at teaching BTECs. They felt that this was true of the quality of their teaching generally and the extent to which it engages and motivates students. They had also said that they had developed a better appreciation of what constitutes 'excellent' work (and therefore top grades) in the context of BTEC qualifications.
 - Too much direction and prescriptive teaching: HEI staff, in particular, harbour concerns over the level of guidance and, to use a term that appeared regularly during the research, 'hand-holding', that can take place on BTEC qualifications in some institutions. Alongside this, many of the HEI staff pointed to the (now prohibited) repeated resubmissions of BTEC assignments as having played a part.

"They [BTEC students] are used to being able to resubmit their work. We don't do that here; they do one draft and then submit it. Some of them really struggle with that."

Programme Director of Management, Leadership and Leisure at HEI

- 4.7 There are some distinctly different points of view and a great deal of subjectivity within the points above. However, there is more consensus across the research sample on the main impacts of grade increases in BTECs and the knock-on effects for how Applied Generals are viewed, both in the education sector and more widely by the public.
- 4.8 The first impact is that grade increases have perpetuated a view amongst the public that BTECs (and by extension Applied Generals) are an easier option than the A-levels with which they share an equal number of UCAS points. Staff in schools and colleges remarked that as a consequence of the negative media (and social media) coverage around grade increases on BTECs, it can be difficult to persuade students and, in particular, their parents, that a BTEC/Applied General is the most appropriate option and that it will be recognised and valued by HEIs and employers.

"Parents often don't value Applied Generals as highly as A-levels. Rightly or wrongly, A-levels are still seen as the gold standard."

School teacher delivering ICT

- 4.9 The second impact affects HEIs. The significant increase in both the number and proportion of students applying for HE courses with top grades in BTEC qualifications is said to have made it more difficult to differentiate between applicants. HEI staff also said that the range in the knowledge and abilities of students with top grades in BTECs has become wider as more students have achieved those top grades.
- 4.10 In response, some HEIs in the sample for certain courses such as chemistry and other sciences have amended their entry criteria and now require students to have either an AS-level or A-level qualification in a subject relevant to the preferred HE course.

"Because of the number of BTEC applicants with top grades, we don't really know what we're getting. The 'Distinction' grade no longer sets students apart."

Member of admissions team at an HEI

4.11 The third impact is that grade increases – and the associated inference that BTECs are easier than A-levels – have perpetuated the use of 'BTEC' as derogatory slang for substandard. The feedback gathered for this research suggests that many BTEC/Applied General students feel aggrieved by this.

"I've seen it all on Twitter, especially around the time that the A-level students are doing their exams....that's when it really seems to start."

First year HEI undergraduate

Assessment and new specifications

4.12 There was unanimous agreement across the teaching staff in the research sample that the introduction of the 'one resubmission' rule for BTEC assignments was an appropriate move.

"It used to be easier to achieve higher grades because of the resubmissions....students could have lots of attempts. Now they can't do that...there's more rigour in the system."

FE college tutor

4.13 The introduction of must-pass external assessments on Applied General qualifications (from September 2016) has also been widely welcomed by the HEI staff taking part in the research, with anticipated benefits including:

- A reduction in the extent to which staff can 'guide' students through their courses. Although none of the school and college staff felt that this had happened in their own institutions, they recognised that the system would allow it to happen and often expressed the view that it did take place elsewhere.
- A reduction in grading anomalies across institutions. As reported in Chapter 3, HEI staff have observed what they consider to be considerable differences in the preparedness for HE of students that have undertaken the same qualifications, and obtained the same grades, at different institutions. They feel that the larger external assessment component will help to address that.
- A strengthening, over time, of the reputation of Applied Generals. It is thought by
 the majority of consultees that the must-pass external assessments now included
 with Applied Generals will help to improve the public image of the qualifications in
 terms of their comparability with A-levels.

"Regardless of what we [school teachers] think, [interim] Applied Generals are seen by most people to be easier than A-levels. I think the recent changes will help to put them on more of an even keel."

School teacher

- 4.14 Whilst unhappy about the relatively late receipt of assessment guidance for some of the new Applied Generals, school and college staff generally agree that there is "plenty of guidance" in the specifications and that it provides them with an appropriate base upon which to make informed, professional judgements about which grades to award.
- 4.15 Looking specifically at the introduction/expansion of examination components in Applied Generals, views were predictably mixed although there were some common themes:
 - A large majority of the HEI staff taking part in the research welcome the
 introduction of the new specifications. The general consensus is that the new
 specifications will add rigour to the qualifications and will be a truer test of students'
 abilities (note that at the time of writing, universities had not enrolled any students
 that had undertaken Applied Generals under the new specifications, so their views
 were based on expectation).

A university in the North West intends to accept the new BTEC Applied Science qualification, alongside two relevant A-levels, for entry onto the foundation year of their Medicine degree programme. Although staff at the university do not feel that the new qualification is as academically challenging as an A-level, they do value the incorporation of calculus and feel that the increased examination component will provide greater differentiation in the results.

"The transition to examination assessment on Applied Generals will no doubt not be straightforward for some students and some providers, but we believe they will be better prepared for university as a result."

Member of admissions team at an HEI

• There are some subject specific exceptions to this majority views in HEIs. Staff delivering fine art and performing arts courses, for example, tended to question the benefits of the new specifications to their subject areas, with some strongly of the view that the changes are both unnecessary and unwanted.

"What we need is for students to present a portfolio that has been developed over time. We do not want them to have to jump through hoops and be objective driven by passing exams. For us, this change in direction is a concern."

Head of School of Art at an HEI

- Staff in schools and colleges understand the rationale for the changes but are concerned about the consequences. Their concerns tend to fall into one or both of two categories:
 - Take-up and suitability: staff expect some students (although quantifying with any accuracy is difficult) that would have previously have chosen an Applied General to consider other options following the introduction of the examination component. Their concerns are not about participation overall (as Raising the Participation Age dictates that young people must stay in education or training until they are 18) but rather the suitability of the qualifications on offer, given the proportion of students who choose Applied Generals because they dislike or feel unduly pressured by the prospect of exams.
 - Outcomes: linked to the point above, schools and colleges expect to see an overall reduction in the grade profile of Applied General qualifications. Whilst this may have an impact on institution-level performance data, staff more commonly raised concerns about Applied General students who submit high quality assignments but who perform poorly under examination conditions.

"Students won't get the same grades with the new BTECs as they did with the old ones. The exam element means that we won't see as many D*s."

FE college tutor

4.16 On the topic of the new specifications, staff in schools and colleges raised two other points, although each was only cited by a small minority of the sample. The first relates to the reduction in the number of optional units on some of the new qualifications. The one mentioned most regularly was the BTEC Extended Diploma in Business, on which the number of optional units has reduced from 14 to 6. This change, and similar reductions on other Applied General qualifications, may, in the view of some school and college staff, reduce the appeal of them to potential students. Other staff, however,

welcomed the greater consistency and comparability that it will allow across students and institutions.

"In the past [on BTECs], students have been able to choose what they are interested in. This is another reason why they're not seen as being comparable with A-levels – because on A-levels there's no hiding."

HEI tutor delivering Business Studies

4.17 The second point is more positive and involves staff praising the refreshed content of certain qualifications. The new BTEC Applied Science qualification mentioned under paragraph 4.15 is a good example, as is the suite of BTEC Business qualifications, which staff in certain schools and colleges reported to be more attuned with modern day business practices and techniques than their predecessors.

5 SUPPORTING STUDENTS TO SUCCEED

Types of support

- 5.1 Staff in 12 HEIs provided examples of additional support that can be accessed by students with Applied Generals/vocational qualifications³³. This support can be categorised as follows:
 - Support that is specifically targeted at students with Applied Generals/vocational qualifications.
 - Term-time support that can be accessed by all students, including those with Alevels, but which tends to be needed by a higher proportion of those with Applied Generals/vocational qualifications.
 - Out-of-term support which, as above, is not specifically targeted at those with Applied Generals/vocational qualifications (and may therefore be required by students with A-levels) but which tends to be relevant to them.
- 5.2 The following sub-sections provide a selection of those examples. At the time of writing, none of the institutions concerned had formally evaluated the impacts of the support, but all of them felt that it was beneficial.

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³³ This does not imply that additional support is only available in 12 of the 40 HEIs in the sample. Rather, it reflects the fact that the research instrument did not explicitly request details of additional support. Where the topic arose during the qualitative consultations, it was explored by the researchers. However, it was not necessarily covered with staff in each HEI.

Support specifically targeted at students with Applied Generals or vocational qualifications

Piloting a variety of approaches to support non-traditional entrants

A university in London has piloted a range of activities designed to prepare students with non-traditional entry qualifications (including Applied Generals) for their HE studies and to support them once at the institution. These include:

- Peer assisted learning, which matches second and third year undergraduates with first year non-traditional entrants in three pilot departments (Science, Mathematics and Occupational Therapy). The peer assisted learning covers exam preparation, assignments, understanding the course and understanding the university.
- 'Preparing for exams' sessions (including revision techniques and exam regulations) for students in Civil Engineering, Electronic and Computer Engineering, and Mechanical Engineering.
- Creating 'video lectures and tutorials', available online, that students can work through at their own pace. The lectures and tutorials have initially focused on the 'Introduction to Accounting' module, on which non-A-level students have previously been known to struggle.

Maths and Statistics Support Hub

A university in the South West runs a Maths and Statistics Support Hub (MASSH) for students that join the university with a BTEC. MASSH was set up after research at the university showed that BTEC students on some programmes were finding the maths elements of their courses particularly challenging.

For BTEC students on science and environmental science programmes, their mathematics units are delivered via small group tutorial sessions (for A-level students they are delivered via larger lectures). Engineering students with a BTEC undertake a year-long maths catch-up programme in their first year, including weekly support sessions. Students on ICT programmes that have a BTEC also have weekly maths catch-up sessions during their first semester.

The university also offers a maths programme for local FE students undertaking BTECs, and a maths summer school, as part of their work on widening participation.

Improving essay writing skills

In response to an increasing number of BTEC students enrolling on their drama degree programme, another university in the South West has introduced a new module specifically designed to improve the essay writing skills of those students. The module aims to bring the BTEC students to the same standard as the A-level students in this regard, with staff remarking that the BTEC students begin the course at "an unfair disadvantage".

Teaching and Learning BTEC Champions Group

Following a detailed review of progression and achievement, a Teaching and Learning BTEC Champions Group has been established at an East Midlands university. The group is led by a Pro-Vice-Chancellor and has senior representatives from all academic departments. The purpose of the group is for departments who have recognised a disparity in progression and achievement to identify, pilot and evaluate different teaching, learning and assessment processes specifically aimed at supporting students who have come through an Applied General qualification route.

Addressing gaps in preparedness for HE in partnership with colleges

Tutors at an FE college in the East of England have approached three local universities to better understand the knowledge and skills gaps that students completing a BTECs in Health and Social Care may have when undertaking a nursing or midwifery degree. Feedback from the universities suggests that these gaps centre on resilience, revision skills, examination skills, mathematics and English. Extra sessions covering these issues have now been developed and are being delivered to help students in the transition from FE to HE study.

Term time support available to all students

Maths diagnostics and support sessions

At a university in the North of England, all new undergraduates in the schools of Science and Engineering and Health and Social Care undergo a mathematics diagnostic test at the start of the academic year. Based on the results, the students are placed into one of three 'streams'. The streaming dictates the content and pace of the mathematical elements of the courses in the first year.

Students in the third stream are encouraged to attend additional tutorial sessions to help them meet the mathematical demands of their courses. Feedback from course leaders indicates that there is a concentration of non-A-level students in the third stream and amongst those who access additional support.

Improving study skills by changing the content of a degree course

A university in the Midlands has taken the decision to re-draft its degree in Early Childhood, Education and Care (for first study from September 2017) in order to include study skills as an intrinsic dimension of the programme.

The university has a varied intake of students, including a high proportion from non-traditional routes such as the Access to HE Diploma and BTECs. The Early Childhood, Education and Care degree programme also attracts mature students who have often not participated in formal learning for some time.

Whilst staff provide study skills support on this degree, participation in those support sessions has been optional and staff report that some students tend not to participate to the extent that they should, hence it now being formally included within the degree.

Student dashboard

A university in the Midlands has developed a 'student dashboard' that can be accessed by students and staff. The dashboard provides a snapshot of engagement for each student based on card swipes to academic buildings, logins and submissions of assessments via the university's virtual learning environment, library loan data, attendance and access to online resources. This enables academic staff to identify at an early stage those students who have low engagement and who therefore may be struggling. Staff are able to assess whether students with particular characteristics, including their prior qualifications, need additional academic support.

Out of term support

Summer camp to improve preparedness for HE

A university in the North of England runs a 'summer camp' which is designed to prepare undergraduates for their HE programme by topping up on certain skills/disciplines (most commonly mathematics) alongside various course specific topics. Attendance at the summer camp is used as a mandatory condition of acceptance to the university for students whom the admissions staff believe are in need of some pre-enrolment support.

Although not targeted explicitly at students with Applied Generals/non-A-level qualifications, the university finds that there is an over-representation of these students amongst those that are asked to attend.

Maths assessment and summer work

The Computing faculty at a university in the South of England asks applicants with BTECs to undertake a maths assessment as part of the selection process. BTEC students who are offered a place and who accept are often given maths-related work to complete over the summer holidays to help them prepare for their undergraduate course.

6 CONCLUSIONS

- 6.1 The conclusions below are structured under the stated objectives for the research.

 These were:
 - To improve Ofqual's understanding of the key issues and concerns of those who use Applied General qualifications.
 - To identify the ways in which Applied General qualifications are, and/or are not, fit for purpose in preparing students to progress to HE.
 - To identify the key features of Applied General qualifications that are particularly valued by users.
 - To identify any specific areas where stakeholders believe that improvements could be made to the standards of current Applied General qualifications (based on their experience predominantly of qualifications that met the interim requirements).
- 6.2 It is important to remember at this juncture that the individuals consulted for the research did not always provide feedback that related exclusively to Applied Generals. In some cases they were referring more broadly to BTECs and/or other Level 3 vocational qualifications.

Issues and concerns of those who use Applied General qualifications

- 6.3 Across the research sample, there is broad agreement that Applied Generals fulfil an important role in providing pathways for students not suited to, or not inclined towards, more academic (A-levels) or vocational (Tech Levels and Apprenticeships) programmes of learning. They are increasingly recognised as a route into HE, evidenced by the rapid growth in the number of students progressing to higher level learning having undertaken an Applied General.
- 6.4 The vast majority of the research sample do not (yet) view Applied Generals as academic qualifications (although, following the Sainsbury Review, they are designated as sitting within an 'academic route'). This is especially true of staff in HEIs. They are typically seen as vocational or 'middle' qualifications that sit between the academic routeway of A-levels and the vocational routeway of Tech Levels.
- 6.5 Amongst the participants in this research, it is teaching staff in HEIs that voiced the most significant issues and concerns about Applied Generals. With some subject specific exceptions (mainly creative arts, ICT and sport), the common view is that, compared with A-level students, Applied General students enter HE with a comparative disadvantage in mathematics and academic learning skills, e.g. essay writing, independent study, critical thinking and approach to examinations.
- 6.6 The majority of HEI staff covered by the research (noting the aforementioned subject specific exceptions above) do not regard Applied General qualifications as being equivalent to A-levels in terms of their rigour, how well they prepare students for HE

- and the extent to which they accurately reflect students' knowledge and skills. They consider there to be too broad a range of abilities amongst students with Distinction grades, and too much variation across different post-16 institutions.
- 6.7 Where staff in schools and colleges have concerns about Applied Generals, they tend to centre on the impacts on participation and outcomes caused by the introduction of the new specifications.

Fitness for purpose of Applied Generals in preparing students for HE

- 6.8 Applied Generals are reported to be effective at developing students' subject interest and knowledge, their practical skills, their ability to work effectively in teams, their time management and their proficiency at giving presentations.
- 6.9 In certain subject areas creative arts, ICT and sport Applied Generals (or, more accurately, Applied Generals and/or Tech Levels) tend to be preferred by the HEIs in the sample over A-levels and are seen to provide an appropriate foundation for HE study. Amongst HEI staff delivering subjects that are more traditionally academic, and/or which require strong skills in mathematics, views tend to be much less positive and a number of areas were cited in which Applied General students are reportedly less well prepared for HE than their A-level counterparts. These have been listed in paragraph 6.4 and include critical thinking, essay writing and approach to examinations.
- 6.10 In response, HEIs are providing an increasing amount of additional support to first year undergraduates that have entered with Applied Generals. Some are now working with local colleges to help improve the preparedness for HE of non-A-level students through additional modules in various relevant study skills.
- 6.11 Students' views on their preparedness for HE are mixed, plus it can be difficult for them to disentangle the effects, strengths and weaknesses of Applied Generals from other educational and non-educational experience in their lives. However, most of those in schools and colleges who intended to progress to HE felt that their Applied General was giving them a good grounding. Those already in HE had often found the jump to higher level study challenging and had noticed a marked difference in learning styles and expectations from their Applied General. Nonetheless, it was extremely rare for students in HE to say that they regretted choosing an Applied General as a route into higher level study.
- 6.12 Applied Generals are seen by both tutors and students to provide a good grounding for progression to further study at Level 4 (e.g. a Higher National Certificate). It is reportedly less common for students to struggle with the increase in difficultly on a Level 4 qualification than it is when they progress from an Applied General directly onto an undergraduate programme.

Key features of Applied Generals that are valued by users

6.13 The students in this research were enthused by the 'applied' nature of Applied General qualifications. For their own preferred styles of learning, they saw this as a major

- advantage over A-levels. Many were also drawn to the qualifications because of the route they offer into HE.
- 6.14 Related to both of these is the absence of examinations, or the relatively limited examination content, in Applied Generals prior to the introduction of the new specifications. With the exception of 'interest in the subject', no other reason for selecting an Applied General was cited by a larger proportion of the research sample.
- 6.15 Students are also mainly positive about the assignment-based nature of Applied Generals, the rapport and working relationship that the qualifications enabled them to develop with tutors, and the opportunity to resubmit their work.

Changes to Applied Generals

- 6.16 The new assessment rules for Applied Generals introduced in 2016/17 are welcomed by the majority of HEI consultees in the research sample. The common (although not unanimous) view is that the changes will introduce additional rigour to the qualifications and will provide a truer reflection of students' abilities than was previously the case under the previous specifications.
- 6.17 School and college staff have given the changes a far less warm reception. Whilst acknowledging the potential benefits of the changes in terms of the rigour and robustness of the qualifications, they are concerned for students who may deliver high quality assignments but who then struggle to perform well under examination conditions.
- 6.18 In terms of future changes, most of the HEI staff that were consulted in higher tariff institutions, alongside those teaching subjects that are traditionally considered academic or mathematical, would advocate a reduction in the UCAS points attached to Applied General qualifications. However, it is important to note that, at the time of the research, the HEIs had not received any students that had completed the new Applied Generals featuring the must-pass external assessment.
- 6.19 Whilst the research identified some occasional support within schools and colleges for a reduction in UCAS points, it came with the very clear caveat that any such changes should not impact upon the opportunities that students have to progress to HE.
- 6.20 School and college staff are keen to see the results from the Applied Generals studied in 2016/17 before making any other recommendations as to how the qualifications might be changed or improved. HEI staff will be very interested to compare the preparedness for HE of those learners with those that have enrolled with Applied Generals in the past.

APPENDIX 1: APPLIED GENERAL QUALIFICATION PERFORMANCE TABLES

2017 PERFORMANCE TABLES

The qualifications in these tables meet the interim criteria for Applied Generals

Agriculture, horticulture, environmental conservation and animal care

Ref.	Qualification title	Size (GLH)
	Environmental conservation	
600/0319/4	Pearson BTEC Level 3 Certificate in Environmental Sustainability (QCF)	180
600/0321/2	Pearson BTEC Level 3 Subsidiary Diploma in Environmental Sustainability (QCF)	360
600/0324/8	Pearson BTEC Level 3 Diploma in Environmental Sustainability (QCF)	720
600/0320/0	Pearson BTEC Level 3 Extended Diploma in Environmental Sustainability (QCF)	1080

Performing arts, arts, crafts, media and publishing

Ref.	Qualification title	Size (GLH)
	Art and design	
500/8551/7	NCFE Level 3 Certificate in Art and Design (QCF)	160
600/6094/3	OCR Level 3 Cambridge Technical Certificate in Art and Design (QCF)	180
500/7333/3	Pearson BTEC Level 3 Certificate in Art and Design (QCF)	180
500/8123/8	NCFE Level 3 Certificate in Interactive Media (QCF)	250
500/7144/0	Pearson BTEC Level 3 Subsidiary Diploma in Art and Design (QCF)	360
600/2827/0	UAL Level 3 Diploma in Art & Design (QCF)	570
500/5316/4	UAL Level 3 Diploma in Art and Design - Foundation Studies (QCF)	680
500/7928/1	Pearson BTEC Level 3 Foundation Diploma in Art and Design (QCF)	720
501/0872/4	WJEC Level 3 Diploma in Foundation Studies Art and Design (QCF)	720
600/2826/9	UAL Level 3 Extended Diploma in Art & Design (QCF)	1110
	Media and communication	
601/3986/9	UAL Level 3 Diploma In Creative Media Production & Technology (QCF)	540
601/3987/0	UAL Level 3 Extended Diploma in Creative Media Production & Technology (QCF)	1080
Music		
500/7718/1	Pearson BTEC Level 3 Certificate in Music (QCF)	180
500/7844/6	Pearson BTEC Level 3 Subsidiary Diploma in Music (QCF)	360
600/6682/9	Pearson BTEC Level 3 90-credit Diploma in Music (QCF)	540
500/7871/9	Pearson BTEC Level 3 Diploma in Music (QCF)	720

Ref.	Qualification title	Size (GLH)
500/7717/X	Pearson BTEC Level 3 Extended Diploma in Music (QCF)	1080
	Performing arts	
601/0111/8	OCR Level 3 Cambridge Technical Certificate in Performing Arts (QCF)	180
500/6920/2	Pearson BTEC Level 3 Certificate in Performing Arts (QCF)	180
601/0249/4	OCR Level 3 Cambridge Technical Introductory Diploma in Performing Arts (QCF)	360
500/6919/6	Pearson BTEC Level 3 Subsidiary Diploma in Performing Arts (QCF)	360
601/0250/0	OCR Level 3 Cambridge Technical Subsidiary Diploma in Performing Arts (QCF)	540
600/3953/X	Pearson BTEC Level 3 90-credit Diploma in Performing Arts (QCF)	540
601/1780/1	UAL Level 3 Diploma In Performing and Production Arts (QCF)	540
601/0247/0	OCR Level 3 Cambridge Technical Diploma in Performing Arts (QCF)	720
500/6873/8	Pearson BTEC Level 3 Diploma in Performing Arts (QCF)	720
601/0248/2	OCR Level 3 Cambridge Technical Extended Diploma in Performing Arts (QCF)	1080
500/6872/6	Pearson BTEC Level 3 Extended Diploma in Performing Arts (QCF)	1080
601/1790/4	UAL Level 3 Extended Diploma In Performing and Production Arts (QCF)	1080

Finance, enterprise, business and law

Ref.	Qualification title	Size (GLH)	
	Finance		
600/8537/X	LIBF Level 3 Certificate in Financial Studies (QCF)	180	
600/7833/9	CISI Level 3 Diploma In Finance, Risk & Investment (QCF)	340	
600/8551/4	LIBF Level 3 Diploma in Financial Studies (QCF)	360	
	Enterprise and finance		
500/7714/4	Pearson BTEC Level 3 Certificate in Personal and Business Finance (QCF)	180	
600/7269/6	AQA Level 3 Certificate in Enterprise, Employability and Personal Finance	180	
500/7712/0	Pearson BTEC Level 3 Subsidiary Diploma in Personal and Business Finance (QCF)	360	
	Enterprise and entrepreneurship		
500/6245/1	Pearson BTEC Level 3 Subsidiary Diploma in Understanding Enterprise and Entrepreneurship (QCF)	360	
601/0501/X	Pearson BTEC Level 3 90-credit Diploma in Enterprise and Entrepreneurship (QCF)	540	
500/6246/3	Pearson BTEC Level 3 Diploma in Enterprise and Entrepreneurship (QCF)	720	

Ref.	Qualification title	Size (GLH)
601/0502/1	Pearson BTEC Level 3 Extended Diploma in Enterprise and Entrepreneurship (QCF)	1080
	Business management	
600/4226/6	OCR Level 3 Cambridge Technical Certificate in Business (QCF)	180
500/6748/5	Pearson BTEC Level 3 Certificate in Business (QCF)	180
600/4608/9	OCR Level 3 Cambridge Technical Introductory Diploma in Business (QCF)	360
500/6750/3	Pearson BTEC Level 3 Subsidiary Diploma in Business (QCF)	360
600/4235/7	OCR Level 3 Cambridge Technical Subsidiary Diploma in Business (QCF)	540
600/3889/5	Pearson BTEC Level 3 90-credit Diploma in Business (QCF)	540
600/4229/1	OCR Level 3 Cambridge Technical Diploma in Business (QCF)	720
500/6747/3	Pearson BTEC Level 3 Diploma in Business (QCF)	720
600/4232/1	OCR Level 3 Cambridge Technical Extended Diploma in Business (QCF)	1080
500/6746/1	Pearson BTEC Level 3 Extended Diploma in Business (QCF)	1080
Law and legal service		
500/7713/2	Pearson BTEC Level 3 Certificate in Applied Law (QCF)	180

Health and social care and child development and well-being

Ref.	Qualification title	Size (GLH)
	Health and social care	
600/4612/0	OCR Level 3 Cambridge Technical Introductory Diploma in Health and Social Care (QCF)	360
500/9317/4	Pearson BTEC Level 3 Subsidiary Diploma in Health and Social Care (QCF)	360
600/4236/9	OCR Level 3 Cambridge Technical Subsidiary Diploma in Health and Social Care (QCF)	540
600/6178/9	Pearson BTEC Level 3 90-credit Diploma in Health and Social Care (QCF)	540
600/4230/8	OCR Level 3 Cambridge Technical Diploma in Health and Social Care (QCF)	720
500/9465/8	Pearson BTEC Level 3 Diploma in Health and Social Care (QCF)	720
600/4233/3	OCR Level 3 Cambridge Technical Extended Diploma in Health and Social Care (QCF)	1080
500/9501/8	Pearson BTEC Level 3 Extended Diploma in Health and Social Care (QCF)	1080
Child development and well-being		
601/2460/X	Pearson BTEC Level 3 National Subsidiary Award in Children's Play, Learning and Development (VRQ)	180

Construction, planning and the built environment

Ref.	Qualification title	Size (GLH)
	Building and construction	
500/7138/5	Pearson BTEC Level 3 Certificate in Construction and the Built Environment (QCF)	180
601/1563/4	TLM Level 3 Certificate for Designing, Engineering and Constructing a Sustainable Built Environment (QCF)	180
601/1562/2	TLM Level 3 Diploma for Designing, Engineering and Constructing a Sustainable Built Environment (QCF)	300

Engineering, manufacturing technologies and transport operations

Ref.	Qualification title	Size (GLH)
	Engineering	
601/4593/6	OCR Level 3 Cambridge Technical Certificate in Engineering Principles	180
500/8156/1	Pearson BTEC Level 3 Certificate in Engineering (QCF)	180
601/4594/8	OCR Level 3 Cambridge Technical Extended Certificate in Engineering	360

Information and communication technology

Ref.	Qualification title	Size (GLH)
	ICT practitioners	
600/4228/X	OCR Level 3 Cambridge Technical Certificate in IT (QCF)	180
500/9148/7	Pearson BTEC Level 3 Certificate in IT (QCF)	180
600/4623/5	OCR Level 3 Cambridge Technical Introductory Diploma in IT (QCF)	360
500/9147/5	Pearson BTEC Level 3 Subsidiary Diploma in IT (QCF)	360
600/3887/1	Pearson BTEC Level 3 90-credit Diploma in IT (QCF)	540

Leisure, sport, travel and tourism

Ref.	Qualification title	Size (GLH)
	Sport	
600/6140/6	OCR Level 3 Cambridge Technical Certificate in Sport (QCF)	180
500/6753/9	Pearson BTEC Level 3 Certificate in Sport (QCF)	180
600/6143/1	OCR Level 3 Cambridge Technical Introductory Diploma in Sport (QCF)	360
500/6751/5	Pearson BTEC Level 3 Subsidiary Diploma in Sport (QCF)	360
600/6142/X	OCR Level 3 Cambridge Technical Subsidiary Diploma in Sport (QCF)	540
600/3931/0	Pearson BTEC Level 3 90-credit Diploma in Sport (QCF)	540

Ref.	Qualification title	Size (GLH)
600/6141/8	OCR Level 3 Cambridge Technical Diploma in Sport (QCF)	720
500/6755/2	Pearson BTEC Level 3 Diploma in Sport (QCF)	720
600/6144/3	OCR Level 3 Cambridge Technical Extended Diploma in Sport (QCF)	1080
500/6764/3	Pearson BTEC Level 3 Extended Diploma in Sport (QCF)	1080
	Sport and exercise sciences	
500/6679/1	Pearson BTEC Level 3 Certificate in Sport and Exercise Sciences (QCF)	180
500/6765/5	Pearson BTEC Level 3 Subsidiary Diploma in Sport and Exercise Sciences (QCF)	360
600/3930/9	Pearson BTEC Level 3 90-credit Diploma in Sport and Exercise Sciences (QCF)	540
500/6766/7	Pearson BTEC Level 3 Diploma in Sport and Exercise Sciences (QCF)	720
500/6801/5	Pearson BTEC Level 3 Extended Diploma in Sport and Exercise Sciences (QCF)	1080
	Sports development	
600/4083/X	Pearson BTEC Level 3 Diploma in Sports Development (QCF)	300
	Sports studies	
601/3136/6	VTCT Level 3 Introductory Diploma in Sports Studies (QCF)	360
601/3137/8	VTCT Level 3 Subsidiary Diploma in Sports Studies (QCF)	540
601/3135/4	VTCT Level 3 Diploma in Sports Studies (QCF)	720
601/3138/X	VTCT Level 3 Extended Diploma in Sports Studies (QCF)	1080
Travel and tourism		
500/9787/8	Pearson BTEC Level 3 Certificate in Travel and Tourism (QCF)	180

Retail, hospitality and commercial enterprise

Ref.	Qualification title	Size (GLH)
	Hospitality and catering	
600/4386/6	WJEC Level 3 Diploma in Food Science and Nutrition (QCF)	360
601/4552/3	WJEC Level 3 Diploma in Food Science and Nutrition	360
Retail		
500/7313/8	Pearson BTEC Level 3 Diploma in Retail Knowledge (QCF)	249

Science & mathematics

Ref.	Qualification title	Size (GLH)	
	Applied science		
500/6726/6	Pearson BTEC Level 3 Certificate in Applied Science (QCF)	180	
500/6725/4	Pearson BTEC Level 3 Subsidiary Diploma in Applied Science (QCF)	360	
600/5849/3	Pearson BTEC Level 3 90-credit Diploma in Applied Science (QCF)	540	
500/6673/0	Pearson BTEC Level 3 Diploma in Applied Science (QCF)	720	
500/6720/5	Pearson BTEC Level 3 Extended Diploma in Applied Science (QCF)	1080	
	Environmental science		
601/4550/X	WJEC Level 3 Diploma in Environmental Science	360	
601/4551/1	WJEC Level 3 Extended Diploma in Environmental Science	720	
	Mathematics and statistics		
601/4546/8	WJEC Level 3 Certificate in Statistical Problem Solving Using Software	150	

Sociology and social policy

QN	Qualification title	Size (GLH)
Sociology and social policy		
600/3083/5	WJEC Level 3 Diploma in Criminology (QCF)	360

2018 PERFORMANCE TABLES

The qualifications in these tables meet the full criteria for Applied Generals

Performing arts and media

Ref.	Qualification Title	Size (GLH)	
	Art and design		
601/7228/9	Pearson BTEC Level 3 National Extended Certificate in Art and Design	360	
601/7230/7	Pearson BTEC Level 3 National Foundation Diploma in Art and Design	510	
601/7229/0	Pearson BTEC Level 3 National Extended Diploma in Art and Design	1080	
	Media and communication		
601/7258/7	OCR level 3 Cambridge Technical Certificate in Digital Media	180	
601/7259/9	OCR Level 3 Cambridge Technical Extended Certificate in Digital Media	360	
601/7467/5	Pearson BTEC Level 3 National Extended Certificate in Creative Digital Media Production	360	
601/7468/7	Pearson BTEC Level 3 National Foundation Diploma in Creative Digital Media Production	510	
601/7469/9	Pearson BTEC Level 3 National Extended Diploma in Creative Digital Media Production	1080	
	Music technology		
601/6779/8	NCFE Level 3 Applied General Certificate in Music Technology (VRQ)	360	
	Performing arts		
601/7684/2	OCR Level 3 Cambridge Technical Certificate in Performing Arts	180	
601/7231/9	Pearson BTEC Level 3 National Certificate in Performing Arts	180	
601/7685/4	OCR Level 3 Cambridge Technical Extended Certificate in Performing Arts	360	
601/7233/2	Pearson BTEC Level 3 National Extended Certificate in Performing Arts	360	
601/7235/6	Pearson BTEC Level 3 National Foundation Diploma in Performing Arts	510	
601/7232/0	Pearson BTEC Level 3 National Diploma in Performing Arts	720	
601/7234/4	Pearson BTEC Level 3 National Extended Diploma in Performing Arts	1080	

Finance and business

Ref.	Qualification Title	Size (GLH)
	Business	
601/7145/5	AQA Level 3 Certificate in Applied Business	180
601/7698/2	OCR Level 3 Cambridge Technical Certificate in Business	180
601/7155/8	Pearson BTEC Level 3 National Certificate in Business	180
601/7146/7	AQA Level 3 Extended Certificate in Applied Business	360
601/7699/4	OCR Level 3 Cambridge Technical Extended Certificate in Business	360
601/7159/5	Pearson BTEC Level 3 National Extended Certificate in Business	360
601/7161/3	Pearson BTEC Level 3 National Foundation Diploma in Business	510
601/7700/7	OCR Level 3 Cambridge Technical Foundation Diploma in Business	540
601/7701/9	OCR Level 3 Cambridge Technical Diploma in Business	720
601/7157/1	Pearson BTEC Level 3 National Diploma in Business	720
601/7160/1	Pearson BTEC Level 3 National Extended Diploma in Business	1080
	Enterprise and entrepreneurship	
601/7413/4	Pearson BTEC Level 3 National Certificate in Enterprise and Entrepreneurship	180
601/7414/6	Pearson BTEC Level 3 National Extended Certificate in Enterprise and Entrepreneurship	360
601/7528/X	Pearson BTEC Level 3 National Diploma in Enterprise and Entrepreneurship	720
	Finance	
600/8537/X	LIBFS Level 3 Certificate in Financial Studies (QCF)	180
601/6040/8	CISI Level 3 Diploma in Finance, Risk & Investment (QCF)	360
600/8551/4	LIBF Level 3 Diploma in Financial Studies (QCF)	360

Health and social care

Ref.	Qualification Title	Size (GLH)	
	Child development and wellbeing		
601/7569/2	Pearson BTEC Level 3 National Extended Certificate in Children's Play, Learning and Development	360	
	Health and social care		
601/7059/1	OCR Level 3 Cambridge Technical Certificate in Health and Social Care	180	
601/7193/5	Pearson BTEC Level 3 National Certificate in Health and Social Care	180	
601/7060/8	OCR Level 3 Cambridge Technical Extended Certificate in Health and Social Care	360	
601/7197/2	Pearson BTEC Level 3 National Extended Certificate in Health and Social Care	360	
601/7199/6	Pearson BTEC Level 3 National Foundation Diploma in Health and Social Care	510	
601/7061/X	OCR Level 3 Cambridge Technical Foundation Diploma in Health and Social Care	540	

601/7062/1	OCR Level 3 Cambridge Technical Diploma in Health and Social Care	720
601/7194/7	Pearson BTEC Level 3 National Diploma in Health and Social Care	720
601/7198/4	Pearson BTEC Level 3 National Extended Diploma in Health and Social Care	1080

Construction, planning and the built environment

Ref.	Qualification Title	Size (GLH)
Building and construction		
601/1563/4	TLM Level 3 Certificate for Designing, Engineering and Constructing a Sustainable Built Environment (QCF)	180
601/1562/2	TLM Level 3 Diploma for Designing, Engineering and Constructing a Sustainable Built Environment (QCF)	300

Engineering

Ref.	Qualification Title	Size (GLH)
	Engineering	
601/4593/6	OCR Level 3 Cambridge Technical Certificate in Engineering Principles	180
601/4594/8	OCR Level 3 Cambridge Technical Extended Certificate in Engineering	360
601/7584/9	Pearson BTEC Level 3 National Extended Certificate in Engineering	360
601/7591/6	Pearson BTEC Level 3 National Foundation Diploma in Engineering	540

Information and communication technology

Ref.	Qualification Title	Size (GLH)	
	IT and computing		
601/7097/9	OCR Level 3 Cambridge Technical Certificate in IT	180	
601/7574/6	Pearson BTEC Level 3 National Certificate in Information Technology	180	
601/7098/0	OCR Level 3 Cambridge Technical Extended Certificate in IT	360	
601/7341/5	Pearson BTEC Level 3 National Extended Certificate in Computing	360	
601/7575/8	Pearson BTEC Level 3 National Extended Certificate in Information Technology	360	
601/7343/9	Pearson BTEC Level 3 National Foundation Diploma in Computing	510	
601/7576/X	Pearson BTEC Level 3 National Foundation Diploma in Information Technology	510	
601/7342/7	Pearson BTEC Level 3 National Extended Diploma in Computing	1080	

Sport

Ref.	Qualification Title	Size (GLH)
	Sport	
601/7093/1	OCR Level 3 Cambridge Technical Certificate in Sport and Physical Activity	180
601/7094/3	OCR Level 3 Cambridge Technical Extended Certificate in Sport and Physical Activity	360
601/7218/6	Pearson BTEC Level 3 National Extended Certificate in Sport	360
601/6763/4	VTCT Level 3 Introductory Diploma in Sports Studies	360
601/7220/4	Pearson BTEC Level 3 National Foundation Diploma in Sport	540
601/6764/6	VTCT Level 3 Subsidiary Diploma in Sports Studies	540
601/7690/8	1st4sport Level 3 Diploma in Sports Performance and Excellence	720
601/7421/3	Pearson BTEC Level 3 National Diploma in Sport and Exercise Science	720
601/6787/7	VTCT Level 3 Diploma in Sports Studies	720
601/7671/4	1st4sport Level 3 Diploma in Sport and Physical Activities	750
601/7422/5	Pearson BTEC Level 3 National Extended Diploma in Sport and Exercise Science	1080
601/6788/9	VTCT Level 3 Extended Diploma in Sports Studies	1080

Hospitality

Ref.	Qualification Title	Size (GLH)
Hospitality and catering		
601/4552/3	WJEC Level 3 Diploma in Food Science and Nutrition	360

Science and mathematics

Ref.	Qualification Title	Size (GLH)	
	Environmental science		
601/4550/X	WJEC Level 3 Diploma in Environmental Science	360	
601/4551/1	WJEC Level 3 Extended Diploma in Environmental Science	720	
	Laboratory skills		
601/7458/4	OCR Level 3 Cambridge Technical Introductory Diploma in Laboratory Skills	360	
601/7461/4	OCR Level 3 Cambridge Technical Diploma in Laboratory Skills	720	
	Mathematics and statistics		
601/4546/8	WJEC Level 3 Certificate in Statistical Problem Solving Using Software	150	
	Medical science		
601/7651/9	WJEC Level 3 Certificate in Medical Science	180	
601/7644/1	WJEC Level 3 Diploma in Medical Science	360	
	Science		
601/7104/2	AQA Level 3 Certificate in Applied Science	180	

Ref.	Qualification Title	Size (GLH)
601/7434/1	Pearson BTEC Level 3 National Certificate in Applied Science	180
601/7105/4	AQA Level 3 Extended Certificate in Applied Science	360
601/7436/5	Pearson BTEC Level 3 National Extended Certificate in Applied Science	360
601/7438/9	Pearson BTEC Level 3 National Foundation Diploma in Applied Science	510
601/7435/3	Pearson BTEC Level 3 National Diploma in Applied Science	720
601/7437/7	Pearson BTEC Level 3 National Extended Diploma in Applied Science	1080

Applied general qualifications in sociology and social policy

Ref.	tef. Qualification Title	
	Sociology and social policy	
601/6249/1	WJEC Level 3 Certificate in Criminology	180
601/6248/X	WJEC Level 3 Diploma in Criminology	360

APPENDIX 2: SAMPLE DETAILS

Higher Education Institutions

Forty HEIs took part in the research. Selected characteristics of those HEIs are provided in Table A2.1 (a summary by region is provided in Table A2.2). Across the sample, 19.1% of acceptances in 2016 had undertaken at least BTEC at Level 3. This compares with a national average in 2016 of 18.9%.

Thirty one HEIs declined the invitation to take part in the research (Table A2.3). Notable differences between those institutions and the 40 that took part include:

- On average, the organisations that declined had fewer acceptances in 2016 (3,775 per institution) than those that took part (4,432 per institution). Note that this refers to total acceptances and not just to students with one or more Applied General.
- Those that declined had a lower average proportion of acceptances with one or more BTECs (17.1% across the 31 institutions combined) than those that took part (19.1% across the 40 institutions).
- Three low-tier institutions declined the invitation to take part and one accepted. In addition, two other low-tier institutions were invited to take part in the research and whilst neither formally declined, nor did they accept.

Table	A2.1: Profile of HEIs in t	he research	ı sample			
Ref.	Region	Tier	UCAS average score (2016)	No. acceptances (2016)	No. acceptances with at least one BTEC (2016)	% acceptances with at least one BTEC
1.	South West	Middle	288	745	335	45.0%
2.	West Midlands	Middle	274	3,220	1,230	38.2%
3.	North West	Middle	327	3,985	1,440	36.1%
4.	London	Middle	291	1,430	505	35.3%
5.	South West	Middle	321	4,910	1,660	33.8%
6.	Yorkshire and Humber	Middle	331	3,980	1,345	33.8%
7.	North West	Middle	342	6,265	2,120	33.8%
8.	West Midlands	Middle	316	6,335	2,125	33.5%
9.	North East	Middle	305	3,990	1,320	33.1%
10.	Yorkshire and Humber	Middle	304	8,065	2,385	29.6%
11.	East Midlands	Middle	280	3,415	980	28.7%
12.	West Midlands	Middle	298	815	230	28.2%
13.	East	Middle	302	5,570	1,535	27.6%
14.	East Midlands	Middle	305	7,620	2,095	27.5%
15.	North West	Middle	303	3,770	1,010	26.8%
16.	South East	Middle	321	6,115	1,580	25.8%
17.	Yorkshire and Humber	Middle	300	2,010	495	24.6%
18.	South West	Middle	314	5,200	1,070	20.6%
19.	London	Middle	301	2,790	570	20.4%
20.	London	Middle	349	3,115	630	20.2%
21.	South East	Middle	301	5,440	1,050	19.3%
22.	South East	Middle	293	2,380	455	19.1%
23.	London	Low	254	3,710	660	17.8%
24.	South East	High	431	4,055	700	17.3%

Table A2.1: Profile of HEIs in the research sample % **UCAS** No. No. acceptances acceptances Ref. Tier acceptances with at least one Region average with at least score (2016) (2016)BTEC (2016) one BTEC 25. South East Middle 660 13.7% 335 4,805 26. London Middle 314 4,125 530 12.8% Middle 27. London 353 2,660 330 12.4% 28. North West High 423 3,230 385 11.9% 29. 410 470 **East Midlands** High 3,945 11.9% 30. North West High 383 5,955 580 9.7% 31. South East Middle 311 165 15 9.1% 32. South East High 417 5,360 465 8.7% 33. South East High 375 4,650 380 8.2% 34. Yorkshire and Humber 550 7.4% High 430 7,390 35. **East Midlands** High 390 310 7.4% 4,180 36. East Midlands 424 430 High 7,540 5.7% 37. South West High 466 5,960 335 5.6% 38. South West 478 190 5.1% High 3,710 39. Yorkshire and Humber High 415 5,985 300 5.0% 433 350 4.0% 40. North West High 8,705 **Totals** 177,295 33,805

Source: UCAS

Average

845

19.1%

4,432

Table A2.2: Regional summary of HEIs in the research sample					
Region	No. institutions in the sample	UCAS average score (2016)	Average no. acceptances (2016)	Average no. acceptances with at least one BTEC (2016)	Average % acceptances with at least one BTEC
West Midlands	3	296	3,457	1,195	34.57%
North East	1	305	3,990	1,320	33.10%
East of England	1	302	5,570	1,535	27.60%
Yorkshire and Humber	5	356	5,486	1,015	18.50%
North West	6	369	5,318	981	18.45%
London	6	310	2,972	538	18.09%
South West	5	373	4,105	718	17.49%
South East	8	348	4,121	663	16.09%
East Midlands	5	362	5,340	857	16.05%

Source: UCAS

Table	Table A2.3: Profile of HEIs that declined the invitation to take part in the research					
Ref.	Region	Tier	UCAS average score (2016)	No. acceptances (2016)	No. acceptances with at least one BTEC (2016)	% acceptances with at least one BTEC
1.	South East	Middle	298	1,625	655	40.3%
2.	South East	Middle	275	2,810	1,020	36.3%
3.	South West	Middle	319	2,740	950	34.7%
4.	South East	Low	256	2,820	975	34.6%
5.	East	Middle	297	310	105	33.9%
6.	North West	Middle	286	1,625	515	31.7%
7.	North West	Middle	349	8,780	2,595	29.6%
8.	East	Middle	343	800	235	29.4%
9.	Yorkshire and Humber	Middle	284	1,105	315	28.5%
10.	East Midlands	Middle	302	4,070	1,140	28.0%
11.	South East	Low	270	3,625	985	27.2%
12.	North West	Middle	307	1,485	390	26.3%
13.	London	Middle	337	4,640	1,155	24.9%
14.	South West	Middle	310	2,150	525	24.4%
15.	South East	Middle	316	1,875	425	22.7%
16.	South West	Middle	323	6,325	1,300	20.6%
17.	Yorkshire and Humber	Middle	335	4,380	900	20.5%
18.	West Midlands	Middle	316	8,130	1,660	20.4%
19.	East	Low	234	3,440	700	20.3%
20.	East	High	423	4,390	540	12.3%
21.	West Midlands	Middle	350	2,740	335	12.2%
22.	London	High	371	3,550	415	11.7%
23.	East	Middle	297	4,240	450	10.6%

Table A2.3: Profile of HEIs that declined the invitation to take part in the research No. **UCAS** No. acceptances % acceptances average Ref. Region Tier acceptances with at least with at least score (2016)one BTEC one BTEC (2016)(2016)24. South East High 371 4,050 310 7.7% 25. London 404 4,965 335 6.7% High 26. North East High 430 6,175 385 6.2% West Midlands 27. High 423 6,400 325 5.1% 28. London High 397 1,170 50 4.3% 195 29. London High 462 6,010 3.2% 30. South West 476 5,530 85 1.5% High 31. West Midlands 485 5,070 55 1.1% High **Total** 117,025 20,025

Source: UCAS

Average

FE Colleges

Fifteen FE colleges took part in the research (Table A2.4). A combined total of 15,269 starts on Applied Generals were recorded by these colleges in 2015/16. This equates to 8% of all Applied General starts in FE colleges nationally in that year.

3,775

646

17.1%

Thirteen FE colleges declined the invitation to take part (Table A2.5). These colleges had, on average, fewer starts on Applied Generals in 2015/16 (745 per institution compared with 1,018 per institution across the participating sample).

Table	Table A2.4: Profile of FE colleges that took part in the research			
Ref.	Region	No. starts on Applied Generals in 2015/16		
1.	North West	5,459		
2.	South West	1,243		
3.	North East	1,217		
4.	North East	1,189		
5.	Yorkshire and Humber	1,072		
6.	East Midlands	922		
7.	East Midlands	751		
8.	London	645		
9.	Yorkshire and Humber	622		
10.	West Midlands	608		
11.	West Midlands	480		
12.	East of England	392		
13.	North West	308		
14.	East Midlands	190		
15.	London	171		
	Total	15,269		
	Average	1,018		

Source: Skills Funding Agency

Table A2.5: Profile of FE colleges that declined the invitation to take part in the research

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Ref.	Region	No. starts on Applied Generals in 2015/16
1.	South West	1,992
2.	North West	1,292
3.	East of England	1,164
4.	South East	844
5.	South West	735
6.	West Midlands	665
7.	North West	548
8.	East of England	536
9.	North West	516
10.	South West	485
11.	North West	387
12.	East Midlands	294
13.	East Midlands	225
	Total	9,683
	Average	745

Source: Skills Funding Agency

Schools

Fifteen schools took part in the research (Table A2.6). In terms of the key characteristics of the schools, there was considerable variation across the sample. For example:

- The number of 16 to 18 year-old students in 2015/16 ranged from 177 to 1,798.
- The number of students achieving at least one Applied General qualification in 2015/16 ranged from 58 to 274 (as a proportion of the 16-18 cohort this ranged from 6.9% to 39.3%).
- The average point score per A-level entry in 2015/16 ranged from 20.3 to 33.0.

Across the sample as a whole, 20.8% of 16 to 18 year-old students in 2015/16 were entered for at least one Applied General qualification. This compares with an equivalent figure nationally (for state schools) of 12%.

Eighteen schools declined the invitation to take part in the research (Table A2.7). In terms of how the key characteristics of those schools compare with those that took part:

- Those that took part had, on average, larger 16 to 18 year-old cohorts (462 students) than those that declined (384 students).
- However, amongst those that took part, a smaller proportion of 16 to 18 year-olds had been entered for one or more Applied General (an average of 20.9% compared with an average of 29.9% amongst those that declined).
- Those that took part had a higher average point score per A-level entry (28.5) than those that declined (26.4).

Table A2.6: Profile of schools in the research sample (all data from 2015/16) No. 16 to 18 year-% 16 to 18 year-old No. 16 to 18 Average point olds entered for one students entered Ref. Region year-old score per Aor more Applied for one more students level entry General **Applied General** 186 73 33.0 1. East 39.3% 2. West Midlands 740 274 37.0% 20.3 3. North East 177 64 36.2% 27.0 29.8 4. Yorkshire and Humber 338 110 32.5% 5. North East 231 74 32.0% 28.3 6. North East 220 60 27.3% 23.7 7. Yorkshire and Humber 312 79 25.3% 27.6 8. South West 409 91 22.3% 27.0 9. South West 343 76 22.2% 30.3 10. South East 365 65 17.8% 32.6 11. Yorkshire and Humber 477 72 15.1% 27.3 12. South West 556 78 14.0% 29.8 13. East 1,798 247 13.7% 31.1 14. Yorkshire and Humber 443 58 13.1% 28.9 15. West Midlands 329 23 6.9% 27.7 6,924 **Total** 1,444

462

96

20.9%

28.5

Source: Department for Education

Average

Table A2.7: Profile of schools that declined to take part in the research (all data from 2015/16) No. 16 to 18 year-% 16 to 18 year-old No. 16 to 18 **Average point** olds entered for one students entered Ref. Region year-old score per Afor one more or more Applied students level entry General **Applied General** 1. 586 361 15.9 South East 61.6 2. North East 206 103 50.0 21.6 3. West Midlands 333 153 46.0 33.2 4. South West 309 131 42.4 29.7 5. 308 37.3 North East 115 28.6 6. **East Midlands** 224 82 36.6 20.8 7. North East 251 91 36.3 16.8 8. London 247 80 32.4 24.5 9. West Midlands 308 99 32.1 28.5 10. South East 177 56 31.6 31.8 11. Liverpool 385 107 27.8 23.2 12. 577 London 136 23.6 30.3 13. South East 504 110 21.8 30.5 14. South East 214 45 21.0 24.8 506 15. South West 104 20.1 25.1 16. **East Midlands** 426 77 18.1 26.7 17. West Midlands 551 98 17.8 34.1 18. London 798 116 14.5 25.5 Total 6,910 2,064 384 **Average** 115 29.9% 26.4

Source: Department for Education

Qualifications covered by the research

The 57 Applied General qualifications listed in Table A2.8 are those that:

- Were being studied, or had been studied, by the students that contributed to the research.
- Were being delivered by the teaching staff that contributed to the research.

As a consequence of the above, Table A2.8 includes some qualifications that meet the interim criteria for Applied Generals and others that meet the full criteria. The list does not include other Applied Generals that are delivered at the participating schools and colleges but which were not taught/studied by the individuals that contributed to the research. The same is true of other Applied Generals held by students at the participating HEIs but whom themselves did not take part in a consultation session.

Table A2.8: Applied General qualifications represented in the staff and student consultations
AQA Level 3 Extended Certificate in Applied Business
OCR Level 3 Cambridge Technical Extended Certificate in Business
OCR Level 3 Cambridge Technical Extended Certificate in IT
OCR Level 3 Cambridge Technical Extended Diploma in Business (QCF)
Pearson BTEC Level 3 90-credit Diploma in Applied Science (QCF)
Pearson BTEC Level 3 90-credit Diploma in Business (QCF)
Pearson BTEC Level 3 90-credit Diploma in Health and Social Care (QCF)
Pearson BTEC Level 3 90-credit Diploma in IT (QCF)
Pearson BTEC Level 3 90-credit Diploma in Music (QCF)
Pearson BTEC Level 3 90-credit Diploma in Sport (QCF)
Pearson BTEC Level 3 90-credit Diploma in Sport and Exercise Sciences (QCF)
Pearson BTEC Level 3 Certificate in Applied Law (QCF)
Pearson BTEC Level 3 Certificate in Business (QCF)
Pearson BTEC Level 3 Certificate in Construction and the Built Environment (QCF)
Pearson BTEC Level 3 Certificate in Engineering (QCF)
Pearson BTEC Level 3 Certificate in IT (QCF)
Pearson BTEC Level 3 Certificate in Music (QCF)
Pearson BTEC Level 3 Certificate in Travel and Tourism (QCF)
Pearson BTEC Level 3 Diploma in Applied Science (QCF)
Pearson BTEC Level 3 Diploma in Business (QCF)
Pearson BTEC Level 3 Diploma in Health and Social Care (QCF)
Pearson BTEC Level 3 Diploma in Music (QCF)
Pearson BTEC Level 3 Diploma in Performing Arts (QCF)
Pearson BTEC Level 3 Diploma in Sport (QCF)
Pearson BTEC Level 3 Diploma in Sport and Exercise Sciences (QCF)
Pearson BTEC Level 3 Extended Diploma in Applied Science (QCF)

Table A2.8: Applied General qualifications represented in the staff and student consultations

Pearson BTEC Level 3 Extended Diploma in Business (QCF)

Pearson BTEC Level 3 Extended Diploma in Health and Social Care (QCF)

Pearson BTEC Level 3 Extended Diploma in Music (QCF)

Pearson BTEC Level 3 Extended Diploma in Performing Arts (QCF)

Pearson BTEC Level 3 Extended Diploma in Sport (QCF)

Pearson BTEC Level 3 Extended Diploma in Sport and Exercise Sciences (QCF)

Pearson BTEC Level 3 Foundation Diploma in Art and Design (QCF)

Pearson BTEC Level 3 National Diploma in Applied Science

Pearson BTEC Level 3 National Diploma in Business

Pearson BTEC Level 3 National Diploma in Performing Arts

Pearson BTEC Level 3 National Diploma in Sport and Exercise Science

Pearson BTEC Level 3 National Extended Certificate in Health and Social Care

Pearson BTEC Level 3 National Extended Certificate in Information Technology

Pearson BTEC Level 3 National Extended Certificate in Performing Arts

Pearson BTEC Level 3 National Extended Certificate in Sport

Pearson BTEC Level 3 National Extended Diploma in Applied Science

Pearson BTEC Level 3 National Extended Diploma in Art and Design

Pearson BTEC Level 3 National Extended Diploma in Business

Pearson BTEC Level 3 National Extended Diploma in Creative Digital Media Production

Pearson BTEC Level 3 National Extended Diploma in Health and Social Care

Pearson BTEC Level 3 National Extended Diploma in Performing Arts

Pearson BTEC Level 3 National Extended Diploma in Sport and Exercise Science

Pearson BTEC Level 3 National Foundation Diploma in Engineering

Pearson BTEC Level 3 National Foundation Diploma in Information Technology

Pearson BTEC Level 3 National Subsidiary Award in Children's Play, Learning and Development (VRQ)

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