



Department
for Education

**16 to 19 study
programmes: revised
English and maths
condition of funding
Equality analysis**

June 2014

Contents

1. Introduction	3
2. Engagement and involvement	4
3. Description of the policy	5
4. Evidence base	7
5. Analysis	8
6. Challenges and opportunities	22
7. Conclusions	27
8. Next Steps	29
Annex A: Ethnicity data	30
Annex B: DfE programmes to support effective teaching for pupils with SEN in schools and FE	33
Annex C: FE Workforce strategy	35

1. Introduction

This document assesses the impact of changing the 16-19 funding condition for students without a good pass in English and/or maths at academic age 15 by reference to the protected characteristics of pupils or students. The changes would mean that from August 2015 full-time students with prior attainment of grade D in English and/or maths GCSE/iGCSE would be required to study GCSE in these subjects in 16-19 study programmes and not alternative 'stepping stone qualifications'¹. The requirement is likely to be extended from August 2017 and for the purposes of this analysis, we have covered students with prior attainment of grades D and E. In 2017 there will be a new grading system for reformed GCSEs and the exact grades that will apply to the condition of funding are yet to be determined.

The Public Sector Equality Duty requires the Secretary of State, when exercising functions, to have due regard to the need:

- to eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Equality Act 2010;
- to advance equality of opportunity between people who share a protected characteristic and those who do not; and
- to foster good relations between people who share a protected characteristic and those who do not.

The relevant protected characteristics are disability, gender, pregnancy and maternity, race, religion or belief, gender reassignment, and sexual orientation. Age is also a relevant protected characteristic, but does not apply in relation to schools. Pupils with Special Educational Needs (SEN), pupils eligible for Free School Meals (FSM), and pupils with English as an Additional Language (EAL), are not groups covered specifically by the Equality Act 2010 (although pupils within those groups may otherwise share a protected characteristic), but have been included in this analysis wherever possible.

We have not identified any potential for a negative impact on students because of their age (to the limited extent it is applicable), religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment.

We have identified a minor impact on males and some impact for those with disabilities and in certain ethnic groups. Disadvantaged students are also more likely to be low attainers and so over-represented in the group affected by this policy. We are confident that the benefits of studying for rigorous, respected qualifications in English and maths, which help young people progress to further study, training or employment, outweigh any negative impact. We will, however, continue to assess and monitor the impact on equalities of the policy as new data becomes available.

¹ 'Stepping stone' qualifications are approved qualifications that support student on the journey to GCSE, such as Functional Skills and Free Standing Maths.

2. Engagement and involvement

A formal consultation on the introduction of 16-19 study programmes was completed in 2012 and responses to that consultation have informed this analysis. Both DfE and Ofqual consulted on the content for reformed GCSEs in English and maths and published equality impact assessments. We also considered responses to the consultation on the reformed 16-19 accountability system, including a measure for attainment in GCSE English and maths for students without a good pass at age 15.

We spoke with representatives of national groups, including the Association of Colleges, the Association of School and College Leaders, 157 Group, the National Institute of Adult and Continuing Education, the Association of National Specialist Colleges, and Disability Rights UK to discuss the policy and help inform our assessment of equality impact.

3. Description of the policy

Background

Following Professor Alison Wolf's review of vocational education (March 2011), 16-19 study programmes were introduced by the government in September 2013 to give all 16- to 19-year-olds the opportunity to undertake education programmes that offer breadth, depth and progression onto higher education, further study or skilled employment without unduly limiting their options. Study programmes are expected to follow a number of design principles including: at least one qualification of substantial size and challenge; non-qualifications activity such as tutorial time; work experience where appropriate; and English and maths for those who do not have a GCSE at grade C or above. At the same time to give education providers the flexibility to introduce these new requirements a new 16-19 funding formula replaced funding on a 'per qualification' basis with funding based on a 'per student' rate.

All young people are entitled to leave education with qualifications in English and maths that open opportunities and provide them with a solid foundation for the future. GCSEs are the qualifications most recognized by employers, educators and the public. Ensuring young people achieve respected qualifications in English and maths is fundamental to the economic prospects of individuals and the country in an increasingly competitive world.

Students who do not already have a good pass in English and/or maths at age 15 should always be given the opportunity to work towards the achievement of GCSE A*-C. Since September 2013 this has become an expected part of a 16-19 study programme for any student that does not already hold these qualifications. This can include the study of approved 'stepping stone' qualifications, such as Functional Skills, on the journey towards GCSE. The requirement for students without a GCSE A*-C pass to study English and maths will become a 16-19 condition of that student being funded for students enrolling from August 2014.

The Department, through the guidance provided to education providers by the Education Funding Agency (EFA) have also suggested that students are expected to study English and maths at a higher level than their prior attainment. This means that students who achieve a grade D by the age of 16 should study a GCSE rather than a 'stepping stone qualification' although this is not currently required by the existing funding condition.

Revisions to the 16-19 condition of funding

To support the expectation that full-time students with a grade D in English and maths should study GCSEs in 16-19 education, this will become a condition of funding for full-time 16-19 students (other than Apprentices and Trainees) enrolling from August 2015.

The Government is also reforming English and maths GCSEs to both make them more stretching and relevant, so that they do more to assess skills such as problem solving in maths and spelling and grammar in English. This is intended to give employers greater confidence that the new GCSEs will enable students to develop more rigorous numeracy and literacy skills. The new GCSEs will be available for first teaching in 2015 with the first examinations to be sat in summer 2017.

The reformed GCSEs will become the benchmark level 2 qualifications in English and maths in 16-19 education. To support this we will further strengthen the 16-19 condition of funding by extending the requirement to study GCSE English and maths to more full-time students enrolling from August 2017. This will be the first year that students enrolled on the new-GCSE will pass from pre to post-16 education.

Ofqual is currently consulting on grade standards for reformed GCSEs, which will be first awarded in 2017. For the purposes of this analysis we have looked at the impact on students with prior attainment of grades D and E. The exact grades to which the policy will apply cannot yet be determined because the existing GCSE A*-F, U grading system will be replaced with one based on grades of 9-1,U. Details of the grades at which the condition will apply, and further analysis on the students affected will, therefore, be produced, nearer the time.

We are separately considering the best approach to the new GCSEs in English and maths for Trainees, Apprentices and part-time students and the impact on these groups has not been considered in this analysis.

4. Evidence base

Our analysis of the potential impact of the proposals is based on:

- i. Department for Education matched administrative data for the cohort who took their GCSEs in 2009/10 and were academic age 18 in 2012/13 has been used to analyse highest attainment and progression aged 16-18 by prior English and maths attainment and characteristics. The data relates to learners in state-funded schools at academic age 15 (Year11), with their characteristics (FSM, SEN, gender, ethnicity) as recorded in the Pupil Level Census at academic age 15 in order to identify those groups who are over/under-represented in the types of study most likely to be impacted by the reforms.

No data are available for religion or belief, Lesbian Gay and Bisexual (LGB) and transgender groups. Characteristics by age have not been explored; the proposals only apply to 16- to 19-year-olds in education, which can be treated as one age group.

- ii. Department for Education administrative data for those academic age 16 (Year 12) in 2012/13 has been used to analyse the latest data on English and maths qualifications studied post-16 by prior attainment and characteristics.
- iii. The Wolf Review of Vocational Education has been used to provide evidence of the benefits of good attainment in English and maths along with other research on the importance of these subjects.
- iv. Responses to the consultations on 16-19 study programmes, reformed GCSEs, and 16-19 Accountability System, including from organisations representing the interests of groups with a protected characteristics, have been used.

5. Analysis

Context

English GCSE

In 2012/13 68% achieved a grade A*-C at academic age 15

Of those academic age 16 in 2012/13 without A*-C English GCSE (188, 433):

- 51% (96,275) achieved a grade D and 24% (44,289) achieved a grade E
- Of those with prior attainment of Grade D, 38% studied GCSE (37,030 out of 96,275)
- Of those with prior attainment of Grade E, 12% studied GCSE at 16 in 2012/13 (5,499 out of 44,289)
- 15,575 were not recorded with a 16-19 provider

Of the 18 in 2013 cohort without a grade A*-C at 15:

- 9% achieved a grade A*-C GCSE
- 16% with a grade D at 15 achieved a grade A*-C GCSE
- 2% with a grade E at 15 achieved a grade A*-C GCSE
- 49% of young people who achieved a D grade in GCSE English at 15 and who had a GCSE as highest study aim achieved a Level 2 GCSE by age 19.
- 17% of young people who achieved an E grade in GCSE English at 15 and who had a GCSE as highest study aim achieved a Level 2 GCSE by age 19.
- 46% of young people who achieved a D grade in GCSE English at 15 and who had a level 2 Functional Skills as their highest study aim achieved a Level 2 Functional skills by age 19.
- 33% of young people who achieved an E grade in GCSE English at 15 and who had a level 2 Functional Skills as their highest study aim achieved a Level 2 Functional Skills by age 19.

Maths GCSE

In 2012/13 71% achieved a grade A*-C at academic age 15.

Of those academic age 16 in 2012/13 without A*-C Maths GCSE (174, 950):

- 34% (60,160) achieved a grade D and 23% (40,867) achieved a grade E

- Of those with prior attainment of Grade D, 35% studied GCSE at 16 in 2012/13 (21,210 out of 60,160)
- Of those with prior attainment of Grade E, 13% studied GCSE at 16 in 2012/13 (5,509 out of 40,867)
- 14,944 were not recorded with a 16-19 provider

Of the 18 in 2013 cohort without a grade A*-C at 15:

- 8% achieved a grade A*-C GCSE
- 19% with a grade D at 15 achieved a grade A*-C GCSE
- 2% with a grade E at 15 achieved a grade A*-C GCSE
- 47% of young people who achieved a D grade in GCSE maths at 15 and who had a GCSE as highest study aim achieved a Level 2 GCSE by age 19.
- 12% of young people who achieved a E grade in GCSE maths at 15 and who had a GCSE as highest study aim achieved a Level 2 GCSE by age 19.
- 54% of young people who achieved a D grade in GCSE maths at 15 and who had level 2 Functional Skills as their highest study aim achieved a Level 2 Functional skills by age 19.
- 36% of young people who achieved an E grade in GCSE maths at 15 and who had level 2 Functional Skills as their highest study aim achieved a Level 2 Functional Skills by age 19.

Gender

Context

English

For the academic age 18 in 2013 cohort:

- 73% of females achieved A*-C at 15, 14% achieved a grade D and 6% a grade E.
- 59% of males achieved A*-C at 15, 19% achieved a grade D and 10% a grade E.
- By academic age 18, 76% of females achieved A*-C overall. Of those with a grade D at 15, 15% achieved A*-C GCSE and of those with a grade E 2%.
- By academic age 18, 62% of males achieved A*-C overall. Of those with a grade D at 15, 17% achieved A*-C GCSE and of those with a grade E 2%.
- The overall progression rate, those achieving A*-C GCSE between 15 and 18, was 10% for females and 9% for males.

For the academic age 16 in 2012/13 cohort without A*-C GCSE English at 15:

- Overall, 26% of females and 24% of males studied GCSE English.
- For those with a grade D: 38% of females and 39% of males studied GCSE; 8% of females and 9% of males studied level 2 Functional Skills; 20% of females and 16% of males studied level 1 Functional Skills; and 7% of females and 6% of males studied entry level Functional Skills.
- For those with a grade E: 12% of females and 13% of males studied GCSE; 6% of females and 6% of males studied level 2 Functional Skills; 29% of females and 26% of males studied level 1 Functional Skills; and 23% of females and 20% of males studied entry level Functional Skills.

Maths

For the academic age 18 in 2013 cohort:

- 62% of females achieved A*-C at 15, 14% achieved a grade D and 9% a grade E.
- 62% of males achieved A*-C at 15, 13% achieved a grade D and 9% a grade E.
- By academic age 18, 66% of females achieved A*-C overall. Of those with a grade D at 15, 21% achieved A*-C GCSE and of those with a grade E 3%.
- By academic age 18, 65% of males achieved A*-C overall. Of those with a grade D at 15, 17% achieved A*-C GCSE and of those with a grade E 2%.
- The overall progression rate, those achieving A*-C GCSE between 15 and 18 was 9% for females and 8% for males.

For the academic age 16 in 2012/13 cohort without A*-C GCSE maths at 15:

- Overall, 22% of females and 16% of males studied GCSE maths
- For those with a grade D: 40% of females and 30% of males studied GCSE; 5% of females and 9% of males studied level 2 Functional Skills; 14% of females and 19% of males studied level 1 Functional Skills; and 4% of females and 6% of males studied entry level Functional Skills.
- For those with a grade E: 16% of females and 11% of males studied GCSE; 5% of females and 5% of males studied Level 2 Functional Skills; 22% of females and 26% of males studied Level 1 Functional Skills; and 12% of females and 17% of males studied Entry Level Functional Skills.

Impact

By increasing the numbers of males and females studying GCSE we expect to increase opportunities for both groups to achieve respected qualifications that will improve their chance of progressing to further study, training or employment.

In English GCSE, the data shows males have lower achievement than females at age 15, so are over-represented in the cohort that is being required to study English in 16-19 education. While the attainment gap continues through to age 18 at the end of key stage 5, the progression rate for males and females in 16-19 education is similar. The qualifications studied in 16-19 education are also similar for males and females.

The requirement for students with prior attainment of grade D to study GCSE English has a slightly greater impact on males because they are over-represented in this group, and this is also true if this is extended to grade E. Of those with a grade D just under 40% of males and females went on to study for GCSE in 2012/13 and around 12% of those with a grade E.

Overall attainment at age 15 and age 18 in maths is similar for males and females. More females with grade D studied GCSE maths than males and they achieve slightly better than males with the same prior attainment. For those with a grade E at 15, attainment is similar for males and females in 16-19 education.

The requirement for students with prior attainment of grade D to study GCSE maths has a similar impact on males and females, and this remains true if it is extended to grade E. Of those with a grade D, 40% of females and 30% of males went on to study for GCSE in 2012/13 and 16% of females and 11% of males with a grade E.

We have not identified any significant negative impact on gender equality from the reforms to conditions of funding, although males are over-represented in the group required to study English GCSE. The move to linear assessment and the potential impact on females, who some consider perform better under modular assessments, has been covered in the equality impact assessment for the new GCSEs.

The reformed GCSEs in English and maths are designed to be accessible to the same proportion of students as the current GCSE.

The funding condition would not apply to students with the lowest grades, as these students are more likely to benefit from alternative courses. While this may reduce opportunities for some of these students to study GCSE, providers are free to offer GCSE to students with lower prior attainment where appropriate.

Progression for students with prior attainment of grade E is currently low for both males and females and many currently study 'stepping stone' qualifications. Effective teaching that motivates and engages low attainers will be important to raising standards in English and maths GCSEs in 16-19 education and should help close the overall attainment gap between males and females.

Disability

Context

There are different types of special education needs (SEN) and disability, any of which can affect a student's learning. Some young people will have a sensory and/or physical

need such as a profound hearing impairment. Others will have communication and interaction difficulties including those with an Autism Spectrum Disorder. Other young people may have social, emotional or mental health difficulties which may also affect their learning, such as attention deficit hyperactive disorder, and others will have a difficulty with cognition and learning. This can include dyslexia, dyscalculia and dyspraxia. All providers have a duty under the Equality Act 2010 to make reasonable adjustments for students with a disability.

There are currently three intervention levels for students with Special Educational Needs in English schools: School Action, School Action Plus and Statement of SEN. Learning Difficulty Assessments (LDA) are used in FE. Education Health and Care (EHC) Plans will replace both statements and LDAs as part of SEN reforms.

The analysis is based on students who had special educational needs (SEN), including disabilities, at age 15. It compares those with any SEN and those with a statement of SEN against those without SEN.

Overall, 4% of students aged 18 in 2012/13 had a statement of SEN at age 15, and 24% had any SEN.

English

For the academic age 18 in 2013 cohort:

- For students with no SEN, 78% achieved A*-C at 15, 14% achieved a grade D and 5% a grade E.
- For students with any SEN, 30% achieved A*-C at 15, 23% achieved a grade D and 18% a grade E.
- For students with a statement of SEN, 11% achieved A*-C at 15, 10% achieved a grade D and 13% a grade E.
- 79% of students with a statement of SEN achieved a grade E or below and 66% achieved grade F or below.
- Only 2% of students with a grade D had a statement of SEN and 6% of those achieving a grade E.
- 34% of students with a grade D at age 15 had any SEN and 56% of those achieving a grade E.
- By academic age 18, 81% of students with no SEN, 34% of students with SEN and 13% of students with a statement of SEN had achieved A*-C GCSE.
- Of those with a grade D at 15, 18% of students with no SEN, 13% of students with SEN and 15% of students with a statement of SEN achieved A*-C GCSE by academic age 18.

- Of those with a grade E at 15, 3% of students with no SEN, 2% of students with SEN and 1% of students with a statement of SEN achieved A*-C GCSE by academic age 18.
- The overall progression rate (those achieving A*-C GCSE between 15 and 18), was 13% for students with no SEN, 5% for students with SEN and 3% for students with a statement of SEN.

For the academic age 16 in 2012/13 cohort without A*-C GCSE English at 15:

- Overall, 32% of students with no SEN, 17% of students with SEN and 8% of students with a statement of SEN studied GCSE English.
- For those with a grade D: 41% of students with no SEN, 34% of students with SEN and 31% of students with a statement of SEN studied GCSE; 9% of students with no SEN, 8% of students with SEN and 8% of students with a statement of SEN studied level 2 Functional Skills; 17% of students with no SEN, 19% of students with SEN and 19% of students with a statement of SEN studied level 1 Functional Skills; and 5% of students with no SEN, 9% of students with SEN and 15% of students with a statement of SEN studied entry level Functional Skills.
- For those with a grade E: 15% of students with no SEN, 11% of students with SEN and 9% of students with a statement of SEN studied GCSE; 7% of students with no SEN, 5% of students with SEN and 5% of students with a statement of SEN studied level 2 Functional Skills; 28% of students with no SEN, 26% of students with SEN and 22% of students with a statement of SEN studied level 1 Functional Skills; and 16% of students with no SEN, 25% of students with SEN and 36% of students with a statement of SEN studied entry level Functional Skills.

Maths

For the academic age 18 in 2013 cohort:

- For students with no SEN, 73% achieved A*-C at 15, 13% achieved a grade D and 7% a grade E.
- For students with any SEN, 29% achieved A*-C at 15, 15% achieved a grade D and 15% a grade E.
- For students with a statement of SEN, 11% achieved A*-C at 15, 7% achieved a grade D and 9% a grade E.
- 81% of students with a statement of SEN achieved a grade E or below and 72% achieved grade F or below.
- Only 2% of students with a grade D at age 15 had a statement of SEN and 4% of those achieving a grade E.

- 28% of students with a grade D at age 15 had any SEN and 41% of those achieving a grade E.
- By academic age 18, 76% of students with no SEN, 32% of students with SEN and 13% of students with a statement of SEN had achieved A*-C GCSE.
- Of those with a grade D at 15, 21% of students with no SEN, 15% of students with SEN and 16% of students with a statement of SEN achieved A*-C GCSE by academic age 18.
- Of those with a grade E at 15, 3% of students with no SEN, 2% of students with SEN and 2% of students with a statement of SEN achieved A*-C GCSE by academic age 18.
- The overall progression rate (those achieving A*-C GCSE between 15 and 18), was 12% for students with no SEN, 4% for students with SEN and 2% for students with a statement of SEN.

For the academic age 16 in 2012/13 cohort without A*-C GCSE English at 15:

- Overall, 25% of students with no SEN, 12% of students with SEN and 7% of students with a statement of SEN studied GCSE maths.
- For those with a grade D: 38% of students with no SEN, 28% of students with SEN and 25% of students with a statement of SEN studied GCSE; 7% of students with no SEN, 7% of students with SEN and 7% of students with a statement of SEN studied level 2 Functional Skills; 16% of students with no SEN, 19% of students with SEN and 19% of students with a statement of SEN studied level 1 Functional Skills; and 4% of students with no SEN, 8% of students with SEN and 14% of students with a statement of SEN studied entry level Functional Skills.
- For those with a grade E: 15% of students with no SEN, 11% of students with SEN and 9% of students with a statement of SEN studied GCSE; 6% of students with no SEN, 4% of students with SEN and 3% of students with a statement of SEN studied level 2 Functional Skills; 24% of students with no SEN, 24% of students with SEN and 22% of students with a statement of SEN studied level 1 Functional Skills; and 12% of students with no SEN, 18% of students with SEN and 26% of students with a statement of SEN studied entry level Functional Skills.

Impact

Students with special educational needs or a disability have lower attainment in GCSE English and maths at 15 and this gap does not close by 18.

Of those aged 18 in 2012/13, 4% had a statement of SEN at academic age 15 and 24% had any SEN. Students with SEN are under-represented amongst students achieving A*-C in English and maths. Students with a statement of SEN also only made up 2% of

those achieving grade D at 15 in both English and maths, 4% of students achieving grade E in maths and 6% of those achieving grade E in English.

This means that more students with SEN will be required to continue study of these subjects, although many of these would not be in scope of the requirement to study GCSE. Students with any type of SEN do, however, make up a significant proportion of students attaining grades D and E in English and maths.

Fewer students who have SEN and grades D/E in English and maths currently study for GCSE post-16 than those with no SEN. The proportions of students studying other qualifications are broadly similar, except for entry level Functional Skills, where those with SEN are over-represented.

SEN students with a statement who achieve a grade D in English and maths at 16 do slightly better at GCSE in 16-19 education than those without a statement. GCSE achievement is low for all students in 16-19 education with prior attainment of grade E in English and maths.

Some respondents to the consultations on 16-19 study programmes, GCSE content and 16-19 accountability raised concerns about GCSE not being suitable for many students with SEN. There were some specific concerns about the content and assessment of the new GCSEs, such as the increased focus on spelling and grammar disadvantaging students with dyslexia, or linear assessments being more difficult to manage for certain students.

These concerns, as well as the removal of tiered papers from new English GCSEs have been addressed in the GCSE equality impact assessments. Others were concerned that GCSEs were too challenging and could demotivate low attainers, including those with SEN, who they thought would be more successful on other programmes.

Students with SEN have a diverse range of issues, challenges and abilities. It is not possible or appropriate to specify particular conditions as making students unable to study GCSE. Students with every type of SEN, including a small number with profound and multiple learning disabilities, achieve A*-C in English and maths.

Requiring students with SEN to study GCSE could increase the difficulty, and time needed, of their maths and English study, although because the achievement of GCSEs by SEN students at 18 with grade D/E at 15 is not dramatically different to the rest of the student population, this may not necessarily be the case.

Most students, including those with SEN, will benefit from studying qualifications demanded by employers that open opportunities for further study, training or skilled employment. The changes to funding conditions should raise aspiration and expectations for students with SEN who are capable of progressing and help close the attainment gap. The data suggests, for example, that many students with SEN are being put on entry level courses, despite achieving a grade D at 15.

The new GCSEs are designed to be accessible to the same proportion of students as the current GCSEs. Awarding organisations are also required to minimise bias in their qualifications to ensure that an assessment does not produce unreasonably adverse outcomes for learners who share a common attribute and is related to fairness to all learners. They must design their exam papers in a way that permits reasonable adjustments to be made, whilst minimising the need for them. Disabled students are entitled to have reasonable adjustments to the way their exams are conducted, for example through been given extra time to complete their exams, or different access arrangements.

Other qualifications will still be available for the lowest attainers, but there will also be a very small number of students with SEN or disability who achieved a grade D or E at 15 for whom studying GCSE will not be appropriate. For example, they may have reached the limits of their cognitive ability or they may have complex behavioural issues. To mitigate the impact on this small number of students with SEN, there will be an exemption, where professionals have good evidence to support a judgement that studying GCSE would be detrimental to these students.

A significant increase in the numbers of students with SEN studying GCSE will require extra resources and teaching approaches helpful to particular disabilities and needs (see challenges and opportunities below). Respondents to the 16-19 study programme consultation highlighted the need for investment in recruitment of specialist teachers and CPD to increase workforce capacity and capability. They also emphasised the need for effective teaching that motivates and engages students rather than offering 'more of the same'. Having sufficient specialist teachers, including those with expertise in SEN, is important to ensuring that students receive quality teaching that will support them to achieve their full potential (see workforce below).

Socio-economic disadvantage

Context

Socio-economic disadvantage is not a protected characteristic, but tends to be a factor in low attainment. We have used students on free schools meals (FSM) aged 15 as a proxy for disadvantage.

English

For the academic age 18 in 2013 cohort:

- 69% of non-FSM students achieved A*-C at 15, 16% achieved a grade D and 7% a grade E.
- 43% of FSM students achieved A*-C at 15, 21% achieved a grade D and 14% a grade E.
- By academic age 18, 72% of non-FSM students achieved A*-C overall. Of those with a grade D at 15, 16% achieved A*-C GCSE and of those with a grade E 2%.
- By academic age 18, 46% of FSM students achieved A*-C overall. Of those with a grade D at 15, 15% achieved A*-C GCSE and of those with a grade E 2%.
- The overall progression rate, those achieving A*-C GCSE between 15 and 18 was 10% for non-FSM students and 7% for FSM students

For the academic age 16 in 2012/13 cohort without a A*-C GCSE English at 15:

- Overall, 27% of non-FSM students and 18% of FSM students studied GCSE English.
- For those with a grade D: 39% of non-FSM students and 34% of FSM students studied GCSE; 9% of non-FSM students and 8% of FSM students studied level 2 Functional Skills; 17% of non-FSM students and 19% of FSM students studied level 1 Functional Skills; and 6% of non-FSM students and 9% of FSM students studied entry level Functional Skills.
- For those with a grade E: 13% of non-FSM students and 11% of FSM students studied GCSE; 7% of non-FSM students and 5% of FSM students studied level 2 Functional Skills; 27% of non-FSM students and 26% of FSM students studied level 1 Functional Skills; and 20% of non-FSM students and 25% of FSM students studied entry level Functional Skills.

Maths

For the academic age 18 in 2013 cohort:

- 66% of non-FSM students achieved A*-C at 15, 13% achieved a grade D and 8% a grade E.
- 39% of FSM students achieved A*-C at 15, 16% achieved a grade D and 14% a grade E.
- By academic age 18, 69% of non-FSM students achieved A*-C overall. Of those with a grade D at 15, 20% achieved A*-C GCSE and of those with a grade E 2%.
- By academic age 18, 42% of FSM students achieved A*-C overall. Of those with a grade D at 15, 15% achieved A*-C GCSE and of those with a grade E 2%.
- The overall progression rate, those achieving A*-C GCSE between 15 and 18 was 9% for non-FSM students and 5% for FSM students.

For the academic age 16 in 2012/13 cohort without a A*-C GCSE English at 15:

- Overall, 20% of non-FSM students and 14% of FSM students studied GCSE maths.
- For those with a grade D: 36% of non-FSM students and 31% of FSM students studied GCSE; 7% of non-FSM students and 6% of FSM students studied level 2 Functional Skills; 17% of non-FSM students and 17% of FSM students studied level 1 Functional Skills; and 5% of non-FSM students and 7% of FSM students studied entry level Functional Skills.
- For those with a grade E: 14% of non-FSM students and 12% of FSM students studied GCSE; 5% of non-FSM students and 4% of FSM students studied level 2 Functional Skills; 25% of non-FSM students and 23% of FSM students studied level 1 Functional Skills; and 14% of non-FSM students and 18% of FSM students studied entry level Functional Skills.

Impact

There is a significant attainment gap between FSM and non-FSM students at age 15, which persists at 18. There is a consistent gap in attainment linked to deprivation across the whole education system and across different subjects, although the quality of education can influence the size of the gap. In 2012/13 35% of FSM students achieved level 3 by age 19, compared to 60% for non-FSM students. Young people from disadvantaged backgrounds are also more likely to not be in employment, education or training.

These groups of students are therefore expected to particularly benefit from these reforms through increased opportunities to achieve GCSE qualifications that will improve their chance of progressing to further study, training or employment.

Disadvantaged students are over-represented in those achieving grade D and E in both English and maths. However, 51% of FSM students without A*-C got grades F and below in maths and 38% in English, so would be out of scope for these reforms.

For students with a grade D in English the proportion progressing to A*-C GCSE is very similar for FSM and non-FSM students, but there is a 5 percentage point gap in maths. For those with grade E in English and maths attainment is equally low for all students.

Slightly more non-FSM students than FSM students with grade D study maths and English GCSE in 16-19 education, but the proportion is similar for those with grade E.

The proportions of students studying other qualifications are broadly similar, except for entry level Functional Skills, where those with FSM are over-represented. Requiring these students to study GCSE would be a step up in challenge.

Underperformance by disadvantaged students may be linked to a variety of factors, such as background, family circumstances, aspirations, and potential differences in the quality of teaching in schools. Some disadvantaged students will have a number of complex challenges outside of education and less parental support, which makes participation and achievement more difficult. Educational providers may also find motivating and engaging some of these students to continue studying GCSE English and maths more challenging. Some respondents to the consultation on study programmes were concerned about low attainers potentially being caught in a demotivating cycle of repeatedly failing GCSE.

Under the proposals, students with prior attainment of grade D planning on re-taking GCSEs in summer 2017 would need to sit the reformed GCSEs. These students would have sat the current GCSE in secondary school and so would have to prepare for a new qualification, which would increase further the challenge of teaching them. This would be particularly true for students starting study programmes in September 2016. The content required to achieve a good pass, is not dissimilar to that in current GCSEs, as most of the more stretching material relates to higher grades. The maths paper is also tiered, with the more challenging paper unlikely to be taken by many of the students in scope of these reforms. However, providers will need to be prepared for the new GCSE and ensure that students are given adequate teaching time.

There may also be a risk of low attainers deliberately doing badly in their GCSEs at key stage 4 in order to avoid repeating them in 16-19 education. This is considered a low risk and is offset by the requirement for all students without A*-C in English and maths to continue studying these subjects post-16.

Students, including those from disadvantaged backgrounds, can benefit from studying qualifications demanded by employers that open opportunities for further study, training or skilled employment. The changes to funding conditions should raise aspiration and

expectations for disadvantaged students who are capable of progressing and help close the attainment gap.

There is evidence² which suggests that with the right teaching and support students will benefit from higher expectations. Sufficient specialist teachers of the right quality to teach GCSE English and maths effectively to lower attainers will be essential to effective implementation. Failure to achieve A*-C in English and/or maths is used as a proxy for students requiring additional learning support and these students attract an additional allocation of £480 for each subject, under the new 16-19 funding formula.

Race

Context

See Annex A for data on English and maths attainment and progression for different ethnic groups.

Impact

Achievement in English and maths at 15 and 18 varies across ethnic groups with students from a Chinese or Indian background typically outperforming their peers. Students from Gypsy/Romany and Irish Traveller backgrounds do significantly worse. Progression to GCSE by 18 is low for these students. Progression in maths for students from white British, and Caribbean backgrounds is also below average as it is for white British and black/white Caribbean students in English.

In English, those achieving grade D at 15 are slightly more likely to be from other black, Bangladeshi, Caribbean, Pakistani, or other white/black Caribbean backgrounds. There is more consistency for those achieving grade E, although again Chinese and Indian students are less likely to achieve this grade. This is also true for students getting a grade D in maths at 15, with only Caribbean and white/black Caribbean being more likely than average to get this grade. Students from Gypsy/Romany, Irish Traveller, white/black Caribbean, Caribbean and any other black backgrounds are slightly more likely to achieve grade E in maths.

There are large differences between different ethnic groups without A*-C going on to study English and maths GCSE, with students from Gypsy/Romany and Irish Traveller backgrounds being very unlikely to study GCSE and students from white British and black/white Caribbean backgrounds being below the average. For those with a grade D other than Gypsy/Romany and Irish Traveller Heritage groups, those least likely to go on to study English and maths GCSE are Irish, White British, White and Black Caribbean students.

² See GCSE Reform Equality Analysis, DfE, March 2013

Students with English as an additional language (EAL) might be disadvantaged by the greater demands of the reformed GCSEs and their increased emphasis on spelling, grammar and punctuation. To mitigate this, students studying Ofqual accredited ESOL qualifications will not be required to study English GCSE.

Ethnic groups that typically achieve lower grades at GCSE will come from a range of backgrounds and may face similar challenges to other low attaining groups such as those on FSM and may be harder to motivate and engage. The combination of being eligible for FSM and being part of another group with lower probability of obtaining good qualifications can lead to low results³

Students from less stable environments, which are not conducive to study (for example, asylum seekers), may find taking GCSEs with assessment by examination held only once a year (with the opportunity for one retake) more challenging than qualifications with flexible assessment, as could students from Gypsy/Romany and Irish Traveller backgrounds.

However, most students, including those from different ethnic backgrounds, will benefit from studying qualifications expected by employers that open opportunities for further study, training or skilled employment. The reforms should raise aspirations for all of these students and reduce the numbers taking qualifications that do not show progression from prior attainment, thus helping to close the attainment gap for some ethnic groups.

Key to ensuring that all post-16 students have a good chance of improving their GCSE attainment is high expectations together with sufficient, high-quality specialist teachers.

³ (2010) *How Fair is Britain? Equality and Human Rights Commission*.

6. Challenges and opportunities

Workforce

Effective specialist teaching of English and maths GCSE to larger numbers of students in 16-19 education is fundamental to ensuring that the impact of the reforms on protected groups is positive. Students will benefit from high expectations, as long as they get the support and challenge they need to succeed. If the workforce does not have sufficient capacity and capability to deliver effective teaching at this level, there may be an increase in course provision to meet the funding condition without an improvement in outcomes.

This depends on there being sufficient specialist teachers and lecturers to teach at this level. It also requires high-quality teaching that motivates and engages students who have previously not achieved a good pass at GCSE and may benefit from new approaches that contextualise the content in their vocational learning to make it more relevant and accessible. Students with SEN may need extra support or alternative teaching methods that address their particular needs. Effectively delivering the new focus on English and maths and building capacity in the workforce also relies on strong leadership and governance in institutions.

The reforms will result in a significant increase in the number of students who will be required to continue to study English and maths GCSE. The reformed maths GCSE is likely to require an increase in teaching time because of its broader content.

Based on data for students entering 16-19 education in 2012/13 and not studying GCSE, up to an additional 40,000 full-time students with prior attainment of grade D would need to study GCSE English in 2015 and 26,000 students would need to study GCSE maths. For those with prior attainment of grade E, up to an additional 26,000 full-time students would need to study GCSE English in 2017 and up to an additional 24,000 GCSE maths. However, this data pre-dates the introduction of Study Programmes. Because all students without A*-C have been expected to study English and maths towards GCSE level since September 2013 the expansion of the specialist teaching workforce to meet these demands is already well underway.

The FE sector will be most affected by the revisions to conditions of funding, as in 2012/13 54% of students without A*-C in English and/or maths at 15 went on to study in FE colleges, compared to about 20% to schools and less than 8% to other types of provider. About 56% of students with SEN without A*-C in English and/or maths attended FE colleges, compared to 18% who attended schools and less than 7% for other types of provider.

The 2012/13 Ofsted annual report found that maths and English remained a significant concern with high levels of poor progress and poor attainment among students. Interim findings from Ofsted's survey of 16-19 Study Programmes found that while all the

providers visited were aware of the English and maths requirements, some colleges had a shortage of qualified teachers who can teach GCSE to grade C and above.

Funding reforms, including the equalisation of funding levels between academic and vocational programmes and the introduction of 'per student' funding in place of 'per qualification' funding, was intended to remove incentives to place students on lower level courses and give providers greater flexibility in how they deploy their staff and resources.

However, FE colleges and smaller providers have particular difficulty in attracting new graduates, especially in maths and science, partly due to less attractive salaries and less structured career paths. Responses to the 16-19 study programme consultation suggest that developing the capacity of existing staff as well as exploring shared delivery models with other colleges, schools and other local partners, may help.

Whilst FE colleges and training providers are independent organisations responsible for their own workforce, the Government recognises the key role the sector plays in delivering policy and ensuring the country has the skills it needs to thrive.

The Department of Business, Innovation and Skills and the Department of Education are working with the Education Training Foundation, the sector owned body responsible for the professionalism of FE staff, to implement an FE workforce strategy designed to help colleges increase the capacity, capability and professionalism of their workforce, with a particular focus on English, maths and SEN (see Annex B for initiatives to support teaching students with SEN). More is also being done to identify excellent, innovative and effective provision and practice in English, maths SEN support, and share this across providers.

The FE Workforce strategy includes a number of new and existing initiatives totalling over £30m this year and next with the aim of increasing the numbers of specialist new teachers of maths and English, and of existing teachers with enhanced skills, by at least 3,000 by the start of the 2015/16 academic year. This includes incentives and bursaries for new graduates and support for developing existing staff. See Annex C for an overview of these initiatives.

A study running through to the end of 2015 will be evaluating the overall success and impact of the bursaries, enhancement schemes and other initiatives which make up the programme, particularly how far they support the sector to improve the quality of specialist teaching of maths and English, including of those with SEN.

This will enable us to closely monitor the steps being taken by the sector to increase the capacity and capability of the maths and English workforce. This will, in turn, enable the Education Training Foundation to adjust and target its support to those providers or groups of providers where the need is greatest.

There is also an increased emphasis on raising standards in 16-19 education through revised Ofsted inspection frameworks for schools and colleges with a greater focus on students making expected progress from their prior attainment; clearer accountability measures, which include progress in English and maths GCSE to be introduced from

2016; and more rigorous minimum standards to identify when a provider is underperforming, so that action can be taken.

Benefits of English and maths

English and maths enable wider learning and progression, and are also important skills in their own right in the labour market and daily life.

The 2011 review of vocational education for 14-19 year olds by Professor Alison Wolf emphasised how fundamental Maths and English GCSE (at grades A*-C) were to young people's employment and education prospects. The review found that 'English and maths GCSE (A*-C) are of critical importance for employment. Employers use them as a signal and sifting device and they are also of critical importance for entry into selective programmes post-16, and higher education'.

Some evidence suggests that many employers are not satisfied with school and college leavers' literacy and numeracy. A 2013 CBI survey⁴ found that 32% of firms were not happy with young people's literacy and 31% their numeracy, with 48% of firms putting young people on basic remedial training – up from 42% last year. However, the Employer Skills Survey⁵, conducted by the UK Commission for Employment and Skills, did find that most young people recruited by employers are suitably prepared for work.

International evidence, including the analysis of the new PIAAC⁶ (Programme for the International Assessment of Adult Competencies) survey of adult skills in 22 countries including the UK, suggests that a one standard deviation increase in numeracy skills is associated with an 18% wage increase across prime workers. This masks considerable differences across countries. PIAAC also showed that the relationship is particularly strong in the UK. Those with decent numeracy skills earn an even higher wage premium, on average, than in other OECD countries, whilst those without these skills are more heavily penalised in the UK labour market.

A recent report for National Numeracy by Pro Bono Economics (2014) suggests the annual economic cost to the UK of low adult numeracy was around £20bn per year, including lost earnings, profit and government costs from reductions in taxes and increases in benefits.

Good maths and English skills are key to progressing to higher-level study and gaining employment in particular fields. For example, previous research has found that those with

⁴ CBI/Pearson [Education and Skills Survey 2013](#)

⁵ [The youth employment challenge](#)

⁶ Eric A. Hanushek, Guido Schwerdt, Simon Wiederhold, Ludger Woessmann (2013) Returns to skills around the world: evidence from PIAAC.

A level maths earn 7-10% more at age 33 than similarly educated workers without A-level maths. Several studies also show there are also high returns to pursuing degrees in subjects that require advanced maths (such as Medicine, mathematics and computer sciences, and engineering) relative to other degrees. Those working in Science, Technology and Engineering professions (STE) have been found to earn on average 19% more than others, with an even greater premium for those with an intermediate or degree level STEM qualification.

Although we have good evidence that achieving at least five good GCSE passes increases earnings and employment prospects; based on current evidence, it is more difficult to identify the specific impact of specific subjects including English and maths on student's future earning potential. The Department has only recently begun to focus on the impact of specific GCSEs. Many more studies – including robust longitudinal studies – do focus on the economic positive impact of improving literacy and numeracy skills.

We do know that Employers value the existing GCSEs, with 94% saying these qualifications are important to obtain⁷, but only just over half agree that other qualifications are of equal value. The general public also recognise the importance of GCSEs. Over 75% of the public believe GCSE is an important qualification to obtain but only just over half think other qualifications are equal value.

GCSEs are more valued by employers in the labour market. Wage returns evidence⁸ shows that those holding 5 good GCSEs earn around 9-11% than most other Level 2 qualifications, with the exception of Apprenticeships.

The reformed GCSEs are designed to be qualifications in which students, employers and further and higher education institutions can have confidence. The increased level of challenge should meet that of our international competitors. While the new qualification will be more challenging, particularly at the top-end, with effective teaching most students should be able to benefit from studying these more rigorous qualifications.

English Content

The new English Language GCSE provides greater focus on ensuring that students can read fluently, analyse texts, including non-fiction texts, and write clearly and accurately using appropriate Standard English. Pupils will be expected to use a range of vocabulary and sentence structures with accurate spelling and punctuation, which will constitute 20% of the marks of the overall qualification. Oral literacy and spoken language will continue to form part of the new English language GCSE, but will be reported separately and not form part of the final mark and grade.

⁷ Ofqual (2013) annual survey of perceptions of A levels, GCSEs and other qualifications

⁸ [The returns to qualifications in England](#)

Mathematics Content

The qualification will contain broader and deeper mathematical content, delivered through two tiered papers. There will be additional requirements to provide clear mathematical arguments and more questions involving solving problems in a real life context, which may require multi-step solutions. The new GCSE has a new section on ratio, proportion and rates of change to ensure this fundamental area is covered in greater depth. Students will now have to learn about vectors and conditional probability, and learn key formulae by heart. The reformed maths GCSE is likely to require additional teaching time compared to the current qualification.

7. Conclusions

Our analysis suggests that both the existing GCSEs, and in particular the reformed GCSE in maths and English do represent qualifications which are of considerable benefit to those that hold them. The reforms to 16-19 funding conditions for English and maths offer a positive opportunity for 16-19 providers to address equality and diversity issues for students who missed out on a good pass in these subjects at key stage 4. We have not identified any potential for a negative impact on students because of their age, religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment. There is a minor impact on males who are over-represented, particularly those with grade D in English GCSE.

As set out in the analysis, students with SEN, certain ethnic groups and disadvantaged students are over-represented in the cohort in scope of the revised funding condition. These students are more likely to be more difficult to motivate and engage in studying GCSEs in these subjects. Currently, very low numbers of students with grade E are given the opportunity to study and achieve GCSE, whether they are in a protected group or not, and too many students are being placed on lower level qualifications.

However, with the right teaching and support many more students should be capable of achieving a GCSE. We find that the reform is justified given the importance of GCSE qualifications to all students' prospects of further study, training and employment. The reforms should also reduce the number of students with protected characteristics guided onto taking lower-quality qualifications which are not so valued by employers. It is of no benefit to any student to obtain qualifications that do not provide evidence of successful progression to employment, or further study. Overall, these reforms will have a disproportionate positive impact on disadvantaged groups, by ensuring that they take more rigorous and respected qualifications more frequently taken by less disadvantaged peers, enhancing their rates of progression accordingly.

Higher expectations of attainment should help drive better teaching and learning. As set out above, a positive impact will be dependent on having sufficient, high-quality specialist teachers who can teach GCSE and who can differentiate their teaching and learning practice to meet the learning style of vocational students, including lower attainers, with a focus on contextualising within vocational subjects. There is a risk that provision is expanded to meet the condition of funding, without improving the quality of the teaching and learning, which will mean that attainment does not quickly improve. By not expanding the policy to greater numbers of students until 2017, it will give the sector time to prepare.

The policy will pose a particular challenge to FE providers, who typically take on more students with the relevant lower grades and characteristics defined in this report and who will need to improve their specialist provision to deliver effective English and maths teaching for GCSE. This is why the Government has implemented an FE Workforce strategy to help providers build specialist capacity and capability in these subjects and in teaching students with SEN.

Low attainers tend to be at greater risk of disengagement. Good planning and teaching makes the curriculum accessible to all students and ensures that learning is differentiated to take account of their individual learning styles and personal motivations as well as their prior attainment.

Ofsted has found that institutions that make good progress with lower attainers have a culture of high expectations for all students and provide encouragement to all⁹. OECD researchers have concluded that the best-performing education systems embrace the diversity in students' capacities, interests and social background with individualised approaches to learning. In contrast, systems that assume that students have different destinations with different expectations and differentiation in terms of how they are placed in schools, classes and grades often show less equitable outcomes without an overall performance advantage.

It is important for all students to have the opportunity to study for qualifications that give them the best chance of progression including those who struggle because of special educational needs. Again, central to this is the quality of teaching and learning to ensure that students with SEN are given the best possible opportunity to develop fundamental English and mathematics knowledge, understanding and skills.

While most students, including those with SEN, can benefit from taking more rigorous standard qualifications with reasonable adjustments, we recognise that for a very small number of students this may be inappropriate. There will be an exemption for a small number of students with SEN whom professionals judge would be better served by alternative qualifications. Students with EAL will also be able to study approved ESOL qualifications rather than English GCSE.

Additional funding is available to institutions that teach students with low prior attainment in maths and English as well as financial incentives and training for institutions in recruiting and developing the skills of their workforce. These coupled with plans for the close monitoring of progress and the periodic review of this equality impact assessment are intended to ensure that the benefits to young people associated with this policy can be realised in practice.

⁹ For instance, see Ofsted (2010) 'Twelve Outstanding Special Schools', and Ofsted (2009) '20 Outstanding Primary Schools'.

8. Next Steps

It is important to note that this data does not represent a full reflection of how the proposals will impact on post-16 participation and attainment in English and maths from 2015 and beyond and further analysis will be conducted.

We will continue to have discussions with expert groups on how to minimise any negative impacts on specific student groups during implementation and Ofqual will continue to monitor suitability of access arrangements and reasonable adjustments for candidates taking reformed GCSEs.

We cannot confirm the exact grades to which the 2017 condition of funding will apply at this stage. The grade threshold in the new GCSE for requiring students to continue study of English and maths post-16 also needs to be determined. Furthermore, the reformed GCSEs in English and maths have not yet been accredited and published. We will update this assessment once these matters have become clear.

The most recent data used in this analysis is from 2012/13, so the impact of a number of policy reforms on English and maths has not been included. Study Programmes are in their first year of implementation, so there is no robust data about their impact on take up of English and maths. The new 16-19 performance table measure on GCSE English and maths will not be published until 2016 tables. Providers now also have more flexibility to deploy resources due to funding reforms and DfE and BIS are working to help the sector increase the capacity and capability of the workforce.

All these reforms should support more effective delivery of English and maths to students who have not achieved a good pass at GCSE. The full impact of the changes to 16-19 funding conditions cannot be predicted ahead of implementation from September 2015. Further data on workforce readiness and post-16 participation, attainment and progression will need to be collected and analysed as it becomes available, following implementation, in order to continue to monitor impact.

Annex A: Ethnicity data

English	African	AO Asian background	AO Black Background	AO other ethnic background	AO mixed background	AO White background	Bangladeshi	Caribbean	Chinese	Gypsy/Romany	Indian	Pakistani	Traveller of Irish heritage	White and Black African	White and Black Caribbean	White British
Attainment at 15: A*-C	64%	62%	59%	58%	69%	59%	64%	60%	75%	16%	79%	60%	28%	68%	61%	66%
Grade D	17%	15%	20%	16%	15%	15%	18%	20%	10%	15%	12%	19%	16%	15%	19%	16%
Grade E	8%	8%	9%	9%	7%	9%	8%	10%	5%	12%	4%	10%	9%	7%	9%	8%
GCSE attainment A*-C age 18 with grade D at 15	36%	37%	28%	33%	22%	25%	30%	21%	46%	4%	38%	30%	0%	23%	15%	13%
GCSE attainment A*-C age 18 with grade E at 15	8%	10%	6%	8%	5%	5%	5%	3%	10%	2%	6%	5%	0%	7%	1%	1%
GCSE Attainment A*-C at 18 (without A*-C at 15)	21%	20%	17%	18%	14%	13%	17%	12%	31%	1%	25%	16%	0%	13%	8%	7%
Progression to A*-C between ages 15-18	22%	20%	17%	18%	15%	14%	17%	12%	31%	1%	25%	17%	0%	14%	8%	7%
Study aims age 16 in 2012/13																
Grade D at 15																
GCSE	64%	68%	51%	60%	45%	47%	63%	46%	74%	13%	65%	59%	0%	49%	36%	34%
FS L2	5%	5%	7%	4%	7%	7%	5%	7%	2%	9%	5%	5%	5%	9%	8%	9%
FS L1	7%	7%	13%	8%	16%	14%	8%	15%	5%	21%	8%	11%	24%	10%	18%	19%

English	African	AO Asian background	AO Black Background	AO other ethnic background	AO mixed background	AO White background	Bangladeshi	Caribbean	Chinese	Gypsy/Ro many	Indian	Pakistani	Traveller of Irish heritage	White and Black African	White and Black Caribbean	White British
Entry	4%	3%	4%	3%	5%	6%	4%	7%	2%	15%	4%	5%	24%	4%	8%	7%
Grade E at 15																
GCSE	31%	32%	25%	26%	18%	20%	23%	15%	34%	6%	28%	22%	0%	15%	12%	10%
FS L2	5%	6%	5%	5%	6%	6%	8%	6%	10%	0%	6%	6%	0%	9%	6%	6%
FS L1	25%	22%	27%	24%	26%	25%	25%	26%	16%	21%	24%	24%	17%	30%	25%	28%
Entry	16%	15%	20%	15%	19%	19%	22%	25%	13%	23%	18%	21%	17%	20%	24%	22%

Maths	African	Any Other Asian background	Any Other Black Background	Any Other ethnic background	Any Other mixed background	Any Other White background	Bangladeshi	Caribbean	Chinese	Gypsy/Ro many	Indian	Pakistani	Traveller of Irish heritage	White and Black African	White and Black Caribbean	White British
Attainment at 15: A*-C	60%	68%	53%	60%	64%	59%	63%	51%	87%	13%	78%	57%	24%	62%	52%	62%
Grade D	13%	10%	16%	12%	13%	13%	12%	17%	4%	12%	10%	14%	9%	13%	16%	14%
Grade E	9%	6%	11%	8%	8%	9%	9%	12%	2%	11%	5%	10%	12%	9%	12%	9%
GCSE attainment A*-C age 18 with grade D at 15	35%	37%	26%	28%	21%	24%	31%	18%	42%	6%	37%	31%	0%	22%	15%	17%
GCSE attainment A*-C age 18 with grade E at 15	8%	9%	5%	8%	3%	5%	5%	3%	9%	0%	9%	6%	0%	6%	2%	2%
GCSE attainment A*-C age 18 with grade E at 15	8%	9%	5%	8%	3%	5%	5%	3%	9%	0%	9%	6%	0%	6%	2%	2%
GCSE Attainment A*-C	15%	17%	11%	13%	11%	11%	12%	7%	25%	1%	19%	13%	1%	10%	6%	7%

Maths	African	Any Other Asian background	Any Other Black Background	Any Other ethnic background	Any Other mixed background	Any Other White background	Bangladeshi	Caribbean	Chinese	Gypsy/Romany	Indian	Pakistani	Traveller of Irish heritage	White and Black African	White and Black Caribbean	White British
at 18 (without A*-C at 15)																
Progression to A*-C between ages 15-18	16%	19%	11%	14%	12%	12%	12%	7%	43%	1%	20%	13%	1%	10%	6%	7%
Study aims age 16 in 2012/13																
Grade D at 15																
GCSE	63%	56%	52%	50%	43%	39%	57%	44%	39%	8%	59%	52%	20%	47%	37%	31%
FS L2	2%	3%	4%	4%	6%	6%	3%	4%	3%	3%	3%	5%	10%	4%	7%	8%
FS L1	7%	12%	11%	10%	13%	14%	8%	12%	10%	29%	9%	10%	10%	13%	15%	18%
Entry	3%	4%	3%	4%	4%	5%	4%	4%	17%	10%	4%	5%	10%	3%	5%	5%
Grade E at 15																
GCSE	19%	12%	14%	19%	9%	11%	21%	10%	13%	6%	17%	13%	0%	14%	13%	11%
FS L2	2%	2%	3%	4%	2%	2%	2%	2%	0%	2%	2%	2%	5%	10%	4%	5%
FS L1	17%	16%	20%	19%	19%	23%	19%	21%	16%	26%	18%	19%	15%	24%	25%	24%
Entry	11%	16%	9%	12%	13%	15%	16%	15%	16%	20%	11%	13%	31%	13%	15%	14%

Annex B: DfE programmes to support effective teaching for pupils with SEN in schools and FE

The quality of teaching is central to ensuring that pupils with SEN are given the best possible opportunity to develop key knowledge, understanding and skills. DfE is also ensuring that the quality of teaching is improved by providing funding for staff to work towards a qualification related to SEN through the National Scholarships Fund. Following recommendations from the Rose review, 3,200 teachers obtained specialist qualifications in dyslexia approved by the British Dyslexia Association.

The quality of initial teacher training in SEN is increasing. Almost two thirds of newly qualified secondary school teachers in 2012 rated this aspect of their training as good or very good, compared to less than half of those surveyed in 2008. A DfE survey of 12,000 Newly Qualified Teachers in 2012 found that just 7% of them rated their training in SEN as poor. 59% of primary and 66% of secondary teachers rated their training as “good” or “very good” in helping them to teach pupils with SEN. This compares to as few as 45% in 2008.

The government’s Schools Direct programme is helping to improve the skills of new teachers in supporting SEN; and the National College for Teaching and Leadership has developed specialist resources for initial teacher training and new advanced level online modules on areas including dyslexia, autism and speech and language needs, to enhance teachers’ knowledge, understanding and skills.

DfE is also providing £5.5 million over two years through contracts with the Voluntary and Community Sector to provide free information, advice and training on key aspects of SEN. This includes:

- NASEN (the National Association of SEN) is being funded to provide an SEN Gateway – a one stop shop for schools and teachers looking for useful training resources and materials.
- The Dyslexia SpLD Trust is providing a free online professional development tool for teachers, allowing them to assess their knowledge of dyslexia, find and access suitable training. The Trust has also produced a web-based catalogue of the best-evidenced approaches to supporting dyslexic pupils.

Other organisations such as the Autism Trust, Communication Trust and National Sensory Impairment Partnership are producing tools and information for schools on the specialist areas that they represent.

Further Education

FE colleges are autonomous institutions with responsibility for training and developing their staff. It is for them to ensure their staff have the capacity to support learners with SEN effectively. To support the FE sector with this, the Government:

- has funded the development of FE Clusters to help colleges share good practice and learn from one another;
- has commissioned the Education and Training Foundation to provide resources and support to improve teaching, learning and assessment with SEN identified as a priority area;
- across 2013/14 and 2014/15 financial years BIS is providing bursaries of up to £9,000 to high quality graduates undertaking training programmes with a focus on teaching learners with SEN, and
- for the 2013/14 financial year DfE has made £1 million in bursaries available to support existing FE teachers to undertake CPD to develop their specialist skills and knowledge to support learners with SEN.

Annex C: FE Workforce strategy

As part of our plans to support these changes, the Government will be publishing an FE workforce strategy. This will set out the steps we are taking to improve the quantity and quality of teachers to support the delivery of maths and English GCSEs; to increase business engagement in FE; to improve the quality of leadership and governance; and to enhance the use and effectiveness of technology to support teaching and learning.

We are investing over £30m to raise the quality of teaching in maths and English, including a comprehensive package of incentives such as bursaries, to attract more graduates, programmes to enhance the skills of existing maths and English teachers so they can teach GCSE; and a new Golden Hello scheme for maths teachers recruited after April 2014. More details are provided in the table below.

As the sector led organisation, the Education and Training Foundation will play a lead role in implementing this strategy. We have already announced incentives to recruit high-quality maths teachers into schools, alongside significant investment in maths training and development for existing teachers.

Activity	Lead organisations
Bursaries of up to £20,000 to attract new graduates with relevant degrees to teach maths and English and to specialise in teaching students with SEN within the FE sector (available in 2013/14 and 2014/15).	Department for Business, Innovation & Skills and the National College for Teaching and Leadership https://www.gov.uk/government/publications/further-education-initial-teacher-training-bursary-guide-academic-year-2014-to-2015
Delivery of a Subject Knowledge Enhancement scheme to enable highly qualified graduates who have the skills and aptitude to teach but need to acquire deeper, more specific maths knowledge and skills to do this before they start initial teacher training.	Department for Business, Innovation & Skills and the National College for Teaching and Leadership https://www.gov.uk/government/publications/maths-matics-subject-knowledge-enhancement-ske-programme-guide-academic-year-2013-to-2014
Publication of new Professional Standards for teachers and trainers in the Education and Training sector.	Education and Training Foundation http://www.et-foundation.co.uk/supporting/programmes/professional-standards/
Golden Hellos to encourage retention of new maths teachers - payments of £7,500 for graduates teaching maths in FE paid in the second year of teaching, rising to £10,000 if they undertake early professional development in teaching learners with SEN.	Education and Training Foundation http://www.feadvice.org.uk/next-steps/funding-information-and-incentives .
Recruitment incentive scheme (in 2013/14) - a payment of £20,000 to FE providers who recruit a specialist graduate maths teacher; or £30,000 for those who will be sharing their teaching expertise with nearby institutions, supporting the CAVTL recommendation to create a cadre of local specialist maths and English teachers, to be based in colleges and supporting all providers in a locality.	Education and Training Foundation http://www.et-foundation.co.uk/supporting/programmes/maths-teacher-recruitment-incentive/

Activity	Lead organisations
Grants (in 2013/14) for those who work with students with SEN in the FE sector, particularly SEN teachers and inclusion co-ordinators, to undertake specialist development in teaching students with SEN.	Department for Education / The Association of Centres for Excellence in Teacher Training http://www.acett.org.uk/Default.aspx
Funding for FE Centres of Excellence in Teacher Training (CETT) to identify innovative and effective practice in teaching maths and English to post-16 students, and in teaching students with SEN; and assess the level of SEN teaching skills and knowledge in the sector (in 2013/14 and 2014/15).	Department for Business, Innovation & Skills / The Association of Centres for Excellence in Teacher Training http://www.acett.org.uk/Default.aspx
The Foundation supported a maths enhancement programme for existing teachers by subsidising costs of the training (in 2013/14), enabling more teachers to participate.	Education and Training Foundation http://www.et-foundation.co.uk/supporting/programmes/gcse-maths-enhancement/
Development of new English enhancement programme, to increase skills of existing FE teachers to teach English to GCSE level, delivery from September 2014.	Education and Training Foundation http://www.et-foundation.co.uk/our-priorities/professional-standards/
A support programme to increase the skills of existing FE, Sixth Form Colleges and school teachers to teach new level 3 Core Maths qualifications, announced in October 2013 and now in delivery.	Department for Education / CfBT https://www.ncetm.org.uk
Introduction of a 'premium' graduate recruitment scheme, to support recruitment of graduates to FE. Pilots running from autumn 2014.	Education and Training Foundation http://www.et-foundation.co.uk/supporting/programmes/premium-graduate-scheme/
Action research projects to improve standards in initial teacher training.	Results to be published in August 2014 on Education and Training foundation website



Department
for Education

© Crown copyright 2014

You may re-use this document/publication (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to us at: www.education.gov.uk/contactus.

This document is available for download at www.gov.uk/government/publications

Reference: DFE-00461-2014