



Department
for Education

Subject content of reformed A levels: equality analysis

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1. Introduction

This document assesses the impact of the AS and A level subject content in: art and design; biology; business; chemistry; computer science; economics; English language; English literature; English language and literature; history; physics; psychology; and sociology by reference to the protected characteristics of pupils or students. Section 149 of the Equality Act 2010 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 Act;
- 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 age, disability, gender, pregnancy and maternity, race, religion or belief, gender reassignment sex and sexual orientation. Pupils with Special Educational Needs (SEN), pupils eligible for Free School Meals (FSM), pupils with English as an Additional Language (EAL), and looked after children are not groups covered specifically by the Equality Act (although pupils within those groups may otherwise share a protected characteristic), but have been included in this analysis wherever possible, although not as a proxy for groups with protected characteristics. Some of the evidence that has informed this equality analysis, for example that which relates to low attaining pupils, does not relate specifically either to groups covered by the Equality Act or to the defined groups of pupils identified above (e.g. SEN, EAL, FSM). However, we know that some of the groups considered in this analysis are disproportionately represented among low attaining pupils. 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. Nor has any adverse impact on these groups been communicated to us either through our meetings with representative groups or by respondents to our consultation. We have identified some potential for limited impact because of gender and some impact for those with disabilities (such as dyslexia and dyscalculia) which can be mitigated in some circumstances.

A range of correspondents commented on issues that will be addressed by Ofqual's consultation on assessment and as they are formally the responsibility of Ofqual we do not propose to address or respond to them here.

2. Engagement and involvement

The public consultation opened on 25 October 2013 and closed on 20 December 2013. We received 291 responses from a range of stakeholders, including schools, higher education (HE) representatives, equalities groups and awarding organisations. We held stakeholder meetings on each subject giving subject organisations and subject experts the opportunity to explore the proposals and provide initial feedback before responding to the consultation formally.

3. Description of the policy

In March 2012, the Secretary of State for Education set out a programme of reform for A levels. In line with the Government's commitment in the 2010 Schools White Paper, *The Importance of Teaching*¹, he set out that universities should be more involved in the design of A levels to help ensure that the qualifications equip students for higher education. He also confirmed the Government's ambition for A levels to be linear, with all examinations at the end of the two year course. Subsequently, in an exchange of letters with the Ofqual Chief Regulator, he confirmed that the AS should become a separate, stand-alone qualification, also taught and assessed on a linear basis².

Following the Secretary of State's announcement that he wished universities to influence the content of A levels, awarding organisations (AOs) began consulting with university representatives. The AOs used a wide range of consultative mechanisms including their specialist subject panels, focus groups, telephone interviews and analysis of literature from interested parties.

In March 2013, the Secretary of State confirmed his intention that new linear A levels should be available for first teaching from 2015. In order to address the concerns raised about the A level qualification and assessment structure to this timescale, it was necessary to establish a process prior to the establishment of the A level Content Advisory Board (ALCAB) being formed by the Russell Group of universities, which will be in place from 2014³.

As a result, a review of A level subject content was conducted between April and July 2013 by the four AOs for A levels in England⁴, working with representatives from a range of higher education institutions (HEIs). The review considered A levels in: art and design; biology; business studies; chemistry; computing; economics; English language, English literature; English language and literature; geography; history; mathematics; physics; psychology; and sociology. The review was independently chaired by Professor Mark E. Smith, Vice-Chancellor of Lancaster University.

The review concluded that, of the 15 A levels originally considered, 14 could be revised by the Awarding Organisations and delivered for first teaching in 2015. Mathematics was the only subject that could not be delivered to that timescale.

Following the review, AOs were asked to suggest changes to the A level subject content to implement the specific recommendations made in the report. Where the report

¹ See <http://www.education.gov.uk/schools/toolsandinitiatives/schoolswhitepaper/b0068570/the-importance-of-teaching>

² For the exchange of letters where this was announced see <http://www.ofqual.gov.uk/qualifications-and-assessments/qualification-reform/a-level-reform/>

³ <http://www.russellgroup.ac.uk>

⁴ AQA, OCR, , Pearson, and WJEC

identified that further work was needed to develop A level content AOs were tasked with developing this content.

AOs were also asked to consider the content for AS qualifications where it was specified in the current subject content, to confirm it was appropriate for a stand-alone AS qualification and consider what changes were needed to reflect the revised A level content.

The consultation summarised the key content changes proposed for each individual subject⁵. It asked whether the revised A level subject content gives students the foundation to progress to undergraduate study. It sought views on the proposals made by AOs to translate the issues raised during Professor Smith's review on changes to A level subject content and to highlight the content for AS qualifications.

Following that consultation the review panel⁶ was reconvened to consider the response to the consultation, again chaired by Professor Smith. As a result, further revisions have been made to the subject content. As part of this process, the review panel recommended that the new geography A level should be introduced from September 2016 rather than September 2015 because of the fundamental and significant further work required to reform the A level in the light of the response to the consultation. The A level Content Advisory Board (ALCAB) are now advising on the content of geography ahead of first teaching in 2016.

A levels are not being reformed in isolation. Reforms across the education system will benefit all pupils and lead to improvements in teaching and learning so that pupil performance will rise to meet the new higher standard. Many policies, for example the introduction of the Pupil Premium, SEN reforms, and the expansion of the academies programme, have a particular focus on those pupils left behind currently. A summary of the Department for Education's (DfE) programmes to support teaching for pupils with SEN in schools and in further education (FE) is set out at Annex A.

⁵ www.education.gov.uk/consultations

⁶ Professor Mark Smith, AQA, OCR, Pearson and WJEC

4. Evidence base

Our analysis of the potential impact of the proposed A level content in art and design; biology; business; chemistry; computer science; economics; English language; English literature; English language and literature; history; physics; psychology; and sociology has been informed by:

- i. meetings with higher education representatives, subject associations, AOs and organisations representing the interest of groups with a protected characteristic;
- ii. the views of the A level review panel chaired by Professor Mark E Smith
- iii. the range of documents set out at Annex B; and
- iv. responses to our A level content consultation, including from organisations representing the interests of groups with a protected characteristic at Annex C.

5. Evidence review

DfE asked the following questions in the A level subject content consultation:

- 5) *Do you think that any of the proposals have the potential to have a disproportionate impact, positive or negative, on specific student groups, in particular the 'protected characteristic' groups? (The relevant protected characteristics are disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation.) Please provide evidence to support your response.*
- 6) *How could any adverse impact be reduced and how could the subject content of A levels be altered to better advance equality of opportunity between persons who share a protected characteristic and those who do not? Please provide evidence to support your response.*

The following summary of evidence draws on responses to the public consultation on the A level content, and also refers to views expressed by stakeholders in face-to-face meetings. The subject content consultation asked for views on the equality implications of the draft content. 175 responded to question 5 (from 290 respondents to the overall consultation). 87 said our proposals would have no impact. 47 stated that they would have a negative impact on those students with one or more protected characteristics. Only 17 of these 47 respondents made specific comments on content in relation to protected characteristics, 41 were not sure if they would have an impact of which 10 commented further. The very limited number of impacts raised by respondents (both yes there will be an impact and not sure if there would be an impact) focused on:

1. Unseen element in English literature disadvantaging FSM/disadvantaged children (2 respondents)
2. Focus on literature texts excludes male students (1 respondent)
3. The demand in English subjects disadvantaging severe dyslexics (1 respondent)
4. The proposed history content not being inclusive (2 respondents) and the history span disadvantaging students with autism (1 respondent)
5. The greater focus on mathematics in some subjects discouraging for female students and some less advantaged pupils (8 respondents)
6. Practical work undertaken in some subjects can advantage and disadvantage some students (5 respondents)

These are addressed in turn under each of the subject areas.

There were 50 responses to question 6, of which 11 commented on content (all of which are addressed in individual subject paragraphs). Respondents suggested:

- Choice of unseen texts should reflect diversity (1 respondent)
- Too few girls studying economics (1 respondent)

- Mathematics in other subjects makes those qualifications less accessible (1 respondent)
- History content is too exclusive (1 respondent)
- History content is too exclusive and inclusive (1 respondent)
- History cost and access to resources (1 respondent)
- Practical work allows students with disabilities to score highly (1 respondent)
- Practical work disadvantages students with disabilities (1 respondent)
- Non- religious content should be included in history (1 respondent)
- Dyslexic students would have difficulty with English content (1 respondent)
- Computer science content less appealing for female students (1 respondent)

Many comments related to issues other than subject content and were outside the scope of this consultation, and a range of correspondents commented on issues that will be addressed by Ofqual's consultation on assessment and assessment objectives, as these are formally the responsibility of Ofqual we do not address or respond to them here

Impact

Specific references were made to less able (lower ability) groups, dyslexic students, those with SEN, those with disabilities, gender and FSM students (or students from more disadvantaged backgrounds). Respondents did not always draw a distinction between groups such as those with SEN and/or disabilities. Our analysis suggested possible equality impacts in the following subjects: art and design; the sciences; English literature; computer science; economics and business. The detail of which is set out below.

Conclusion

We consider that overall these reforms are justifiable to ensure the qualifications adequately prepare students for higher education, particularly bearing in mind the potential for mitigating any adverse effects on those students with disabilities through access arrangements and other mitigations/reasonable adjustments that are already in place. All students, including those with protected characteristics, will benefit from fulfilling A level study courses which better equip them to progress towards further study and work opportunities. The A level review panel members also considered the responses to the equalities questions and are in agreement with this conclusion. Many of the proposals for change stem from feedback from subject organisations and HE. All students will therefore benefit from the opportunity to take qualifications which better prepare them for higher education study.

5.2 Subject Content

5.2.1 Art and design

The only significant subject content revision for art and design AS and A level is a new emphasis on drawing. The proposed new requirement is “record experiences and observations, in a variety of ways using drawing or other appropriate visual forms”.

It is possible that the new emphasis on drawing may make it less accessible to some students with disabilities. However as drawing can be non-digital and/or digital this would be a low impact. As this is a skill on which higher education representatives place great importance the proposals are justifiable, particularly given that students can complete their studies on a computer if they choose.

There were no responses or evidence identified by the DfE’s analysis or raised by the A level review panel, which considered the consultation responses, to indicate any other possible negative impacts on persons who shared a protected characteristic from the proposed changes to art and design content.

5.2.2 Business

Our analysis suggested that an increase in quantitative content may make it less accessible to pupils with a disability, for example dyscalculia, and may have an impact on female engagement. One respondent thought that the increase in mathematical content would make it less accessible generally and another that it would affect those from disadvantaged backgrounds.

Although there is a lack of evidence relating to the individual subjects affected by this curriculum change there is some limited evidence that an increase in mathematical content may turn female students away from subjects they might otherwise have taken.

For those students with disabilities (such as dyscalculia) there will be some circumstances which can be mitigated through the use of access arrangements. Evidence also noted that intervention needs to be targeted at strengthening the meaningfulness of numbers at a young age (when pupils begin learning numeracy) in order to have a substantial impact on numeracy skills.

Policy changes are not made in isolation – policies such as the pupil premium contribute to enabling more disadvantaged students to be properly prepared for A levels. The new primary National Curriculum for mathematics is focussed on building firm foundations for all students, benchmarked against expectations in high-performing jurisdictions. The new curriculum places a greater emphasis on mental and written arithmetic, including teaching times tables early, written methods of calculation and applying mathematics to

solve multi-step problems. We believe both genders and the majority of pupils have already sufficient preparation to enter this A level if they wish (see figures below). As a result of curriculum and qualification reforms students should reach A level with a better grasp of numeracy and key mathematics which will help cope with the increased mathematics content of other A levels.

In addition the mathematical concepts required are those required for a GCSE grade C. In 2013 73% of pupils (73% female and 72% male) achieved at least a C grade in mathematics. This means, for example that more than 400,000 pupils have already achieved the necessary mathematics grade required to pursue a business A level (just over 27,000 pupils achieved business studies A level in 2013). In fact female students outperform male students by a small margin at the level of mathematical ability that the changes require. Part of the GCSE mathematics reform is to reflect the secondary curriculum from 11-16 and prepare all students for further mathematics study post-16, both A level mathematics and further mathematics, and other forms of core mathematics study. The new GCSE mathematics subject content was published on 1 November 2013 and the new qualifications will be available for first teaching from September 2015. New GCSEs in mathematics will be more challenging, ambitious and rigorous. They will raise standards in schools and ensure that children have the numeracy skills vital to continue in higher education, training and employment. Schools may expect to devote more teaching time in order to better prepare pupils for GCSE and in turn A level content.

In considering these responses the A level review panel concluded that increasing the focus on quantitative skills to respond to the needs of higher education was important and outweighed these potential risks.

Some students with a disability, such as dyscalculia may find it more challenging to engage with the subject and may be put off taking it or achieve less than they would have previously. However, this has always been a risk given that these subjects have traditionally included mathematical content, although this has now been increased and set out more clearly. We are satisfied that the proposed changes will have no major impact on those with the protected characteristics of disability or gender. In consultation with stakeholders including subject associations there was extensive support for the need for more quantitative skills that are appropriate for a business qualification. We are satisfied that the greater emphasis that has been placed on application of quantitative skills, in both the AS and A level, in a range of business contexts will enable students to develop such skills as required in higher education.

Therefore, we believe that, on balance, the proposed changes are justifiable given how fundamental the mathematical content is to the subject and that the majority of students are adequately prepared for entry to this subject.

We have not identified any potential for a negative impact on students because of age, race, religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment.

5.2.3 Computer science

Our analysis suggested that an increase in quantitative content may make it less accessible to pupils with a disability such as dyscalculia and may have an impact on female engagement. A very small number of respondents (3) thought that the increase in mathematical content would make it less accessible and a particular point was made of encouraging female engagement in computer science. One respondent offered a US study as an example of encouraging female students in computer science.

In consultation with stakeholders, including subject associations, there was extensive support for the need for more quantitative skills in a computer science A level.

The subject content introduces a new aim that A level specifications must encourage students to develop 'mathematical skills'. Setting these out explicitly within the A level subject content will strengthen the mathematical content of the qualifications and will address the concerns expressed by higher education representatives that the current content does not ensure that all students develop appropriate mathematical skills. No evidence was offered that an increase in quantitative content would have any major impact on take up by female students. For those students with disabilities (such as dyscalculia) there will be some mitigation by access arrangements in some situations. As set out above more than 70% of pupils already achieve at least a C in mathematic GCSEs with around 11,000 achieving what is currently information technology A level computer studies/ICT A levels.

The arguments as set out for business A level on the teaching of mathematics prior to key stage 5 also apply here. In considering these responses the A level review panel concluded that increasing the focus on quantitative skills in response to the needs of higher education was important and outweighed potential risks.

We are satisfied that the proposed changes will have no major impact on those with the protected characteristics of disability or gender.

As set out above, one respondent offered a published study from a US university that has successfully turned this problem around so that 42% of their undergraduate computer science intake is female - it took active engagement at pre-GCSE and following that through: <http://www.cs.cmu.edu/afs/cs/project/gendergap/www/>. It may be that there are positive lessons to learn from this study in relation to securing greater female engagement which have the potential for a greater positive impact than can be achieved through the qualification content.

In consultation with stakeholders including subject associations there was extensive support for the need for more quantitative skills in the computer science A level. We believe that on balance the proposed changes are justifiable to meet the educational needs as set out above and that the majority of students are adequately prepared.

We have not identified any potential for a negative impact on students because of age, race, religion or belief pregnancy or maternity or sexual orientation or as a result of gender reassignment.

5.2.4 Economics

Our analysis suggested that an increase in quantitative content may make it less accessible to pupils with disabilities such as dyscalculia and may have an impact on female engagement. One respondent raised the concern about the very limited number of female students participating in economics. Another (group of colleges) were concerned that the increase in mathematical content would affect their intake where it drew upon a less affluent population.

In consultation with stakeholders including subject associations there was extensive support for the need for more quantitative skills in the economics A level.

The content places a more explicit emphasis on developing mathematical skills. As with the subjects above students with disabilities (such as dyscalculia) there will be some mitigation by access arrangements in some situations. Again no evidence was offered that an increase in quantitative content will have any major impact on take up by female students. As set out above more than 70% of pupils achieve at least a C in mathematics GCSE the standard required to undertake the quantitative content of the proposed economics A level with currently over 23,000 students achieving the A level.

The arguments as set out for business A level on the teaching of mathematics prior to key stage 5 for all pupils including disadvantaged pupils also applies here. In considering the consultation responses the A level review panel concluded that increasing the focus on quantitative skills to respond to the needs of higher education was important and outweighed potential risks.

We are satisfied that the proposed changes will have no major impact on those with the protected characteristics of disability or gender.

We believe that the proposed changes are justifiable and the inclusion of mathematical skills in an economics A level is perfectly valid and should be expected by those students who would choose to pursue such a subject.

We have not identified any potential for a negative impact on students because of age, race, religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment.

5.2.5 English (language, language and literature, and literature)

The evidence review showed that there was a concern about the inclusion of an unseen text in English literature that may disproportionately affect pupils with dyslexia and advantage those pupils with greater access to reading material at home. There was a concern that the continued prominence of fiction in English literature would disadvantage male students who may be more engaged by other forms of literature (1 respondent). There was also a concern that classic fiction would limit the relevance of English literature to minority ethnic students (1 respondent). 5 respondents were concerned that the proposals would disadvantage pupils with SEN.

We are satisfied that the specifications should ensure awarding organisations encourage a range of texts that would allow for candidates from diverse backgrounds and gender to engage with the curriculum. Under Ofqual's condition of recognitions awarding organisations are required to minimise bias in their qualifications. Minimising bias is about ensuring that an assessment does not produce unreasonably adverse outcomes for learners who share a common attribute and is related to fairness to all learners and is also closely related to their statutory equality duties.

Students for English literature A level will need to read widely, broadening their knowledge and their critical and comparative understanding of literature and we are content that this reflects changes proposed for the GCSE. Additionally in English language for the first time a non-literary text has been prescribed to remove the opportunity to create a specification with an overly literary bias in which potentially only literary texts could be studied. The English literature content requirements state that study may include texts in translation that have been influential and significant in the development of literature in English. There is also no requirement that the texts studied originate in any particular country. Although the requirement to include an unseen text is new the majority of English literature A level specifications already include an unseen text and therefore the impact of the change will be limited for most students.

As in GCSE we recognise that there will be some mitigation by access arrangements in some situations available to those students with disabilities (including dyslexia). It is important for all pupils to have the best teaching possible including those who struggle because of disabilities such as dyslexia. Central to this is the quality of teaching to ensure that pupils with disabilities and other SEN are given the best possible opportunity to develop key English knowledge, understanding and skills. That is why DfE is ensuring that the quality of teaching is improved. For example, following recommendations from

the Rose review, 3,200 teachers obtained specialist qualifications in dyslexia approved by the British Dyslexia Association. In addition, 600 teachers have achieved or are working towards a qualification related to SEN through the National Scholarships Fund and a further 500 have applied for the current funding round. A fuller summary of DfE's programmes to support teaching for pupils with SEN in schools and further education is set out at Annex A.

In considering the consultation responses the A level review panel concluded that there was unlikely to be any disproportionate impact of the revised A level on disadvantaged groups as most students are already assessed using unseen texts. Neither did they believe that there would be a disproportionate impact on male students as fiction is studied by A level students under the current content and therefore it was concluded that this did not represent a change to the status quo. With regard to the view that the inclusion of classic fiction would limit the relevance of the subject to minority ethnic students the panel confirmed that a wide range of literature would be covered in the A level and the AS, giving scope to engage students with different interests. The requirement in English literature to include at least one work first published or performed after 2000 will allow students to study contemporary works produced in their own lifetime. The review panel were also satisfied that existing methods for supporting or offering special dispensation to these students with disabilities or SEN would continue to apply.

We believe the proposals for the English qualifications are justifiable. All students, including those with protected characteristics, will benefit from fulfilling A level study courses which better equip them to progress towards further study and work opportunities. Many of the proposals for change stem from feedback from subject organisations and higher education. All students will therefore benefit from the opportunity to take qualifications which better prepare them for higher education study.

We have not identified any potential for a negative impact on students because of age, race, religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment.

5.2.6 History

The analysis did not identify any evidence of potential impacts on protected groups arising from proposed changes to content. Two respondents were concerned about the content not being inclusive or relevant. One respondent was concerned that history would be exclusive to particular groups while recognising that when well-constructed, history can enhance the sense of identity and worth of different groups. Another was concerned about the availability and cost for resources for one SEN student. One respondent thought that non-religious content should be included in history.

The subject associations did not believe that the proposals have the potential to have a disproportionate impact on protected groups. One welcomed in particular the opportunity

for independent historical enquiry, which they believe offers an opportunity for various constituencies to showcase capacities and ability which an examination only model might not.

The content requires that the awarding organisations develop specifications that provide a broad and coherent course of study. The subject content for history AS and A level aims to develop students' interest in history, as well as retaining a strong emphasis on the development of broad historical understanding. The switch to enable A level students to develop an understanding of historical events in the context of longer term and broader chronological changes and the slight lessening of British history will mean more opportunity to engage students from a range of different backgrounds in broader history and the history of more than one country. For this reason and despite one individual's concern regarding cost and resources we do believe the change is justified and the content is acceptable.

The A level review panel was satisfied that there was no evidence to support the concern that the content would be exclusive and that the majority of respondents raised no specific concerns about the impact of the revised history subject content on protected groups.

We have not identified any potential for a negative impact on students because of age, race, disability, gender, religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment.

5.2.7 Science - biology, chemistry, physics and psychology

There were no responses or evidence which raised possible negative impacts on persons who shared a protected characteristic from the proposed changes to psychology content.

Our analysis indicated that the greater focus on practical work in the sciences (except psychology) may help to address the gender balance between male and female students within these subjects and may pose possible implications for pupils with physical or sensory disabilities i.e. difficulty of access to practical activities. It also identified that the increase in quantitative content (for all the sciences) may have an impact on female engagement and attainment and those with a disability, for example, dyscalculia. One respondent thought practical activities could advantage some students with certain disabilities, however another thought it could disadvantage those with other disabilities.

In consultation with stakeholders, including subject associations, there was extensive support for the need for more quantitative skills in science A levels.

We are satisfied that the greater focus on practical work will have a positive effect on encouraging more female students to continue studying the sciences to a higher level.

The evidence suggests that practical work may help all pupils to relate science to real life. This added context for science education was found to be particularly important for female students across a number of sources. There is some mitigation provided by work currently being undertaken by the department. For example, the DfE funds the Stimulating Physics Network. Delivered by the Institute of Physics it provides support to schools such as continuing professional development (CPD) and pupil engagement activities to increase progression rates from GCSE to A level physics. This work has a particular focus on increasing the number of female students that go on to take physics A level.

The arguments as set out for business A level on the teaching of mathematics prior to key stage 5 also apply here.

For those students with disabilities (such as dyscalculia or physical disabilities) there will be some circumstances which can be mitigated through the use of access arrangements. Some students with a disability, such as dyscalculia, may find it more challenging to engage with the subject and may be put off taking it or achieve less than they would have previously. However, this has always been a risk given that these subjects have traditionally included mathematical content, although this has now been increased and set out more clearly. We are satisfied that the proposed changes will have no major impact on those with the protected characteristics of disability or gender.

We recognise that practical work may advantage students with particular disabilities yet disadvantage other students with another type of disability. Practical work is considered essential in science education with the science community and higher education highlighting its role in developing practical skills, specific knowledge and understanding of science, and understanding the processes of scientific enquiry. Some teachers may (in the past) have been apprehensive for a range of reasons (e.g. health and safety issues, funding, and shortage of specialist staff), but there are ways to help address the logistical barriers faced by pupils with disabilities for example the use of support staff, appropriate equipment and access and a range of ICT access can contribute solutions. We are further satisfied that it is also recognised that needs must always be assessed on an individual basis to ensure that the mitigations needed and used are the right ones for individuals.

We have not identified any potential for a negative impact on students because of age, race, religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment.

5.2.8 Sociology

There were no responses or evidence which raised possible negative impacts on persons who shared a protected characteristic from the proposed changes to sociology content.

The original review of A levels chaired by Professor Smith concluded that the current subject content was fit for purpose. The revised subject content for sociology proposes only small wording changes. As a result we have not identified any potential for a negative impact on students because of age, disability, gender, race, religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment.

6. Summary

We believe that overall the A level content will have a positive impact by providing respected qualifications in which pupils, employers and further and higher education institutions can have full confidence.

We did not identify or were presented with any comments or evidence that the proposed changes to sociology would have any impact on students with protected characteristics

Where respondents have raised concerns about the potential impact of content we have responded to the concerns as set out above. In those subjects where there is an increase in mathematical concepts and in the English subjects we recognise there may be an impact on some students with certain disabilities (eg dyscalculia and dyslexia) but as is currently the case some mitigation is available through access arrangements where required.

Where the content poses some possible scope for impact on female engagement we are content that impact would be low, and the changes are justifiable.

In science subjects (excluding psychology) where practical work may pose possible implications for pupils with physical or sensory disabilities current mitigations will continue to apply and work aimed at helping to address the logistical barriers faced by pupils with disabilities for example support staff, appropriate equipment and access, and a range of ICT access can contribute to solutions.

We believe that the practical assessments will be an encouragement to all students, including female students to progress to science A levels particularly alongside DfE (and other) initiatives such as those at paragraph 5.2.8. The evidence suggests that practical work may help all pupils to relate science to real life. Moreover, this added context for science education was found to be particularly important for female students across a number of sources.

Practical work in science is considered as essential in science education with the science community highlighting its role in developing practical skills, specific knowledge and understanding of science, and understanding the processes of scientific enquiry.

We consider that overall these reforms are justifiable to ensure students are adequately prepared for higher education, particularly bearing in mind the potential for mitigating any adverse effects on those students with disabilities through access arrangements that are already in place. All students, including those with protected characteristics, will benefit from fulfilling A level study courses which better equip them to progress towards further study and work opportunities. Many of the proposals for change stem from feedback from subject organisations and higher education. All students will therefore benefit from the opportunity to take qualifications which better prepare them for higher education study.

Furthermore, the new A levels are being delivered in a wider context, which will raise the achievement of pupils with SEN. Many policies, for example the introduction of the Pupil Premium and the expansion of the academies programme have a particular focus on those pupils left behind currently. The quality of SEN teaching is central to ensuring that pupils with SEN are given the best possible opportunity to develop key English and mathematics knowledge, understanding and skills. A summary of DfE's programmes to support good teaching for pupils with SEN in schools and FE is set out below at Annex A.

Annex A: 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. 600 teachers have achieved or are working towards a qualification related to SEN through the National Scholarships Fund and a further 500 have applied for the current funding round. More than 500 support staff have trained or applied for funding to increase their skills in SEN. 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 (the Department for Business, Innovation & Skills) 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 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 B: Documents considered as part of the equality analysis

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Annex C: Respondents to A level consultation representing the interests of groups with a protected characteristic

- Dyslexia-SpLD Trust, the membership of which consists of:
 - British Dyslexia Association (BDA)
 - Dyslexia Action
 - Helen Arkell Dyslexia Centre
 - Professional Association of Teachers of Students with Specific Learning Difficulties (Patoss)
 - Springboard for Children
 - Xtraordinary people
 - Driver Youth Trust
- Independent School Religious Studies Association
- Jewish Community Secondary Schools
- National Society (Church of England)



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