

Developing New GCSE, A Level and AS Qualifications for First Teaching in 2016

Equality Analysis Report

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1 Introduction

In July 2014 we published a consultation on developing new GCSE, A level and AS qualifications for first teaching in 2016. We had previously consulted on and announced our decisions on the structure and assessment of the first new qualifications to be taught, including some that will be taught from September 2016. This consultation was about a number of additional subjects planned for first teaching in September 2016. We sought views on the design, assessment arrangements and assessment objectives of these new qualifications. The table below sets out both those subjects that were part of this consultation and, where we have already consulted on arrangements for that subject for GCSE or A level and AS qualifications, the status of the development of the subject:

Subject	GCSE – covered in this consultation?	A level and AS qualifications – covered in this consultation?		
Ancient languages	No. We have already consulted and the new qualifications are due to be taught from September 2016.	Yes. We confirmed the assessment arrangements in December 2014.		
Art and design	Yes	No. We have already consulted and new qualifications are accredited ahead of first teaching in September 2015.		
Computer science	Yes	No. We have already consulted and new qualifications are accredited ahead of first teaching in September 2015.		
Dance	Yes	Yes		
Geography	No. We have already consulted and the new qualifications are due to be taught from September	Yes. We confirmed the assessment arrangements in December 2014.		

¹ Consultation on Developing New GCSE, A level and AS Qualifications for First Teaching in 2016, www.gov.uk/government/consultations/gcses-as-and-a-levels-reform-of-subjects-for-september-2016.

	2016.	
Mathematics	No. We have already consulted and new qualifications are accredited ahead of first teaching in September 2015.	Yes. However first teaching has now been postponed to 2017.
Further mathematics	Not offered at GCSE.	Yes. However first teaching has now been postponed to 2017.
Modern foreign languages	No. We have already consulted and the new qualifications are due to be taught from September 2016.	Yes. We confirmed the assessment arrangements in December 2014.
Music	No. We have already consulted and the new qualifications are due to be taught from September 2016.	Yes. We confirmed the assessment arrangements in December 2014.
Physical education	Yes	No. We have already consulted and new qualifications are accredited ahead of first teaching in September 2015.

To help people consider the possible impacts of the reforms (identified and unidentified), we included in the consultation our initial analysis of the potential positive and negative impacts the proposals could have on students who share different protected characteristics.² Prior to the consultation, and as part of our initial analysis, we met a number of groups and individuals with particular insights into a range of protected characteristics.

In light of the responses to the consultation we have reconsidered our initial analysis. This report sets out our final analysis of the potential impact of the proposed reforms on different groups of students for new GCSEs in:

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² We use the term 'protected characteristics' to refer to people protected under the Equality Act 2010 because this is the term used in the Act. We have set out the types of characteristics in section 1.2.

- Art and design
- Computer science
- Dance
- Music
- Physical education

And new AS qualifications and A levels in:

- Dance
- Music
- Physical education

1.1 Our role, objectives and duties

Ofqual is a statutory body, established by the Apprenticeships, Skills, Children and Learning Act 2009. The Act sets out our objectives (Apprenticeships, Skills, Children and Learning Act, 2009).

Our statutory objectives include the qualifications standards objective, which is to make sure that the qualifications we regulate:

- give a reliable indication of knowledge, skills and understanding; and
- indicate:
 - a consistent level of attainment (including over time) between comparable regulated qualifications; and
 - a consistent level of attainment (but not over time) between qualifications we regulate and comparable qualifications (including those awarded outside of the UK) which we do not regulate.

We must, therefore, regulate so that qualifications properly differentiate between students who have demonstrated they have the knowledge, skills and understanding required to attain the qualification and those who have not.

We also have a duty under the Act to consider the reasonable needs of:

 relevant students, including those with special educational needs and disabilities;

- employers;
- the higher education sector.³

We must also consider aspects of government policy when we are directed to do so by the secretary of state.⁴

As a public body we are, under the public sector equality duty (PSED)⁵, to:

- eliminate discrimination, harassment, victimisation and any other conduct which is prohibited under the Equality Act 2010;
- advance equality of opportunity between people who share a relevant protected characteristic and people who do not share it;
- foster good relations between people who share a relevant protected characteristic and people who do not share it.

GCSE, AS and A level qualifications are designed and awarded by bodies described in the Equality Act 2010 as 'general qualifications bodies', which, for the purposes of AS and A level qualifications, we call exam boards. These bodies are required by the Equality Act 2010 to, among other things, make reasonable adjustments for disabled people taking their exams, except where we have specified that these adjustments should not be made.

When we decide whether these adjustments should not be made, we must consider:

- the need to minimise the extent to which disabled people are disadvantaged in attaining the qualification because of their disabilities;
- the need to make sure that the qualification gives a reliable indication of the knowledge, skills and understanding of a person upon whom it is conferred;
- the need to maintain public confidence in the qualification.

We have set out our equality duties in more detail in appendix A.

The law therefore sets out the framework within which we must operate. We are under a number of duties and we must aim to achieve a number of objectives. These

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³ Apprenticeships, Skills, Children and Learning Act 2009, section 129(2)(c).

⁴ Ibid., section 129(6).

⁵ Equality Act 2010, section 149.

different duties and objectives can, from time to time, conflict with each other. For example, if we regulate to make sure that a qualification gives a reliable indication of a student's knowledge, skills and understanding, a student who has not been able to demonstrate the required knowledge, skills and/or understanding will not be awarded the qualification. A student may find it more difficult, or impossible, to demonstrate the required knowledge, skills and/or understanding because she or he has a protected characteristic. This could put her or him at a disadvantage relative to others who have been awarded the qualification.

It is not always possible for us to regulate so that we can make sure both that qualifications give a reliable indication of knowledge, skills and understanding and that equality between people who share a protected characteristic is advanced. We must review all the available evidence and actively consider all the available options before coming to a final, rational decision.

The bodies we regulate have an obligation to comply with the *General Conditions of Recognition*. These are the rules that exam boards and the other awarding bodies that we regulate must follow. They require exam boards to:

- design qualifications that give a reliable indication of students' knowledge, skills and understanding;
- avoid, where possible, features of a qualification that could needlessly make a qualification more difficult for a student to achieve because he or she has a protected characteristic;
- monitor whether any features in their qualifications have this effect and if so, to make reasonable adjustments.

1.2 Our approach to equality

Qualifications cannot be used to mitigate inequalities or unfairness in the education system or in society more widely which might affect, for example, students' readiness to take the qualification and the assessments within it. Whilst a wide range of factors can have an impact on a student's ability to achieve a particular mark in an assessment, our influence is limited to the way the qualification is designed and assessed.

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⁶ General Conditions of Recognition, <u>www.gov.uk/government/publications/general-conditions-of-recognition</u>

In setting the overall framework within which exam boards will design, assess and award the reformed GCSE, AS and A level qualifications we want to understand the possible impacts of the proposals on people who share a protected characteristic.

The protected characteristics under the Equality Act 2010 are:

- age,
- disability,
- gender reassignment,
- marriage and civil partnerships,
- pregnancy and maternity,
- race,
- religion or belief,
- sex,
- sexual orientation.

Note that we are not required to consider the impact of the reforms on those who are married or in a civil partnership.⁷

1.3 Gathering evidence

Our analysis of the potential impact of the proposed reforms to A level and AS qualifications has been informed by:

- meetings with members of our Equality Advisory Group and the Access Consultation Forum (see appendix B for details of the membership of these groups);
- workshops at which we discussed our proposals with teachers and a wide range of individuals from awarding organisations, professional and subject organisations and representatives of people sharing protected characteristics;
- academic research reports;
- the external literature review⁸ we commissioned for the June 2013 GCSE reform consultation;

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⁷ Equality Act 2010, section 149.

 our recent equality analysis reports on reforms to GCSE, AS and A level qualifications.⁹

We asked three specific questions in our consultation which specifically targeted the impact of our proposals on equality.

- Q.72: We have identified a number of ways the proposed requirements for reformed GCSEs, A levels and AS qualifications may impact (positively or negatively) on persons who share a protected characteristic. Are there any other potential impacts we have not identified? If so, what are they?
- Q.73: Are there any additional steps we could take to mitigate any negative impact resulting from these proposals on persons who share a protected characteristic? If so, please comment on the additional steps we could take to mitigate negative impacts.
- Q.74: Have you any other comments on the impacts of the proposals on persons who share a protected characteristic?

The responses to these questions (see appendix C) and some comments made in response to other questions have informed our understanding of the potential impact of our proposals on students who share protected characteristics.

The following equality organisations responded to our consultation:

- British Association of Teachers of the Deaf (BATOD);
- English Federation of Disability Sport (EFDS).

Where an equality organisation has responded, we have directly quoted its views on specific aspects of how a reform will impact on people with protected characteristics. These organisations have a good insight into the issues faced by those with protected characteristics and we have therefore given due weight to their views. In

http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/equality-impact-assessment-on-the-a-level-decisions

⁸ Caplan, A. and Jackson, J. (2013) *GCSE Reform Equality Analysis: Literature Review*, http://webarchive.nationalarchives.gov.uk/20141031163546/http://www.ofqual.gov.uk/files/2013-06-11-annex-2-gcse-reform-equality-analysis-literature-review.pdf

⁹ GCSE Reform: Equality Analysis Report, http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/equality-analysis-report-on-reforms-to-gcses-from-2015 and New A level Regulatory Requirements: Equality Analysis Report,

addition we have considered all other responses to the consultation and quoted directly from many different respondents where appropriate. We have identified respondents where they have given us permission to do so.

1.4 Structure of this report

In this report we have considered, for the points on which we have consulted, the potential impact of our proposals on students who share protected characteristics and whether, and if so how, potential negative impacts could be mitigated. We have also considered the cumulative effect of all the proposals.

We have considered the potential impact our proposals may have in relation to socio-economic status, in addition to protected characteristics, where such concerns have been identified. There is evidence that social class intersects with certain protected characteristics such as racial group (Croxford, 2000). We have received a number of concerns from equality organisations and other respondents to the consultation about how our proposals may impact on students from disadvantaged backgrounds. However, socio-economic status is not, in itself, a protected characteristic, and therefore students who are disadvantaged by their socio-economic status are not protected by the Equality Act 2010 simply for that reason. Where, however, a student has a protected characteristic as defined by the Equality Act 2010, that student will, of course, be afforded protection in respect of that characteristic.

Where relevant, we have directly drawn on research carried out for the *GCSE Reform:* Equality Analysis Report¹⁰ and responses to the associated *GCSE* Reform Consultation: June 2013.¹¹ This is because our current proposals for GCSE, AS qualifications and A level raise similar concerns in terms of the impact on students with protected characteristics.

 $\underline{http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/equality-analysis-report-on-reforms-to-gcses-from-2015$

¹⁰ GCSE Reform: Equality Analysis Report,

¹¹ Results of *GCSE Reform Consultation – June 2013*, http://comment.ofqual.gov.uk/gcse-reform-june-2013

1.5 Out of scope

A concern expressed by a range of respondents was the separation of the AS qualification from the A level. Following our consultation on A level reform in 2012,¹² and as part of an exchange of letters between Ofqual's Chief Regulator and the Secretary of State for Education,¹³ we confirmed that the AS should become a separate, stand-alone qualification to be taught and assessed on a linear basis and at the same standard as the current AS qualification. As this decision has been taken, it is not appropriate for this report to analyse its impact on persons with protected characteristics.

We received a number of comments in the consultation which directly referred to subject content, in particular to the range of sports included under physical education qualifications. However, subject content is managed by the Department for Education. We will consider these comments in conjunction with the Department for Education's equality analysis of the subject content requirements when deciding whether or not to incorporate them into our regulatory framework.

1.6 Summary of the key impact identified

Our consultation and other research identified that students who do not perform well in exams, perhaps because of their disability, could be negatively affected if all assessment is by exam rather than by a combination of exam and non-exam assessment, particularly where assessment takes place only at the end of the course. These students may also be adversely affected where the proportion of non-exam assessment has been reduced relative to current GCSE, AS and A level qualifications.

http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/letter-from-secretary-of-state-on-a-level-reform-march-2013

http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/letter-to-secretary-of-state-on-a-level-reform-march-2013

¹² The findings report that followed our consultation is available from: http://webarchive.nationalarchives.gov.uk/20140807151639/http://ofqual.gov.uk/documents/analysis-of-the-consultation-carried-out-into-higher-education-involvement-in-gce-a-levels-and-amended-gce-a-level-criteria-design-rules

¹³ The three letters are available from: http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/letter-from-secretary-of-state-on-a-level-reform-january-2013

2. Proposals for assessing new GCSE, A level and AS qualifications

2.1 Assessment in new GCSE, A level and AS qualifications

GCSE, A level and AS qualifications are currently assessed in several ways:

- exams set and marked by the exam boards;
- written assessments completed under non-exam conditions in which students complete written assessment tasks, set either by the exam board or by the teacher. The tasks are usually marked by a teacher, with samples of marked work checked by exam-board moderators, who can adjust the marks to bring them in line with national standards. For some subjects, exam boards mark the tasks directly;
- practical assessments, such as performance in physical education or drama, usually marked by a teacher. In some cases, marks for these can be adjusted by exam boards in a similar way to marks for written non-exam assessment. In other cases no evidence of individual candidates' performance is available for moderators to check, and teachers' marks therefore stand. Some exam boards visit schools and colleges to mark performances directly.

We published two pieces of research in 2012: *Fit for Purpose*,¹⁴ which looked at perceptions of A levels among university staff, employers and teachers; and a report comparing A levels with similar qualifications internationally.¹⁵ Subsequently we consulted on A level reform.¹⁶

http://webarchive.nationalarchives.gov.uk/20141031163546/http://www.ofqual.gov.uk/files/2012-04-03-fit-for-purpose-a-levels.pdf

¹⁴ Fit for Purpose? The View of the Higher Education Sector, Teachers and Employers on the Suitability of A Levels. Commissioned by Ofqual:

¹⁵ International Comparisons in Senior Secondary Assessment, www.gov.uk/government/collections/international-comparability-research

¹⁶ The findings report that followed our consultation is available from: http://webarchive.nationalarchives.gov.uk/20140807151639/http://ofqual.gov.uk/documents/analysis-of-the-consultation-carried-out-into-higher-education-involvement-in-gce-a-levels-and-amended-gce-a-level-criteria-design-rules

Our new principles for reformed GCSEs were published in November 2013¹⁷ and are as follows.

- Non-exam assessment should only be used when it is the only valid way to assess essential elements of the subject.
- Non-exam assessment must strike a balance between valid assessment of essential knowledge and skills, sound assessment practice and manageability.
- Any non-exam assessment arrangements should be designed to fit the requirements of the particular subject, including the relative weighting of written exams and other components assigned to it.
- Non-exam assessment should be designed so that the qualification is not easily distorted by external pressures from the wider system.

Proposal

In our consultation we proposed two main changes to the way in which qualifications in the subjects on which we consulted are assessed. These changes are intended to strike a better balance between exam and non-exam assessment. In summary, we proposed to:

- a) define the percentage of marks to be allocated to exam and non-exam assessment, removing or reducing any current flexibility and promoting comparability between exam boards;
- b) reduce the proportion of non-exam assessment permitted in GCSE, A level and AS qualifications in physical education, music and dance, and in GCSEs in computer science;

A summary of the current and proposed assessment arrangement for the subjects we consulted on can be found in appendix D and our consultation document¹⁸.

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¹⁷ Full details of our GCSE consultation, including the final reports, are available from: http://webarchive.nationalarchives.gov.uk/20141110161323/http://comment.ofqual.gov.uk/gcse-reform-june-2013

¹⁸ www.gov.uk/government/consultations/gcses-as-and-a-levels-reform-of-subjects-for-september-2016

Impact

In this section we look at the general concerns regarding assessment in GCSE, A level and AS qualifications considered in this consultation. We discuss respondents' subject-specific concerns in Section 3 of this report.

Some respondents asserted that female students would be adversely affected. relative to male students, by the removal/reduction of non-exam assessment because they believed in the general perception that female students perform better than male students in coursework assessment. 19 We considered similar concerns in our earlier consultations about GCSE reform and the new regulatory requirements for A level and AS qualifications. We found there was a lack of conclusive evidence to support this position. We have looked at the available research on the relative performance of male and female students in exams and other forms of assessment, as detailed in appendix E.1. As part of the work we carried out for the GCSE reforms, we analysed the relative performance of male and female students in GCSE English between 1990 and 2000, and GCSE mathematics between 1988 and 1998, which does not support the view that female students have benefited more than male students in those subjects from the use of non-exam assessment (appendix E.2). These dates were selected for our analysis due to changes to the weightings of GCSE coursework during this time, and the findings remain relevant to our current proposals.

We have been told in many responses to our consultation that students who do not perform well in exams will be disadvantaged if they cannot compensate for poor exam performance by a stronger performance in non-exam assessment. Students might not perform well for a wide range of reasons. For example, they may find the exam experience stressful, they may experience fatigue because of a disability or because they are fasting, or their performance may be adversely affected by hay fever. BATOD commented on the "deleterious effect" on such candidates of qualifications being assessed entirely by exam, stating that "assessing a subject entirely by examination is not in the interest of these candidates" (consultation response).

In previous consultations we have been alerted to concerns that students who do not live in stable environments conducive to study, for example asylum seekers²⁰ who

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¹⁹ In our *GCSE Reform: Equality Analysis Report*, we also considered the results from the National Curriculum assessments. This information is available here: http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/equality-analysis-report-on-reforms-to-gcses-from-2015.

²⁰ In this context, asylum-seeking status is a proxy for national origin and hence racial group, a protected characteristic under the Equality Act 2010.

are not in settled accommodation, will be disadvantaged if most assessment is by way of exams.

Conversely, a model in which students are required to do assessments at many points throughout a two-year course can also provide challenges for students whose schooling and home lives may be disrupted. Such disadvantages are not always determined by students' protected characteristics as they can affect students from all backgrounds and with a range of protected characteristics. This can pose particular problems for government-housed asylum seekers, who can be moved at any time and such moves are not within their control.

A pregnant student who gives birth before, or is due to give birth during, the exam period will not be able to take exams at other times of the year. Likewise for a student who is undergoing gender reassignment during the exam period. However, non-exam assessments can potentially be taken at different times of the year and therefore a reduction or removal of non-exam assessment may disadvantage these students, and those with disrupted home and school lives, as they will be unable to acquire as many marks towards the overall grade.

We appreciate that:

- some students with certain types of disabilities;
- students with the protected characteristic of pregnancy and maternity;
- students who are seeking asylum;
- students who are fasting

may be negatively affected by our proposed reduction of non-exam assessment and that existing reasonable adjustments may be incapable of mitigating this entirely. Nevertheless, the decision is being taken in view of the problems that we have identified in regard to the maintenance of standards when non-exam assessment is used.²¹ Those problems with standards will lower the quality of assessments for all

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²¹ The problems we have identified can be found in more detail in the following reports:

[■] Fit for Purpose? The View of the Higher Education Sector, Teachers and Employers on the Suitability of A levels,

http://webarchive.nationalarchives.gov.uk/20141031163546/http://www.ofqual.gov.uk/files/2012-04-03-fit-for-purpose-a-levels.pdf

students and it is in no student's interest to have a qualification which, although he or she may have secured a higher grade, is potentially not a valid indication of knowledge, skills and understanding.

We did not identify any adverse impacts of the proposals on the basis of the age or sexual orientation of the student. Nor has any such adverse impact been communicated to us either through our meetings with representative groups or by respondents to our consultation.

2.2 Changes to assessment objectives

The assessment objectives for each subject describe the principal abilities that candidates taking that qualification must be given the opportunity to develop and demonstrate.

Proposal

We worked with subject and assessment experts to develop and improve the current assessment objectives. In revising these, we aimed to make sure they are as clear as possible and that they:

- fulfil their core purpose of describing the abilities that a candidate taking the relevant qualification should be required to demonstrate;
- specify only the abilities that candidates should be required to demonstrate, not the content itself;
- relate to each qualification as a whole, and so address the full range and balance of abilities that are relevant;
- are sufficiently precise and detailed that they can be used consistently for setting and evaluating assessments;
- provide a degree of flexibility in their application to enable alternative approaches where these are legitimate.
- Consultation on New A level Regulatory Requirements, http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/consultation-on-new-a-level-regulatory-requirements
- The report of the findings from our consultation,

 <a href="http://webarchive.nationalarchives.gov.uk/20140807151639/http://ofqual.gov.uk/documents/analysis-of-the-consultation-carried-out-into-higher-education-involvement-in-gce-a-levels-and-amended-gce-a-level-criteria-design-rules

We also developed the proposed assessment objectives so that they help to reflect and promote progression between GCSE, A level and AS qualifications.

Impact

We did not identify any general adverse impacts of our proposed changes to assessment objectives on the basis of any protected characteristic. Nor has any general adverse impact been communicated to us either through our meetings with representative groups or by respondents to our consultation. We discuss respondents' subject-specific concerns in Section 3 of this report.

2.3 The structure of GCSEs

We have previously confirmed that new GCSEs should only be tiered where a single set of assessments cannot in a valid and manageable way assess students across the full ability range.²² We decided that tiering should be used in new GCSEs only when essential.

Proposal

None of the GCSE subjects on which we consulted (see pages 3 to 4 for full details) are currently tiered. We proposed that the new GCSEs in these subjects should, likewise, be untiered.

Impact

In this section we look at the general concerns regarding tiering in the GCSE qualifications considered in this consultation. We discuss respondents' subject-specific concerns in Section 3 of this report.

We found in the GCSE reform equality analysis that tiering could have a negative impact on students who had the potential to achieve a top grade but could not do so because they were entered for the foundation tier. On the other hand, students who are faced with questions they cannot attempt to answer because they were inappropriately entered for the higher tier could fail to achieve any grade at all and/or be demotivated by the experience.

BATOD's response to this consultation supported this, commenting that tiered qualifications offer more able students the chance "to shine" and less able students to "show what they know and can do". Therefore BATOD believe tiering "should be used wherever possible".

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²² http://webarchive.nationalarchives.gov.uk/20141110161323/http://comment.ofqual.gov.uk/gcse-reform-june-2013

In an untiered qualification teachers do not have to take decisions about the tier for which an individual student should be entered. This negates the concerns that have been identified by some researchers that some teachers can underestimate a student's potential to achieve the higher grades and that such underestimation is more likely to occur for students from certain racial groups (Wilkin et al, 2010²³) and, for mathematics and science, for girls (Elwood, 2005²⁴). The potential impact of teacher expectation is also indicated by Hamer et al (2013, p.23) in their suggestion that the decision to enter students in different tiers is influenced by "factors such as socio-economic status". Our proposal that the GCSE qualifications considered in this consultation should remain untiered would address these concerns as they might otherwise be manifested in those subjects.

We did not identify any general adverse impacts of our proposed retention of untiered GCSEs on the basis of age, religion or belief, pregnancy or maternity or sexual orientation or as a result of gender reassignment. Nor has any general adverse impact been communicated to us either through our meetings with representative groups or by respondents to our consultation.

²³ Wilkin, A, C Derrington, R White, K Martin, B Foster, K Kinder and S Rutt (2010) *Improving the Outcomes for Gypsy, Roma and Traveller Pupils: Final Report and Literature Review*, Research Report DFE-RR043:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/181669/DFE-RR043.pdf (accessed 25/05/2013) in Caplan, A and J Jackson (2013) *GCSE Reform Equality Analysis: Literature Review.*

²⁴ Elwood, J (2005) 'Gender and Achievement: What Have Exams Got to Do With It?' *Oxford Review of Education* 31 (3) pp. 373–93 in Caplan, A and J Jackson (2013) *GCSE Reform Equality Analysis: Literature Review.*

²⁵ Hamer, J, R Murphy, T Mitchell, A Grant and J Smith (2013) *English Baccalaureate Certificate* (*EBC*) *Proposals: Examining With and Without Tiers*, Alpha Plus in Caplan, A and J Jackson (2013) *GCSE Reform Equality Analysis: Literature Review*.

3. Subject-specific proposals and impacts

This section sets out our final analysis of the potential impact of the proposed reforms on different groups of students for GCSE, AS and A level qualifications in the following subjects to be first taught in September 2016. As noted in the introduction, these are:

- GCSE Art and design
- GCSE Computer science
- GCSE, AS qualification and A level Dance
- GCSE, AS qualification and A level Music
- GCSE, AS qualification and A level Physical education

3.2 GCSE qualifications in art and design

Proposal

GCSEs in art and design are currently assessed wholly by non-exam assessment, because of the nature of the skills being assessed. We proposed that assessment should continue to be by non-exam assessment only and we believe the subject could not be assessed in a valid way unless students had to demonstrate their art and design skills. We proposed clearer wording for the assessment objectives.

Impact

We identified in our initial equality analysis²⁶ that some disabled students may be unable to demonstrate skills in the subject or have a more limited range of choices than others about the form in which they demonstrate their skills. However, we also noted that appropriate reasonable adjustments could be made to the conduct of the assessment to remove or reduce the disadvantage a disabled student would otherwise experience.

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www.gov.uk/government/consultations/gcses-as-and-a-levels-reform-of-subjects-for-september-2016

A student must not, however, use a practical assistant to demonstrate the skills being assessed.²⁷

We also proposed that the qualification should continue to be untiered. The National Society for Education in Art and Design agreed with this proposal in their consultation response, stating that:

The expertise and experience of our teachers shows that differentiation works across the full age range to include SEN. Differentiation is inherent in teaching art and design (consultation response).

We have not identified anything in our planned approach to art and design that would have a negative impact on students because of their racial group, gender, age, religion or belief, pregnancy or maternity, 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.

3.3 GCSE qualifications in computer science

Proposal

GCSEs in computer science are currently assessed by a combination of exam and non-exam assessment. We proposed to secure greater comparability between qualifications by specifying the balance of assessment type in the future, thus removing exam boards' choice and consequent variability in assessment structure.

We also proposed clearer wording for the assessment objectives.

Impact

Our proposed 20:80 balance of non-exam and exam assessment would reduce the percentage of non-exam assessment that is used relative to current GCSE computer science qualifications. This proposed reduction in the percentage of non-exam assessment was in line with our general principles for GCSE reform that we considered in detail in our previous equality impact analyses.

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²⁷ Details about the reasonable adjustments and access arrangements available for GCSEs, A levels and AS qualifications can be found in the Joint Council for Qualification's document 'Access Arrangements and Reasonable Adjustments 2014–15': www.jcq.org.uk/Download/exams-office/access-arrangements-and-special-consideration/regulations-and-guidance/access-arrangements-and-reasonable-adjustments-2014-2015. Exam boards may offer alternative reasonable adjustments to those set out in this document in order to fulfil their public sector equality duty.

One respondent expressed concern about the impact that the lack of non-exam assessment would have on girls, stating that:

Increasing the weighting to written exams is likely to reduce the chances of girls having success. Coursework has proved helpful in enabling girls, particularly in computer science and 30–40% coursework seems to achieve optimum gain. There is an acute shortage of girls in this subject and related careers, reducing the coursework weighting is unhelpful (personal response to consultation).

We have addressed the lack of conclusive evidence to support this view in more detail in our equality analysis reports relating to GCSE reform²⁸ and the new A level regulatory requirements.²⁹

We have not identified anything in our planned approach to computer science that would have a negative impact on students because of their disability, racial group, age, religion or belief, pregnancy or maternity, 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.

3.4 GCSE, A level and AS qualifications in dance

Proposal

Dance is a performance-based subject. The current and proposed assessment arrangements and assessment objectives reflect this. We proposed to reduce the percentage of non-exam assessment in GCSE by 20 per cent, in A level by ten per cent and by five per cent in the AS qualification.

Impact

The performance skills required for the subject may be difficult for some disabled students to demonstrate. However, the skills can be shown in different ways, making the subject accessible to most disabled students, with or without the need for a reasonable adjustment. Some disabled students might not be able to undertake the performance elements because of their disability. We have specified, using our powers under the Equality Act 2010, that a disabled student can be exempt from a

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²⁸ http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/equality-analysis-report-on-reforms-to-gcses-from-2015

²⁹ http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/equality-impact-assessment-on-the-a-level-decisions

maximum of 40 per cent of the assessments for a GCSE, A level or AS qualification and have their marks from the assessment they are able to take scaled up. We proposed that the percentage of marks allocated to the performance assessment objective for GCSE, A level and AS qualifications in dance will be less than 40 per cent. This would allow a disabled student who was unable to undertake the performance assessment to be granted an exemption from the assessment and to have their marks from the remaining aspects of the qualification scaled up.

Three dance teachers voiced concerns which indicated that the increased proportion of exam assessment in GCSE dance qualifications could have an adverse effect on students with English as an additional language (EAL) and students with special educational needs and disabilities (SEND). A course leader for dance in a secondary school commented that "the students who tend to opt for dance as a GCSE in my organisation have low literacy skills but are exceptional performers" (consultation response). Another dance teacher said that "young people with language or communication barriers can often achieve well in dance, as it allows physical representation of knowledge, skills and understanding through performance and choreography. A greater emphasis on the written form would not allow them to necessarily achieve so well" (consultation response). The third teacher said "I have found it to be a subject where EAL students can achieve well despite limited English literacy skills" (consultation response).

BATOD's response supported these views, stating that our proposals for GCSE Dance "would disadvantage deaf students, as for many of them the written exam is the part that they already find challenging. Deaf pupils are able to do well in all the practical aspects" (BATOD consultation response). BATOD also raised concerns that the written paper in GCSE dance qualifications is "more a test of their English languages comprehension rather than a test of their actual knowledge of the subject" (BATOD consultation response). This links to BATOD's wider concerns about the clarity of exam questions, even where modified question papers are used. We expect exam boards to provide exam questions which set out clear expectations for all students.

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³⁰ Exam boards are required to have in place clear arrangements for making reasonable adjustments in relation to their qualifications as part of their duties under our *General Conditions of Recognition*. We describe these duties in more detail in section 1.1. Modified question papers are one way in which exam boards fulfil their duty. Schools can ask for question papers to be modified so that questions are expressed in more straightforward language. Some exam boards modify their question paper at source, meaning that all students receive the same question paper and no further modification of language is possible for students with disabilities.

The Association for Physical Education (AfPE) raised a concern about gender, commenting that "there could be a significant drop in the number of young people who opt for dance, particularly girls" (consultation response). AfPE did not explain why it believed the reduction in non-exam assessment would lead to a drop in female students choosing to study these dance qualifications, although we do recognise that the majority of students taking these qualifications are female³¹.

Some respondents to our consultation raised a concern that our proposals would increase the amount of time spent preparing for a written exam, reducing the time available for students to practice their performance skills. These respondents believed that "this will [would] disadvantage students whose circumstances will not allow them to take additional practical classes outside school" (consultation response). As we set out in Section 1.4 above, socio-economic differences are not protected under the Equality Act 2010. However, it is possible that our proposals may have a disproportionate impact on students from certain cultural and racial backgrounds, depending on the demographic of schools in deprived areas.

We have not found evidence to confirm the concerns above regarding female students and students from certain socio-economic backgrounds but we will consider the impact of our proposals on these groups as part of our future monitoring of the qualifications.

We have not identified anything in our planned approach to dance that would have a negative impact on students because of their age, religion or belief, pregnancy or maternity, 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.

3.8 GCSE, A level and AS qualifications in music

In current GCSEs in music, 60 to 80 per cent of the marks are allocated to non-exam assessments. The actual forms and balance of assessment types vary between exam boards.

In current A level and AS qualifications in music, 60 to 70 per cent of marks are allocated to non-exam assessments.

Proposal

We are proposing to reduce the percentage of marks allocated to non-exam assessment in GCSE, A level and AS qualifications in music to 60 per cent, reflecting the balance between the practical and theoretical elements in the subject content.

We proposed to make the assessment objectives for music clearer and that the current permitted weighting ranges in GCSE and AS qualifications should be replaced with an absolute weighting. This would enhance comparability between different qualifications.

We proposed, however, to permit a small amount of flexibility for A level qualifications in assessment objectives 1 (AO1) and 2 (AO2).³² This would allow for qualifications that enable students to specialise in either performing or composing. The specialism is restricted to 10 per cent of the total marks available for the qualification. This prevents the course of study becoming too narrow, allows students to develop skills in both areas and that the qualifications are comparable regardless of the chosen specialism.

Impact

Some disabled students might not be able to undertake the performance elements because of their disability. We have specified, using our powers under the Equality Act 2010, that a disabled student can be exempt from a maximum of 40 per cent of the assessments for a GCSE, A level or AS qualification and have their marks scaled up from the assessment they are able to take.

We proposed that the percentage of marks allocated to the performance elements in GCSE, A level and AS qualifications in music should be less than 40 per cent. This would allow a disabled student who was unable to undertake the performance assessment to be granted an exemption from the assessment and to have their

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³² We proposed the following assessment objective weightings at A level:

AO1: Interpret musical ideas with technical and expressive control and an understanding of style and context – 25 to 35%

AO2: Create, develop and refine musical ideas with technical control and expressive understanding, making creative and coherent use of musical devices, conventions and resources – 25 to 35%

AO3: Use analytical, evaluative and reflective skills to make critical judgements about music – 30%

AO4: Demonstrate knowledge and understanding of musical elements, musical contexts and musical language – 10%

marks from the remaining aspects of the qualification scaled up. This could make it possible for a disabled student unable to undertake that assessment to be awarded the qualification nevertheless. The proposed reduction in the percentage of marks allocated to assessing a student's performance may therefore make the qualification more accessible to some disabled students.

Concerns were raised by some delegates³³ at the consultation events that increasing the weighting of performance (included under AO1 for GCSE, A level and AS qualifications) could advantage students who could afford to take independent music exams outside curriculum time. While socio-economic background is not in of itself a protected characteristic, there is evidence demonstrating connections between disadvantaged students and racial groups, as we discuss in Section 1.4. It is therefore possible that increasing the weighting of performance could indirectly discriminate between students from different racial groups.

Delegates also commented that the proposed AO3 and AO4 for A level and AS qualifications could have a negative impact on students from different racial groups. If a student's cultural background is influenced by forms of world music with a limited tradition of discussing music in an academic form, this could make achievement of AO3 and AO4 challenging. For example, a student may find a greater quantity of academic writing about Mozart than about an equivalent Javanese composer. Therefore a student choosing to discuss a composer or music genre highly relevant to their cultural background may find they are unable to achieve as highly as a student from a tradition of Western classical music. The Department for Education is currently considering the content for A level and AS qualifications in music. There has been strong support for the content to include a mandatory section relating to music that is not from the Western classical tradition. This proposed content would mitigate the issue identified by the delegates by placing all students at the same disadvantage. Some students may in fact find that a non Western cultural background becomes an advantage.

We have not identified anything about the proposed changes that would have an adverse impact on students because of their age, religion or belief, pregnancy or maternity, 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.

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³³ Delegates at the music consultation event in September 2014 included representatives from schools, colleges, exam boards (including from ABRSM, the awarding body of the Royal School of Music), subject associations and the music industry.

3.9 GCSE, A level and AS qualifications in physical education

Proposal

Physical performance is an essential element of physical education. The current and proposed assessment arrangements and assessment objectives reflect this. We are proposing to reduce the percentage of non-exam assessment in GCSE from 60 per cent to 30 per cent. We are proposing that the percentage of non-exam assessment in both A level and AS qualifications in physical education should be 30 per cent.

Currently GCSEs in physical education are not tiered. We proposed that the new GCSEs in physical education should not be tiered either.

Impact

The performance skills required for the qualifications can be demonstrated in different ways, making the qualification accessible to most disabled students with or without the need for a reasonable adjustment. We have specified, using our powers under the Equality Act 2010, that a disabled student can be exempt from a maximum of 40 per cent of the assessments for a GCSE, A level or AS qualification and have their marks from the assessment they are able to take scaled up. The proposed reduction in the element of performance-based assessment at GCSE could make it possible for a disabled student unable to undertake that assessment to nevertheless be awarded the qualification. The proposed reduction in the percentage of marks allocated to assessing a student's performance may therefore make the qualification more accessible to some disabled students.

However, a number of teachers and educational specialists disagreed with the proposed proportion of 30 per cent of non-exam assessment, in particular with regard to GCSEs in physical education. For example, a PE teacher commented that the proposed percentage would "effectively shut off physical education to students who struggle with the written aspects of the current GCSE" such as students with severe dyslexia (consultation response). A faculty leader in physical education indicated that this was exacerbated by changes to BTEC qualifications in physical education "so the vocational students will struggle to experience success as they used to" (consultation response). An academy also voiced concerns about the quantity of exam-based assessment:

For many thousands of pupils, many of whom are less academic, GCSE PE is one of the only opportunities to shine.... The new proposed format and weighting of marks will only serve to create a massive divide between pupils of higher and lower academic ability. Unfortunately many thousands of pupils will just not be able to perform well enough in an exam that accounts for 70% of the marks (consultation response from academy).

The Association for Physical Education added that our proposals would not only have a negative impact on students with disabilities, but also on racial groups and gender:

We are concerned about the impact on gender, ethnicity and disabled students in relation to... the assessment weighting. Many students in these categories with the right opportunities excel in a practical context.... [This could be mitigated by] inclusive accessibility through a balanced practical weighting for non-examined practical activities... (consultation response from the Association for Physical Education).

Students' experience of, and performance in, different sports may vary according to their gender, racial group, religion or belief. However, the required performance skills can be demonstrated in a wide range of sports, giving choice to students. Concerns were raised by respondents to the consultation, including the English Federation of Disability Sport, in relation to the type and number of permitted activities outlined in the proposed content for GCSEs, A levels and AS qualifications in physical education. It is not appropriate for us to comment on these concerns in this report as the content is the responsibility of the Department for Education.

In contrast to other subjects, a number of respondents to the consultation disagreed with our proposal to retain untiered GCSEs in physical education. Several heads of PE departments believed that tiering "would enable all students to access a paper that they could have a chance to do well in" (consultation response from head of physical education). Another respondent believed:

Having tiered GCSEs would allow more access for lower ability pupils to achieve a higher grade as opposed to having just one exam for all. The reading age for the GCSE PE exam is currently set at around age 16 and a lot of pupils at our school do not have a good enough reading age to access this paper fully and having the tiered exams could also cater for this to allow all to access at a level appropriate for them (consultation response from head of department for physical education).

Another respondent linked these concerns not only to students with special education needs and disabilities but also students with English as an additional language. The respondent said that the "theory aspect was hard for [these students] before" but could now be "unobtainable" even though they could be "able sportsperson[s]" (consultation response).

We researched tiering as part of our work on GCSE reform in 2013³⁴ and subsequently asked for views as part of the GCSE reform consultation³⁵. We concluded³⁶ that qualifications should be tiered only where one exam cannot assess students across the full ability range in a way that enables them to demonstrate their knowledge, understanding and skills in the subject. This means all students will have the opportunity to be awarded the highest grades. It is possible that students who are less engaged with academic work may be more likely to achieve higher grades in subjects in which they have a particular interest. It would therefore be unfair to limit the opportunity for such students to be awarded the highest grades. We have addressed concerns relating to appropriate language in assessments in Section 3.4.

We have not identified anything about the proposed changes that would have an adverse impact on students because of their age, religion or belief, pregnancy or maternity, 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.

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http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/summary-on-reforms-to-gcses-from-2015/

http://webarchive.nationalarchives.gov.uk/20141031163546/http://www.ofqual.gov.uk/files/2013-06-11-annex-4-technical-paper-on-tiering.pdf

³⁵ http://comment.ofqual.gov.uk/gcse-reform-june-2013

Appendix A: Our equality duties

A.1 Public sector equality duty

We have a duty under the Equality Act 2010 to:

- eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act;
- advance equality of opportunity between people who share a relevant protected characteristic and people who do not share it;
- foster good relations between persons who share a relevant protected characteristic and people who do not share it.

In advancing equality of opportunity between persons who share a relevant protected characteristic and who do not share it, we must, in particular:

- remove or minimise disadvantages suffered by people who share a relevant protected characteristic that are connected with that characteristic;
- take steps to meet the needs of people who share a relevant protected characteristic where their needs are different from the needs of people who do not share it;
- encourage people who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such people is disproportionately low.

To foster good relations between people who share a relevant protected characteristic and people who do not share it involves, in particular, tackling prejudice and promoting understanding.

The protected characteristics are:

- age
- disability
- gender reassignment
- pregnancy and maternity
- race
- religion or belief

- sex
- sexual orientation.

A.2 Additional equality duties

As the qualifications regulator for England, we have further duties under the provisions of Sections 96(7) and 96(8) of the Equality Act 2010 for "relevant qualifications" (GCSEs, A levels and so on). We must:

- determine any limitations on the use of reasonable adjustments for disabled students;
- when determining any such limitations:
 - minimise the extent to which disabled people are disadvantaged in attaining the qualification because of their disabilities;
 - make sure that the qualification gives a reliable indication of the knowledge, skills and understanding of a person upon whom it is conferred;
 - maintain public confidence in the qualification.

We also have a duty under section 129(2)(b) and 129(9) of Apprenticeships, Skills, Children and Learning Act 2009 to consider the reasonable requirements of students, including those with learning difficulties. A 'person with learning difficulties' means:

- children with special educational needs;
- other people who have a significantly greater difficulty in learning than the majority of people of their age;
- other people who have a disability which either prevents them from or hinders them in making use of educational facilities of a kind generally provided for people of their age.

The awarding organisations we regulate are subject to equality duties in their own right, including making reasonable adjustments in both general and vocational qualifications.

Appendix B: The Equality Advisory Group and Access Consultation Forum

As part of our pre-consultation work, we carried out an equality analysis screening exercise and discussed our proposals with our Equality Advisory Group and the Access Consultation Forum.

The Equality Advisory Group provides us with expert external advice, challenge and feedback on equality issues relating to the regulation of qualifications and assessments. We appoint members of the group using an open appointments process so that the membership includes experience of the range of protected characteristics. Group members are appointed for their personal expertise and experience and not as representatives of a particular group or characteristic. The group is invited to consider and advise on:

- the equality implications of significant reforms to qualifications and regulatory arrangements in their early stages and then as the reforms progress;
- the equality issues that arise from issues of strategic importance;
- our arrangements for assessing and managing equality issues in respect of our regulatory role.

The Access Consultation Forum is a multi-stakeholder group which supports our understanding of matters that affect disabled learners accessing qualifications and assessments. The members of the group are drawn principally from awarding organisations and groups representing disabled students and their interests. The Forum advises us on:

- accessibility of the qualifications that we regulate and their assessments;
- reasonable adjustments to assessments.

Appendix D: Proposed weighting of exam and non-exam assessment in GCSE, A levels and AS qualifications

Subject	GCSE		A level		AS qualification	
	Current	Proposed	Current	Proposed	Current	Proposed
	weighting of	weighting of non-				
	non-exam	non-exam	non-exam	non-exam	non-exam	exam
	assessment	assessment	assessment	assessment	assessment	assessment
Art and design	100%	100%	N/A		N/A	
Computer science	25–60%	20%	N/A		N/A	
Dance	80%	60%	55%	50%	60%	50%
Music	60–80%	60%	60–70%	60%	60–70%	60%
Physical education	60%	30%	35–50%	30%	35–50%	30%

Appendix E: Gender in relation to modular/linear assessment

As part of the work we carried out in 2013 on the proposed reforms for GCSEs,³⁷ we reviewed the existing research and statistical evidence on the impact of modular and linear assessment on female and male students. We did this to address the commonly held perception – expressed by respondents to the consultation and by individuals in our pre-consultation work – that girls are better at coursework than they are at examinations. This work was done in respect of GCSEs but we consider that this work is also relevant to A levels given the similarity in our current proposals and the subsequent similarity in responses to our A level consultation.³⁸ These reviews are set out in sections E.1 and E.2.

E.1 GCSE coursework and girls

Evidence from some studies shows that coursework, together with the modular structure of GCSE exams, has had a positive impact on girls' performance. Tim Oates (Cambridge Assessment, 2012) cites several researchers (Boaler, Murphy, William, Elwood, Epstein, Rudduck, and Younger and Warrington) who agree that girls do better in qualifications with coursework for a number of reasons. Firstly they do well when they can discursively explore a subject, and second they attend to all the pieces of work which contribute to the end grade even if they only count for a small percentage, whereas boys place greater status and emphasis on the 'big bang' of the exam. Oates concludes that all the small bits of diligence on the seemingly insignificant pieces of coursework add up to a better overall exam grade for girls.

A report by Ofsted (2008a) states that the gap between girls' and boys' achievement at GCSE has been roughly the same for several years. It acknowledges that whilst there are statistical difficulties in analysing the O level and CSE results of the 1980s, they appear to show that girls were already improving their performance before GCSEs were introduced. The report states that changes made to GCSE criteria in 1994, which reduced the coursework element, did not immediately reduce the superiority of girls' performance. A report on coursework by the Qualifications and Curriculum Authority (2006) looked at the impact of the reduction in coursework

³⁷ GCSE Reform: Equality Analysis Report, http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/documents/equality-analysis-report-on-reforms-to-gcses-from-2015.

³⁸ Consultation on New A level Regulatory Requirements, http://webarchive.nationalarchives.gov.uk/20141110161323/http://comment.ofqual.gov.uk/a-level-regulatory-requirements-october-2013.

weighting, and when considering English, where the weighting was reduced from 100 per cent to 40 per cent, the changes did nothing to narrow the performance gap between girls and boys. The report found that the gap in attainment between the genders widened between 1993 and 1994.

A report by the then Department for Children, Schools and Families (DCSF, 2009) in 2009, looks at the gap in attainment by gender at GCSE between 1986 and 1998. The report states that the introduction of coursework in 1988 coincides with girls' performance overtaking that of boys at 16. It goes on to explain that boys tend to favour multiple-choice exam questions whilst girls tend to perform better in essays and coursework. An evaluation of functional skills exams (Warwick University, 2007) found that multiple-choice questions disadvantage girls. A study into performance in geography (Ofsted, 2008b) found that boys' coursework is of a poorer quality than girls'. The report states that boys struggle to articulate explanations and develop reasoned argument in writing when compared with girls. They will also frequently spend more time on describing processes and graphing and mapping data, but they appear less interested in interpreting and analysing this in depth. The report suggests that this often inhibits them from attaining the higher levels. There is evidence (Ofsted, 2008a) that suggests, however, that boys performed well in coursework when given assistance with organising their work.

Coursework was replaced by controlled assessment in 2009. There is anecdotal evidence (QCA, 2007) that teachers perceive that girls preferred coursework to controlled assessment owing to the fact that it allowed them to reflect on their work and redraft. A study by the Centre for Education and Employment Research (University of Buckingham, 2011) states that the change from coursework to controlled assessment has not had an impact on the gender attainment gap, and it speculates that this is because of the modular structure of the GCSE.

September 2012 saw the effective end of the modular GCSE. There has been speculation in the press that these changes will disadvantage girls (BBC, 2013). When considering modular versus linear assessment, Cambridge Assessment (2010) found that students opting for certificating at the beginning or midway through the course may be at a disadvantage compared with those who opt for certificating at the end, and that girls might be at a greater disadvantage than boys. According to the report, this suggests that students, in particular girls, could benefit from delaying examination to the later part of the course. The report also found, however, that in some cohorts girls following a linear-assessment route and certificating early in the two-year course had higher probability of achieving a certain grade or above than those who certificated late.

E.2 Statistics showing results of GCSE English and GCSE mathematics coursework

By looking at examples of past changes to coursework arrangements, it is possible to gauge what impact they had on results statistics. However, coursework weightings in individual subjects have been largely stable over the years so good examples are scarce.

The best example involves GCSE English. By the early 1990s about two-thirds of 16-year-olds were taking GCSE English through syllabuses that had no examinations, that is to say were 100 per cent coursework. Following a change to the subject criteria, weighting of the coursework was reduced to 40 per cent. The first results for the new specifications were issued in summer 1994. There was much concern at the time that the change could damage national results; in reality, the proportion achieving grades A* to C rose from 57 per cent in 1993 to 58.4 per cent in 1994.

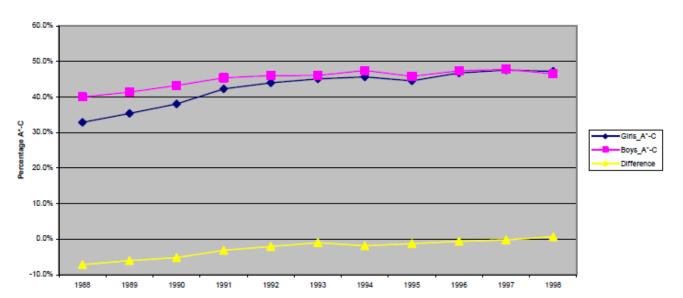
One feature of GCSE English at the time was the differential performance of boys and girls (see yellow line on the chart in figure 3). For those who thought that coursework gave girls a particular advantage, it would be a surprise to learn that reducing the coursework weighting from 100 per cent to 40 per cent did nothing to narrow the performance gap. In fact it widened between 1993 and 1994 at grades A* to C from 14.9 per cent to 16.3 per cent. (In 2012 it was 14.6 per cent.)

GCSE English 1990-2000 70.0% 60.0% 40.0% 20.0% 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

Figure 3: Differential performance of boys and girls in GCSE English (1990–2000)

Another example involves GCSE mathematics from the same time period. For the first three GCSE mathematics exams, coursework was optional and large numbers of

schools and colleges did not choose it. From 1991 to 1993 it was a compulsory element weighted at a minimum of 20 per cent. From 1994 it again became optional. The yellow line on the chart of GCSE mathematics results, shown in figure 4, gives



GCSE Mathematics 1988-1998

no real indication of the changes to coursework that occurred between 1990 and 1991 or between 1993 and 1994. (In 2012 boys outperformed girls at grades A* to C by 0.9 per cent.)

Figure 4: Differential performance of boys and girls in GCSE mathematics (1988–1998)

Given these results, it is difficult to conclude that major changes to coursework weightings will necessarily disadvantage girls.

References

Apprenticeships, Skills, Children and Learning Act 2009. (c22), London: HMSO: www.legislation.gov.uk/ukpga/2009/22/contents (accessed 28th March 2014).

BBC (2013) GCSE Changes to Final Exams 'Will Disadvantage Girls': www.bbc.co.uk/news/education-21955004 (accessed 4th April 2013).

British Dyslexia Association (2014) *Dyscalculia*. Available at: www.bdadyslexia.org.uk/about-dyslexia/schools-colleges-and-universities/dyscalculia.html (accessed 11th March 2014).

Boaler, J., Altendorff, L. and Kent, G. (2011) 'Mathematics and Science Inequalities in the United Kingdom: When Elitism, Sexism and Culture Collide,' *Oxford Review of Education*, vol. 37, no. 4, pp. 457–484.

Cambridge Assessment (2010) *Effects of Modularisation*. Available at: www.cambridgeassessment.org.uk/lmages/109794-effects-of-modularisation.pdf (accessed 31st March 2014).

Cambridge Assessment (2012) What is happening to the gap between boys and girls at GCSE and A level? Available at:

http://iaea2008.cambridgeassessment.org.uk/ca/digitalAssets/177523 Gender presentation white 1 .ppt (accessed 1st April 2014).

Caplan, A. and Jackson, J. (2013) GCSE Reform Equality Analysis: Literature Review. Available at:

http://webarchive.nationalarchives.gov.uk/20141031163546/http://www.ofqual.gov.uk/files/2013-06-11-annex-2-gcse-reform-equality-analysis-literature-review.pdf (accessed 20th January 2014).

Centre for Education and Employment Research/University of Buckingham (2011) *GCSE 2011*. Available at: www.buckingham.ac.uk/research/publications/gcse-2011-buckingham-ceer-2011 (accessed 31st March 2014).

Crawford, C., Dearden, L. and Greaves, E. of Institute for Fiscal Studies (2013) *When you are born matters: Evidence for England*. Available at: www.ifs.org.uk/comms/r80.pdf (accessed 31st March 2014).

Croxford, L (2000) *Inequality in attainment at age 16: A 'home international' comparison*, Centre for Educational Sociology, University of Edinburgh.

Cassen, R. and Kingdon, G. (2007) "Tackling low educational achievement – The Joseph Rowntree Foundation" in Caplan, A. and Jackson, J. (2013) GCSE Reform Equality Analysis: Literature Review. Available from:

http://webarchive.nationalarchives.gov.uk/20141031163546/http://www.ofqual.gov.uk/files/2013-06-11-annex-2-gcse-reform-equality-analysis-literature-review.pdf (accessed 20th January 2014).

Department for Children, Schools and Families (DCSF), (2009) *Influences and Leverages on Low Levels of Attainment – A Review of Literature and Policy Initiatives*. Available at:

<u>www.gov.uk/government/uploads/system/uploads/attachment_data/file/222160/DCS</u> <u>F-WBL-09-02.pdf</u> (accessed 1st April 2014).

Dyslexia Action (2014) *Dyscalculia*. Available at: http://dyslexiaaction.org.uk/dyscalculia (accessed 11th March 2014).

Elwood, J. (2005) 'Gender and Achievement: What Have Exams Got to Do With It?' Oxford Review of Education vol. 31, no.3, pp. 373–93 in Caplan, A. and Jackson, J. (2013) GCSE Reform Equality Analysis: Literature Review. Available at: http://webarchive.nationalarchives.gov.uk/20140807151639/http://ofqual.gov.uk/documents/analysis-of-the-consultation-carried-out-into-higher-education-involvement-ingce-a-levels-and-amended-gce-a-level-criteria-design-rules (accessed 20th January 2014).

Equality Act 2010, section 96. Available at: www.legislation.gov.uk/ukpga/2010/15/section/96

Equality and Human Rights Commission. *Protected Characteristics: Definitions.*Available from: www.equalityhumanrights.com/advice-and-guidance/new-equality-act-guidance/protected-characteristics-definitions (accessed 28th March 2014).

Hall, T., Healey, M. and Harrison, M. (2004) 'Fieldwork and disabled students: Discourses of exclusion and inclusion,' *Journal of Geography in Higher Education*, vol. 28, no. 2, pp. 255–280.

Hamer, J., Murphy, R., Mitchell, T., Grant, A. and Smith, J. (2013) *English Baccalaureate Certificate (EBC) Proposals: Examining With and Without Tiers*, Alpha Plus in Caplan, A. and Jackson, J. (2013) *GCSE Reform Equality Analysis: Literature Review*.

Higton, J., Noble, J., Pope, S., Boal, N., Ginnis, S., Donaldson, R. and Greevy, H. of the Ipsos MORI Social Research Institute (April 2012) *Fit for Purpose? The View of the Higher Education Sector, Teachers and Employers on the Suitability of A levels.* Commissioned by Ofqual. Available at:

http://webarchive.nationalarchives.gov.uk/20141031163546/http://www.ofqual.gov.uk/files/2012-04-03-fit-for-purpose-a-levels.pdf (accessed 31st March 2014).

Joint Council for Qualifications (2013a) Access Arrangements and Reasonable Adjustments: General and Vocational Qualifications. Available at: www.jcq.org.uk/exams-office/access-arrangements-and-special-consideration/regulations-and-guidance/access-arrangements-and-reasonable-adjustments-2013-2014-standard-pdf-version (accessed 6th March 2014).

Joint Council for Qualifications (2013b) *Instructions for Conducting Examinations*. Available at: www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations-for-conducting-examinations-2013-2014 (accessed 6th March 2014).

Kniveton, B.H. (2006) 'Gender and Achievement Among A-level Students Working Alone or in Pairs,' *Research in Education*, vol. 75, pp. 29–39.

Ofsted (2008a) *Boys' Achievement in Secondary Schools*. Available at: www.ofsted.gov.uk/resources/boys-achievement-secondary-schools (accessed 31st March 2014).

Ofsted (2008b) *Geography in Schools – Changing Practice*. Available at: www.ofsted.gov.uk/resources/geography-schools-changing-practice (accessed 31st March 2014).

Ofsted, (2013) *Schools' Use of Early Entry to GCSE Examinations*. Available at: www.ofsted.gov.uk/resources/schools-use-of-early-entry-gcse-examinations (accessed 31st March 2014).

Organisation for Economic Co-operation and Development (2012) *Programme for International Student Assessment* (PISA). Available at: www.oecd.org/pisa/aboutpisa (accessed 7th February 2014).

Organisation for Economic Co-operation and Development (2014) *Are Boys and Girls Equally Prepared for Life?* pp. 1, 7–8. Available at: www.oecd.org/pisa/pisaproducts/PIF-2014-gender-international-version.pdf (accessed 7th February 2014).

Qualifications and Curriculum Authority (2006) A Review of GCSE Coursework. Available at:

http://webarchive.nationalarchives.gov.uk/20141031163546/http://www2.ofqual.gov.uk/downloads/category/95-qualification-standards-reports?download=322%3Areview-of-gcse-coursework-2006 (accessed 1st April 2014).

Qualifications and Curriculum Authority (2007) *Final Report for Case Study Schools' Seminar* (unpublished work).

Qualification and Curriculum Authority (2007)

Developing Functional Skills Qualifications: Standards and Assessment Approaches for Functional Mathematics, English and ICT. Final Report and Recommendations Available at: http://dera.ioe.ac.uk/8894/1/QCA-trials-of-functional-skills1.pdf (accessed 1st April 2014).

Smith, J., Mitchell, T. and Grant, G. (2012) Analysis of the Consultation Carried Out into Higher Education Involvement in GCE A levels and Amended GCE A level Criteria Design Rules). Available at:

http://webarchive.nationalarchives.gov.uk/20140807151639/http://ofqual.gov.uk/documents/analysis-of-the-consultation-carried-out-into-higher-education-involvement-ingce-a-levels-and-amended-gce-a-level-criteria-design-rules (accessed 10th March 2014)

Smith, M.E. (2013), *Independent Chair's Report on the Review of Current GCE* 'Specification Content' Within Subject Criteria: A Report to Ofqual. Available at: http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/files/2013-09-06-smith-review-of-specification-content-july-2013.pdf (accessed 10th March 2014).

Snell, M., Thorpe, A., Hoskins, S. and Chevalier, A. (2008) 'Teachers' Perceptions and A-level Performance: Is There Any Evidence of Systematic Bias?' *Oxford Review of Education*, vol. 34, no. 4, pp. 403–23.

Wilkin, A., Derrington, C. White, R., Martin, K., Foster, B., Kinder, K. and Rutt, S. (2010) *Improving the Outcomes for Gypsy, Roma and Traveller Pupils: Final Report and Literature Review*, Research Report DFE-RR043. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/181669/DFE-RR043.pdf (accessed 31st March 2014) in Caplan, A. and Jackson, J. (2013) *GCSE Reform Equality Analysis: Literature Review*.

Woods, K. (2004) 'Deciding to Provide a "Reader" in Examinations for the General Certificate of Secondary Education (GCSE): Questions About Validity and "Inclusion," *British Journal of Special Education*, vol. 31, no. 3, pp. 122–27.

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