

**Independent Chair's report on the
review of current GCE 'specification
content' within subject criteria**

A report to Ofqual

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1. Introduction

1.1 Context of the report

The starting point for this report is the policy landscape that has emerged concerning A levels since the publication of the white paper *The importance of teaching*. The white paper's concern was to ensure that A levels enhanced their reputation as 'gold standard' qualifications by international comparison, preparing students for higher education (HE), the world of work and more broadly.

Three factors have been identified that determine the reputation and validity of the qualification, namely the subject content, the skills acquired and the assessment methodology. To address these issues, there is a strong desire to see:

- HE play a more active, substantial and ongoing role in A levels,
- the removal of the existing modular structures,
- the transition to a linear examination at the end of two years of study,
- to see where appropriate more external assessment.

Some of the priority aims resulting from these changes are to give students time for more, deeper learning and to improve their opportunities to demonstrate better synoptic understanding.

As part of the increased involvement of universities in the process, the Russell Group has volunteered to play a role in advising on A levels through the formation of the A Level Content Advisory Body (ALCAB), an independent company limited by guarantee. This body will advise Ofqual on what the Russell Group has termed the 'facilitating' subjects. ALCAB has committed to involving a range of other universities (including other high tariff universities) and the learned societies. However, given the Department for Education's requested timetable for introduction of the new A levels for first teaching by September 2015, it was necessary to set up a process prior to ALCAB's formation to provide the desired HE input to subject content for the facilitating subjects (not including languages), as well as six other high-volume A levels.

This resulted in the current review, examining 13 A level subjects: biology, chemistry, mathematics, physics, psychology, sociology, history, art and design, business studies, economics, English, computing and geography. This list includes all of the Russell Group's 'facilitating subjects' (with the exception of modern and classical languages). The process examined:

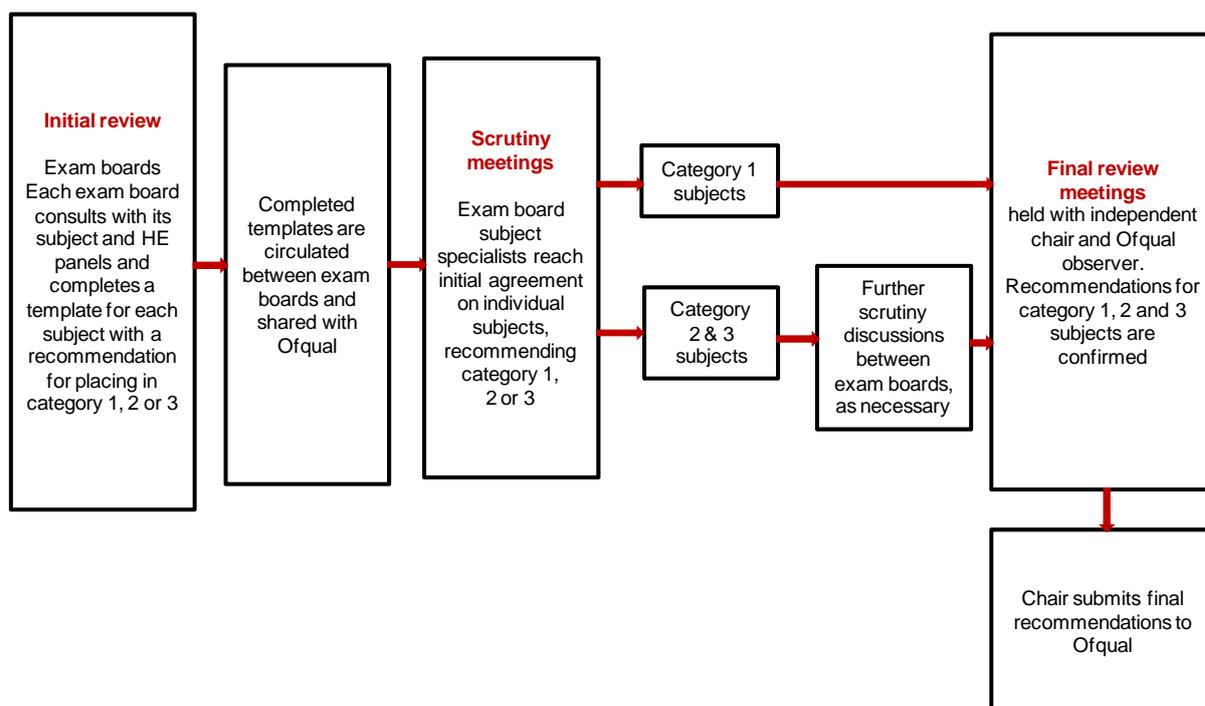
- what changes to subject criteria (content and skills) were thought necessary by stakeholders, (especially, but not exclusively HE)
- the likelihood of being in a position to offer a new A level by 2015 in each subject.

It is stressed that this review has concentrated on content, but that this naturally spilled into identifying skills and their development in the curriculum. There are some also implications for assessment that will need to be clarified in good time for 2015, but are beyond the scope of this report.

1.2 The background to the review process and its operation

The overall review process is indicated in the diagram below and effectively had three main stages:

- initial review, involving responses from teachers, higher education and learned societies
- scrutiny meetings, involving exam board subject specialists
- final review meetings, led by the Independent Chair.



Diagrammatic representation of the review process

1.3 Initial independent exam boards review

In the initial stage, the four exam boards that deliver the highest volume of A levels in England – AQA, OCR, Pearson and WJEC – reviewed the current ‘specification content’ within the subject criteria of the 13 A levels designated for this process with a view to delivering linear A levels for first teaching in 2015. A key part of this process was to ensure that the exam boards had extensively consulted to obtain good evidence from higher education (all exam boards have higher

education boards, but went beyond these for this review) as well as a range of other key stakeholders, including, learned societies, professional organisations, schools, industry and others.

The concerns that brought about this review were mostly about the extent to which A levels prepare students well for HE, so stakeholders were asked what changes were necessary for 2015 to make A levels more suitable for entry into HE. The review has attempted to address these concerns, looking for ways of adapting the 'specification content' of the criteria to allow a smooth progression from A level to degree course. However, the review has also considered the broader purposes of A levels, such as the value of the A levels to business/employers.

Initially, each exam board recorded its independent analysis and classified each subject in a category (1 to 3, see below).

1.4 The scrutiny meetings

A joint scrutiny meeting was held for each individual subject. At each meeting, exam boards shared their independent findings and tried to resolve any subject-specific issues before making a joint overall recommendation about classification to the Independent Chair. A report from each meeting covered the changes necessary to the A level, noting where these were agreed and where there were still outstanding items that needed to be resolved to allow progress.

1.5 Outline of the review meetings

The final review meetings for subjects were held from 24th June–2nd July. These involved the Independent Chair, the Senior Responsible Officer for each of the four exam boards and normally two other representatives from each of the exam boards; a subject specialist and a further senior person with responsibility in the subject area.

Three pieces of evidence were provided – the agreed report of the subject scrutiny meeting, the subject review template (attached as appendix) and the amended subject A level criteria. Each exam board subject team was asked to outline how it had gathered evidence and the breadth of that evidence, particularly the input from HE. It was clear that real, meaningful and widespread input from HE had been sought. They were also asked to comment on the impact of this evidence on content, skills and assessment, and how the scrutiny meeting had worked to come to these conclusions.

This report records the Independent Chair's findings after scrutiny and challenge by him and the four Responsible Officers at the final subject review meetings. Following general observations and a section looking at issues across the science subjects, details of individual subject reviews are attached as appendices.

1.6 Interaction of this process with ALCAB

If a subject is classed in category 3, work on developing that linear A level if it is a 'facilitating' subject will pass to the Russell Group's A Level Content Advisory Board (ALCAB). The Independent Chair understands that ALCAB will not need to carry out any immediate further work on subjects classified in this report in categories 1 and 2. ALCAB's key role regarding these subjects will be an annual review to determine whether or not they need to change in the light of developments in the subject area and as the effects of the changes proposed here work through to students progressing to HE. If a subject were category three and is not a facilitating subject there is currently no process for moving it forward, nor indeed is there any process for all the other non-facilitating subjects that have yet to be considered. This will need further consideration about how such subjects will be considered.

2. Outcomes of review meeting

Each subject review was designed to answer the questions:

- Do the current GCE content criteria, as exemplified by exam boards' current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standard entry requirement?
- If not, are minor or major changes required to secure this outcome?

2.1 Categorisation of subjects

The review was designed to place each subject in one of three categories:

1. The 'specification content' within the current criteria does not require change to allow change to linear form and allow progression to HE.
2. The 'specification content' within the current criteria requires minor change to be converted linear form and allow progression to HE.
3. The 'specification content' within the current criteria requires significant change to allow change to linear form and allow progression to HE.

Decisions about the categorisation of subjects clearly depend on the interpretation of the language in the category descriptions, in particular the phrase 'minor modifications'. For the purposes of the review, the Independent Chair assumed that a subject with no substantive change

(even though there may be minor ‘tidying-up’ changes to modernise terminology, improve clarity, etc.) will fall into category 1, a subject with minor, but substantive changes will be in category 2 and a subject with major substantive changes will be placed in category 3. For those subjects falling into categories 1 and 2 it is expected these will be available for teaching in linear form to the modified subject content by 2015 if the process that follows from this report can deliver to the requisite timescale.

2.2 Evidence for categorisation

The appendices set out in detail for each individual subject the evidence of the involvement of HE, including extensive input from HE across the whole spectrum of institutions, including the Russell Group, 1994 Group, other high tariff universities, learned societies and teachers. Extensive use was made of recent reports (e.g. by Nuffield, SCORE) in the review process. However, this report notes that owing to the pressures of time, acknowledged by Ofqual and the Department for Education, not all interested parties felt able to take the opportunity to feed into this review. To compensate for this, the exam boards were able to cite recent input through other mechanisms available to them on an on-going basis. The quality of the evidence and extent of this *prior* consultation by the exam boards was for the most part good/very good.

2.3 Recommendations for classification

Subject	Category	Notes*
Art & design	1	<ul style="list-style-type: none"> Originally classified as category 2 Ofqual checking whether unendorsed ‘Art, craft and design’ will be a requirement of new criteria Personal investigation and controlled assignment to be in scheme of assessment
Biology	2	<ul style="list-style-type: none"> Resolve issues about assessment of practical skills Exemplify mathematical skills and agree on assessment weighting Work with other sciences to agree assessment objective weightings
Business studies	2	<ul style="list-style-type: none"> Qualification name changed to ‘Business’ Draw up list of quantitative skills and agree on assessment weighting
Chemistry	2	<ul style="list-style-type: none"> Resolve issues about assessment of practical skills Exemplify mathematical skills and agree on assessment weighting Work with other sciences to agree assessment objective weightings
Computing	2	<ul style="list-style-type: none"> Qualification title should be changed to ‘Computer science’ Draw up list of mathematical skills and agree on assessment weighting 20% internal assessment of appropriate practical skills
Economics	2	<ul style="list-style-type: none"> Verify draft list of quantitative skills with HE panels and agree on assessment weighting

		<ul style="list-style-type: none"> Changes made to reflect real-world economics and financial economics
English language	2	<ul style="list-style-type: none"> Further discussion on assessment objectives, particularly with regard to quality of written communication and course work percentage Further discussion on how assessment methods can facilitate progression to HE
English language and literature	2	<ul style="list-style-type: none"> Further discussion on assessment objectives, particularly with regard to quality of written communication and course work percentage Further discussion on how assessment methods can facilitate progression to HE
English literature	2	<ul style="list-style-type: none"> Further discussion on assessment objectives, particularly with regard to quality of written communication and course work percentage Further discussion on how assessment methods can facilitate progression to HE
Geography	2	<ul style="list-style-type: none"> Establish core content and its percentage Further work on finding robust ways of assessing fieldwork skills List quantitative skills and agree on assessment weighting
History	2	<ul style="list-style-type: none"> Slight changes to performance descriptors required Further work on implementation of proposed new requirement to study chronological period of at least 200 years
Mathematics and Further mathematics	3	<ul style="list-style-type: none"> Large scale of change required to move to linear qualifications New qualifications will have to be carefully designed so that uptake of subject continues at existing levels
Physics	2	<ul style="list-style-type: none"> Resolve issues about assessment of practical skills Exemplify mathematical skills and agree on assessment weighting Work with other sciences to agree assessment objective weightings Resolve tensions with emerging physics GCSE
Psychology	2	<ul style="list-style-type: none"> Resolve issues about assessment of practical skills Exemplify mathematical skills and agree on assessment weighting Work with other sciences to agree assessment objective weightings (AO2 and AO3 will be different in psychology) Work on wording of AO3 to address practical skills requirement
Sociology	1	<ul style="list-style-type: none"> Originally classified as category 2 Only minor changes required

*For further details see Section 4 of the main report, *Science issues*, and Appendix 1, *Subject review templates*.

3. Considerations and risks

During the course of the discussions at the final review meetings, a number of common themes emerged.

3.1 Mathematical and numerical skills

- The evidence has identified a requirement for A level students to have stronger mathematical and numerical skills. These subject review meetings have examined this

requirement in appropriate subjects, and the report makes detailed recommendations to address this requirement.

- There was discussion about the presentation of the new A levels. If the new A levels are perceived to be explicitly increasing the mathematical content in a range of subjects, there is a risk that candidate entry in those subjects will fall. The changes to mathematical content in the criteria will need to be communicated very carefully, with emphasis that maths content is about relevant and suitable application of numerical knowledge, understanding and skills in each subject. For the most part, it is about making content and the necessary level explicit to all parties concerned to ensure consistency of approach.

3.2 Practical skills

- Higher education and learned societies have called for A levels to increase students' practical skills. Where these can be increased using external assessment, subject teams have made recommendations.
- The issue of assessing practical skills outside a controlled examination was discussed across the subject meetings, with debate about the definition and value of direct assessment. It was recognised that the issues varied from subject to subject – for example, in science the debate was about direct hands-on competencies, while in psychology the debate focused on ethics and the nature of investigative work within the subject.
- In certain subject meetings, the discussion focused on how to deliver HE's requirement of stronger practical skills while still maintaining a method of assessment that is robust.

3.3 September 2015 launch

- In 2015, A levels in both linear and modular form will be taught, and the impact of this should be considered. This could present some issues if there is any tendency for new A levels to be perceived as intrinsically harder and a redistribution of numbers between the two types of A level occurs.

3.4 A levels and AS levels

- The nature of the new AS level and how it is regarded will have an impact on the success of linear A levels. There was debate across the review meetings about the implications of the AS level on the new A levels. Questions were raised about the extent to which the AS level will be co-teachable with the A level, the relationship of the content of the AS level with the content of the new A level, and higher education's view of the decoupled AS level - whether

it will be used for university entry or will mostly be regarded as an opportunity for students to broaden their skills and knowledge.

- At each review meeting, the Independent Chair asked the subject teams if they would be able to deliver a standalone AS level alongside the new A level in 2015. For the majority of subjects there should be no problem in moving to a standalone AS.

3.5 A levels and GCSEs

- The subject specialists who carried out this review were aware of the emerging ideas behind the review of GCSE, but not the detail. New GCSEs will have an impact on A levels and vice versa, and the A level needs to be designed so that smooth progression can occur.
- If the new A levels are launched to a timeline such that progression is, initially, from current GCSEs, this carries a risk for some students starting the new A levels as they will have been prepared, through their GCSEs, for the old A levels and due attention needs to be paid to this point.

3.6 Linear A levels and synoptic assessment

- One of the aspirations behind new linear A levels is to increase opportunities for synoptic assessment, and this was discussed across the review meetings. In general, the exam boards felt that the move to linear qualifications would improve the opportunities for synoptic assessment for all subjects, although it is evident that some subjects lend themselves to synoptic assessment more than others.

3.7 Implications of further consultation

- In some subjects, the Independent Chair has asked the subject teams to carry out further work on their recommendations. If the outcomes of these discussions require further consultation, this could affect the ability of the exam boards to deliver the new qualification for first teaching in 2015, and for teachers to prepare for it.

3.8 Equality issues

- The subject teams did not consider equality issues in the review. However, it should be noted that as changes in subjects in categories 1 and 2 were designated as minor, this should also apply to any equality effects. Ofqual will need to judge the extent such an impact study needed for these instances.

4. Science issues

During the review, subject-specific groups considered the content of each science subject. In the final review meetings, it emerged that various recommendations and considerations were common across biology, chemistry, physics and psychology and should, in this report, be discussed together.

4.1 Mathematical skills

Evidence from HE and the learned societies identified the need to improve the development of mathematical skills across science A levels. Responding to these concerns, each set of science subject specialists has revisited the mathematical content in the subject criteria, making recommendations for additions and rewording. Details of these recommendations can be found in the individual subject appendices.

Following discussions in the various science review meetings, this report makes two further recommendations to strengthen the mathematical skills of A level science students.

Recommendation 1

In the science criteria, each subject will have a separate appendix listing the mathematical skills relevant to that subject. The report recommends that the criteria document includes exemplar guidance against each mathematical skill showing how that skill can be embedded in the subject, while making it clear that the mathematics underpins the entire subject. It is further recommended that for other subjects where there is clear mathematical content (e.g. economics, computing) that lists of the mathematical skills would be provided. For economics and business such lists will be agreed, but unlike the sciences these skill would not be embedded against specific elements of subject content. In economics and business the skills that candidates will be asked to demonstrate over a series of exams. The exact situations for mathematical skills for geography and computing needs confirming, but will include explicit reference to such skills in some form.

Recommendation 2

On the basis of a discussion about the assessment of the mathematical content in science A levels, this report also recommends that a minimum percentage of assessment of mathematical skills should be included in the assessment objective weightings. This would not be a discrete assessment objective – mathematics could be assessed within any of the assessment objectives. The report recommends that only mathematics at level 2 and above should be explicitly identified. The exam boards will carry out further work to establish the appropriate percentages of assessment of

mathematical skills and to work out how they can be assessed, but, as a starting point, the report recommends the following percentages:

Psychology	10%
Biology	10%
Chemistry	20%
Physics	50%

In recommending these percentages as starting points for discussion, this report draws on the evidence of the SCORE report *Mathematics within A-level 2010 examinations*, which broke down the range of mathematical content assessed across the exam boards in the sciences as Biology 13-24%, Chemistry 24-43% and Physics 47-57%. It should be noted that these slightly higher figures in the SCORE report include the assessment of level 1 mathematics, while this report recommends only the assessment of level 2 mathematics and above within science A levels.

The psychology subject team will carry out a similar exercise, taking 10% as a starting point.

These two recommendations will refocus the A level science criteria so that the assessment of mathematical skills becomes more prominent. The assessment of level 2 mathematical skills will reinforce the skills that students have already acquired in GCSE mathematics.

4.2 'Aims and objectives' and 'Schemes of assessment'

In the current A level science criteria, one set of *Aims and objectives* and one *Scheme of assessment* apply to all of the science subjects. During the scrutiny part of the review, each set of exam board subject specialists made minor revisions to these aims and objectives to reflect improvements identified by higher education and the learned societies.

Following discussion in the final review meetings, the report recommends that the single set of *Aims and objectives* and the one common *Scheme of assessment* be maintained in the new A level science criteria. The exam board subject specialists in biology, chemistry, physics and psychology will work together with Ofqual to produce one set of *Aims and objectives* and one *Scheme of assessment* that reflects their recommendations across the four subjects.

4.3 'Assessment objectives' and their weightings

The subject teams have examined the implications of changing to linear exams on the science criteria's assessment objectives and their weightings. Subject teams tackled these independently, so will now have to work together to align the wording and weightings to produce a

single set of objectives for the science criteria. At the review meetings the following assessment objective weightings were suggested as a starting place for further discussions:

AO1 25-35%

AO2 45-55%

AO3 15-25%

AO3 in psychology will be worded differently (as is the case in the current science criteria) and psychology will have different weightings, to be agreed, for AO2 and AO3. This concept of narrowing the ranges for the assessment objectives extended beyond the sciences.

4.4 Assessment of practical skills

There is consensus among HE, learned societies and teachers about the importance of practical skills in A level science. However, discussion of this raised important questions about whether and how these practical skills should be assessed. Further discussions need to take place, with input from Ofqual, about the acceptability of direct assessment and the consequences of this for the 2015 A levels. This report recommends that the development of new content should only take place once there is agreement about this.

5. Acknowledgements

I would like to mention several groups for their assistance in allowing this process to run swiftly and efficiently. All of the subject groups had prepared helpful and comprehensive Scrutiny Meeting reports. They also engaged constructively in the final Review Meetings and I thank Ofqual for providing observers for these meetings and their helpful input to them. The senior responsible officers of each of the four examination boards involved gave their full support to this process and committed significant time to the Review Meetings and I thank them for this. Particular mention should also be made to Roy Strachan (AQA) for collating and providing the paperwork in preparation for the Review Meetings and for the organisation of the logistics for those meetings. Also I would not have been able to complete this report without the first class support of Graeme Curry and Adam Child via their thorough note taking and initial drafting of this report, although I take full responsibility for any recommendations made and errors that remain in this final report.

Appendix 1 – Subject review templates

Art & Design	I
Biology.....	IX
Business Studies.....	XX
Chemistry	XXVIII
Computing.....	XLI
Economics	XLVI
English Language and Literature	LIV
English Language.....	LXI
English Literature	LXVIII
Geography.....	LXXVI
History	LXXXV
Mathematics and Further Mathematics	XCI
Physics.....	CII
Psychology	CX
Sociology	CXVII



Template for the Independent Chair's write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Art & Design
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	1

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair's approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each of the four awarding organisations undertook its own review and presented a summary report based on that to the scrutiny meeting. Each awarding organisation also took account of responses from learned societies to a request for evidence from JCQ.</p> <p>The sources of external evidence noted by each awarding organisation are as follows:</p> <p>AQA: HE Expert Panel, University of the Arts London, Arts Council England, Ofqual, AQA's Creative Education Conference (attendees included Creative Skillset and NSEAD).</p> <p>Pearson: HEI interviews, External Stakeholder Advisory Committee, Arts</p>	Yes



	<p>Council England, University of the Arts London, Ofqual, National Society for Education in Art and Design (NSEAD), The National Gallery, Tate</p> <p>OCR: HEIs, OCR's Creative Arts Forum, Arts Council England, National Society for Education in Art and Design (NSEAD), University of the Arts London.</p> <p>WJEC: HE Advisory Group, Teacher Expert Panel, Arts Council England, University of the Arts London.</p>	
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	<p>A scrutiny meeting was held on 11 June 2013, with subject specialists from each of the four awarding organisations being present.</p> <p>A note of the scrutiny meeting, agreed by all participants, is available to the final review meeting.</p>	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)	27/06/13	Yes

Part 2: the final recommendation for change

<p>Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> Minor changes are suggested to three of the nine 		Yes



<p>existing aims and objectives, on the basis that “capabilities” conveys a more appropriate concept than “powers”, that <u>communicating</u> of ideas, intentions and outcomes needs to be emphasised, and that the distinction between new and traditional media and technologies no longer needs to be made, as both now naturally co-exist within all routes available within A level Art & Design</p>	<p>Within the evidence, there are suggestions regarding the need for additional clarification and the possible inclusion of a reference to drawing within the aims and objectives. Following discussion, the consensus at the scrutiny meeting was that reference to drawing is more appropriate within the knowledge, understanding and skills section of the criteria. Hence only a small number of editing adjustments are suggested for the aims and objectives.</p>	
<p>Does subject content need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • Within the “Knowledge, Understanding and Skills” section, the phrase ‘in a variety of ways using drawing or other appropriate visual forms’ is introduced in order to indicate that appropriate emphasis should be placed in drawing as a means for recording experiences and observations. • An alternative wording is proposed in order to emphasise the permitted use of different media, indicating that learners can ‘work entirely in digital media or entirely in non-digital media, or in a mixture of both’, provided the aims and assessment objectives are met. • Additional exemplifications are provided for most of the endorsements in order to ensure that 	<p>HE evidence, reported by Pearson and WJEC in particular, indicates a renewed demand for drawing skills (as appropriate to the endorsement type, so the level will vary between endorsements). Following considerable discussion of how this should be reflected in the revised criteria it is suggested that this should be within the content section by indicating that experiences and observations should be “recorded in a variety of ways using drawing or other appropriate visual forms”.</p> <p>Within the evidence from HE and also from Arts Council England there is emphasis on the importance of different media but also on being able to work entirely in digital media or entirely in non-digital media.</p> <p>Within the evidence from HE there is encouragement to update terminology and exemplars, especially in relation to digital</p>	<p>Yes</p>



<p>contemporary approaches are appropriately recognised, and an apparent omission (ceramics) is corrected.</p> <ul style="list-style-type: none"> • It is suggested that a shortened title, “Photography”, is sufficient for that endorsement. • It is suggested that a new endorsement, “Applied”, should be added with a clear indication that it is vocational in nature and context, with an emphasis on meeting project briefs. 	<p>approaches.</p> <p>In the context of using more contemporary terminology, the current long title of the Photography endorsement seems inappropriate.</p> <p>Of several suggestions received in relation to the inclusion of new titles, agreement was strongest in relation to an “Applied” endorsement, which would secure the continued availability of an important progression route in the context of the likely ending of Applied GCEs and the continuing need for progression to Applied Art degree programmes.</p> <p>It was noted that there is some support amongst stakeholders for the addition of “Digital Arts” as a new endorsement, and that there are some undergraduate programmes with this title. Following discussion of this, the majority view was that the most appropriate response would be to ensure that the revised criteria placed sufficient emphasis on digital media, including through the exemplifications provided for each endorsement.</p> <p>Regulatory clarification is required regarding any rationale which may exist for requiring the general route is known as “unendorsed”.</p>	
<p>The rationale for awarding the category rating (1, 2 or 3) given at the top of the form <i>(Rationale here)</i></p>	<p>2 – Although there are numerous suggested changes to be made to the criteria, there is a considerable degree of agreement and the changes are not difficult to implement.</p>	<p>No – amended to category 1</p>



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Clarification is required from OFQUAL on whether the requirement for awarding bodies to offer an unendorsed version of 'Art, craft and Design' will remain in place when the new criteria are implemented.*
- *The appropriateness of continuing to use the term 'unendorsed' to describe the non-specialised version of the A Level. OFQUAL to consider this when agreeing the revising criteria.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *Amend the scheme of assessment so that it comprises two components: a personal investigation and a controlled assignment.*
- *Amend the details of the controlled assignment assessment component so that it may comprise an 'externally set task, brief or stimuli'.*
- *Amend the details of the personal investigation assessment component so that it includes the written element of no less than 1000 words.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and other bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level.*
- *The awarding organisations confirmed that the new A Level would be able to adopt a linear approach and that it also lends itself well to synoptic assessment.*
- *It was agreed in the review meeting that an applied endorsement would **not** be added to the criteria. Awarding organisations would instead amend their individual specifications to capture the applied nature of the subject within the range of current endorsements where appropriate.*
- *It was also clear from the discussion that by comparison the subject content was almost entirely appropriate for progression to HE and further study and much of the suggested change was very minor and this was more appropriately designated as a 1.*



As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.

Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith'.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> No changes are suggested to the assessment objectives, with their weightings being retained with the permitted percentages (20-30% in each case) being referred to as “ranges” rather than “tolerances”. 	<p>Very few observations have been made about assessment objectives within the evidence, and hence no changes are suggested.</p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> With up to three assessment components being permitted, it is considered that the only constraint that needs to be imposed is that one of these must be a Controlled Assignment based on a period of 15 hours of sustained focused work In order to strengthen the requirement for a written element, this is indicated as needing to be ‘no less than 1,000 words of <u>continuous</u> prose’ – hence this needs to be in addition to notes and annotations which may feature elsewhere in the work. In 	<p>The evidence includes no suggestion of a need to move away from the current approach of 100% internal assessment with external moderation. In order to allow flexibility in the design of assessment schemes, only one component is specific, the controlled assignment. There is the possibility of agreement on the inclusion of a Personal Investigation as a second required element within the assessment structure.</p> <p>Within the evidence from HE, there is reference to the importance of extended prose within the assessment. There is some divergence of</p>



<p>order to provide flexibility within the design of assessment schemes for individual specifications, this written element is not prescribed as having to be contained within a particular type of assessment component.</p>	<p>views regarding how to define the required length, with some indicating 1,000 words as a minimum and others 3,000 as a minimum. Given that writing will also be included as notes and annotations, the consensus at the scrutiny meeting was that a minimum of 1,000 words of extended prose would be appropriate.</p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <ul style="list-style-type: none">• As no changes are being recommended for the assessment objectives, none are considered necessary for the performance descriptors.	<p>No changes are proposed.</p>



Template for the Independent Chair's write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Biology
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair's approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	Each AO provided a report prior to the scrutiny meeting outlining their recommendations based on the evidence they had received from HE, Learned Societies, published reports and schools/colleges. Detailed information is included in the scrutiny meeting report for Biology. All AOs have undertaken extensive stakeholder engagement and to ensure that Biology A-level prepares learners for undergraduate study, all AOs are running HE panels, the membership of which has been submitted to Ofqual. Whilst the formal written response from the Learned Societies was disappointing, with many citing a short time scale as an issue, the AOs are working closely with Learned Societies as part of their stakeholder engagement strategies. NOWGEN (Joint venture between Manchester Biomedical Research Centre, Manchester University and Manchester NHS Trust) is working with both Pearson and AQA in connection with A-level	Yes



	<p>Biology. Meetings hosted by the DfE and attended by AOs, Learned Societies including the Society of Biology were cited as evidence.</p> <p>All of the AOs outlined how they collaborate with teachers through Forums, Panels, stakeholder meetings and online questionnaires ensuring the teacher voice is well represented in discussions relating to Biology. The Heads of Science from the 59 Club representing independent schools have provided feedback to all AOs.</p>	
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	<p>There was widespread agreement between the AOs at the scrutiny meeting. This was particularly the case with regards to recommendations to increase the mathematical content (at level 2) and the assessment objective weightings to meet the needs of HE and Learned Societies. This consensus was based on very clear and consistent feedback from HE, Learned Societies and published reports by SCORE.</p>	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)	<p>All four AOs have read this report in preparation for the final review meeting and have agreed with the recommendations and comments. Meeting held on 24/06/13</p>	Yes

Part 2: the final recommendation for change

<p>Consider the DfE's question: <i>Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?</i> i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <p>To position the sciences to better reflect the improvements</p>	<p>Evidence from HE, Learned Societies and published reports indicate that it is skills development rather than named subject content which is causing the most concern. In particular, the skills</p>	Yes



<p>identified by HE and Learned Societies the Biology scrutiny meeting recommended that the aims and objectives should be reworded as follows: AS and A-level specifications in a science subject should encourage learners to:</p> <ul style="list-style-type: none"> • develop essential knowledge and understanding of different areas of the subject and how they relate to each other. • develop and demonstrate a deep appreciation of the skills, knowledge and understanding of the scientific method; • develop confidence and competence in a variety of mathematical and practical skills; • develop their interest in and enthusiasm for the subject, including developing an interest in further study and careers in the subject; • appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society. 	<p>HE has referenced are the ability to problem solve, think independently and apply knowledge and understanding to scientific study.</p> <p>Please note the inclusion of bullet point 3 to address the evidence provided from HE and Learned Societies to improve mathematical and practical skills. The AOs agreed that this should be included in the overarching 'Aims and Objectives' as a principle of science to encourage teachers to embed these skills in their teaching and learning.</p>	
<p>Does subject content need to change? If so, what change is needed?</p> <p>1. Mathematical skills: To reflect the need to increase the mathematical content appropriate to Biology A-level the AOs have reviewed the table in Appendix 8 and have recommended the inclusion of the following: 91.9 Make order of magnitude calculations 92.1 Understand and use the symbols: =, <, <<, >>, >, α, ~. 92.4 Solve simple algebraic equations. 92.5 Use logarithms in relation to quantities that range over</p>	<p>1. Mathematical skills: Of the science A-levels, students studying Biology are least likely to be studying A-level Maths. There was consistent feedback from HE and SCORE (Report published SCORE – Mathematics within A-level Science 2010 Examinations) that the mathematical skills of students studying A-level Biology need to improve. There is general consensus that the additional maths content should include logs and exponentials, the calculation of concentrations and dilutions,</p>	Yes

<p>several orders of magnitude.</p> <p>93.4 Determine the slope and intercept of a linear graph.</p> <p>93.6 Draw and use the slope of a tangent to a curve as a measure of rate of change.</p> <p>94.4 Calculate areas of triangles, circumferences and areas of circles, surface areas and volumes of rectangular blocks, cylinders and spheres.</p> <p>The AOs agreed that the current Appendix 8 is misleading. The recommendation is to provide a separate appendix identifying the mathematical skills requirements for each science. This separate appendix would contextualise what mathematical skills are required in relation to the subject content and criteria. It has been proposed that one AO takes this work away and produces a draft outline of the new appendix which would be circulated between the other AOs for comment. It is important to note that whilst we reached a consensus regarding the additional mathematical content, a discussion did not take place as to how the mathematical content should be assessed and what weighting (if at all) should be applied to mathematical skills.</p> <p>2. Core content: Based on the evidence provided, all AOs agreed that the current 60/40 core content split should remain. The 40% provides enough flexibility for AOs to work collaboratively with HE and Learned Societies to include content outside the core that would enable innovation and differentiation between specifications. For example, an AO might work in collaboration with the British Mycological Society to develop an A-level Biology specification with additional content on fungi. Teachers value choice when</p>	<p>conversion rates and the use of units.</p> <p>2. Core content: There is general agreement expressed by HE, Learned Societies and teachers that the current core content of 60% is right. The 60/40 balance ensures that the essential principles and key content of Biology is covered whilst giving enough flexibility to AOs to collaborate with HE to cover related topics that differentiate their specifications. This encourages</p>	
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<p>selecting the appropriate specification for their learners.</p> <p>Appendix 1: Biology – Knowledge and Understanding</p> <p>In order to improve progression from KS4 and to enable AS to be co-teachable with A-level, based on feedback from teachers and HE the AOs are recommending changes to the grouping of content and in some cases rewording to ensure it is more appropriate for A-level study.</p> <p>These changes are:</p> <p>Grouping of content:</p> <ol style="list-style-type: none"> 1. The relocation of ‘Reproductive isolation can lead to accumulation of different genetic information in populations potentially leading to formation of new species’ from Cellular Control (27) to Biodiversity (21). 2. The relocation of ‘The sequence of bases in the DNA molecule determines the structure of proteins, including enzymes’ and ‘Enzymes catalyse the reactions that determine structures and functions from cellular to whole-organism level’ from Cellular Control (27) to Biological Molecules(24). 3. Ecosystems (25), bullet points 2 and 3 should be joined into one. ‘Energy flows through ecosystems and the efficiency of transfer through different trophic levels can be measured’ 4. The relocation of ‘ATP provides the immediate source of energy’ from Energy for Biological processes (28) to Biological molecules (24). <p>Rewording for A-level study:</p> <ol style="list-style-type: none"> 1. Changing ‘Organisms usually consist of one of more cells’ 	<p>innovation and provides teachers with choice which they value. There was general agreement from HE that the current content was fit for purpose. Each AO identified that at their HE panels there were isolated recommendations for additional topics to be included. There was no consensus from HE as to which additional topics should be included as recommendations varied depending on the expertise of that specific HE representative. For example, the Zoological representatives had different recommendations compared to the Medical School representatives. Similarly, some specialist Learned Societies are keen to ensure that A-level Biology includes content directly relating to their area of expertise. For example, in their formal response to the ‘subject criteria’ review The British Mycological Society requested that the biology subject criteria include the study of fungi. However, the general consensus is that the current core content is fit for purpose.</p>	
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<p>to 'The cell theory is a unifying concept in Biology'</p> <p>2. Changing 'Daughter cells formed during mitosis have identical copies of genes while cells produced as a result of meiosis are not genetically identical' to 'Daughter cells formed during mitosis have identical copies of genes while cells formed during meiosis are not genetically identical'.</p> <p>3. Adding in 'The genome is regulated by a number of factors'.</p> <p>4. Change the topic title 'Cellular Control' to 'Genetics and Evolution'</p> <p>5. Remove the wording 'including plants, animals and micro-organisms' from bullet point 20 as these are all living organisms.</p> <p>Rewording to reflect changes to the scheme of assessment brought about as a result of the decoupling of AS and the move to a two year linear assessment structure.</p> <p>18. Should be changed to: 'The knowledge and understanding set out in this appendix should comprise approximately 60 per cent of the AS and A-level specifications'.</p> <p>In the subject criteria document all references to A2 need to be removed. The AOs agreed that the Subject criteria need to be laid out in such way that they clearly identify what topics would be included in AS and what topics would be included in the full A-level. The table therefore needs changing or removing to ensure this is clear. There was discussion and general consensus that 'Biodiversity' as a topic should be studied at A-level and not AS.</p>		
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PEARSON



<p>The rationale for awarding the category rating (1, 2 or 3) given at the top of the form</p> <p>Each AO recommended a categorisation of 2 with strong agreement that the minor changes required could be addressed to enable the Biology A-level to be redeveloped for first teaching in 2015. A decision from Ofqual clarifying internal/external assessment in relation to practical skills would be required to meet this timescale. The AOs also agreed that consideration needs to be given to the effects of changes to the KS4 programme of study.</p>	<p>The evidence produced by the AOs outlining feedback from HE, Learned Societies, published reports and schools/colleges was consistent. The minor amendments proposed by the AOs to subject content focuses on improving the order in which content is taught and the move to a two year linear A-level and standalone AS, and reflects the feedback from HE that the current subject content is 'fit for purpose'. The proposed changes to the assessment objective weightings and in particular A02 is as a direct result of evidence from HE and Learned Societies that it is skills development rather than subject content which is causing the greatest concern.</p>	<p>Yes</p>
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PEARSON



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Resolve, working with Ofqual, issues about assessment of practical skills (see main report)*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *Mathematical skills – work on exemplary material for mathematical skills (see main report)*
- *Agree on the correct assessment weighting percentage for mathematical skills (see main report)*
- *Work across science subject teams on wording of common aims and objectives (see main report)*
- *Work across science subject teams on wording and assessment weighting of common assessment objectives (see main report)*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and learned bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level in 2015.*
- *While placing biology in category 2, I would note that it is at the category 3 end of category 2. This is because the subject team recommends the inclusion of a number of new mathematical skills in the criteria, and work will have to be done to embed these into the A level and work out how to assess these skills.*



As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.

Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith'.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <p>A01: Knowledge with Understanding AS level = 35-45% A –level = 25-35%</p> <p>A02: Application, analysis, evaluation & problem solving AS level = 45-55% A-level = 50-60%</p> <p>A03: Experimental skills and methods AS level = 10-20% A-level = 10-20%</p> <p>The recommendation of the scrutiny meeting for Biology was to decrease A03 from 20-40% to 10-20%. The reason for this recommendation was that whilst stakeholders and AOs acknowledge the importance of developing practical skills, the emphasis should not be put on the assessment of practical skills rather than teaching and learning in the classroom. The AOs were in agreement that no A0 weighting should have a range greater than 10% as this made comparability between AOs more problematic. As such the range on A03 has been reduced from 20% to 10%.</p> <p>Mathematical skills: It is important to note that whilst we reached a</p>	<p>There was unanimous agreement from HE, Learned Societies, research, SCORE and teachers that the current assessment objective weightings need to be reviewed. In addressing the weightings this would increase the focus on the application, analysis and evaluation of scientific knowledge. The AOs are also recommending a change to the wording of the assessment objectives to provide clarity, particularly in A02 which has greater focus on skills development. The weighting of A02 has also been increased as a direct result of evidence from HE and Learned Societies that it is skills development rather than subject content which is causing the greatest concern.</p> <p>Whilst there is widespread evidence from HE, SCORE, the Society of Biology and other Learned Societies citing the importance of practical skills, there is no consensus as to whether these need to be formally assessed. In particular this feedback related to improving students' confidence and competence. Teachers are also supportive of practical skills but expressed concerns over the method of assessment.</p>

<p>consensus regarding the additional mathematical content, a discussion did not take place as to how the mathematical content should be assessed and what a weighting (if at all) should be applied to mathematical skills.</p>	
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <p><u>Scheme of Assessment</u></p> <p>The scheme of assessment needs changing to reflect a maximum of 3 units.</p> <p>There was major disagreement regarding internal/external assessment as outlined in detail in the Scrutiny Meeting report. This will require clarity and a decision by Ofqual.</p> <p>The AOs agreed that moving to a two year linear qualification would in itself go some way to address synoptic assessment. It was agreed that the reference to synopticity which currently only applies to A2 should be extended and apply to both AS and A-level.</p>	<p>In the move from a 6 unit AS/A2 structure to a decoupled AS and two year linear A-level Ofqual in the 'Draft Conditions of Recognition' have stipulated that 'there will be no more than three assessment components for that qualification'.</p> <p>Clarity is required from Ofqual regarding internal/external assessment.</p> <p>Synoptic assessment is frequently cited by HE and Learned Societies as an area of improvement to better prepare learners for undergraduate study.</p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <p>The AOs expressed concerns regarding how the current 'performance descriptors' were being used by schools and colleges. They need to be reviewed once the subject criteria have been agreed.</p> <p>All AOs agreed that the definition of the purpose of A-level provided by Ofqual was useful and as such, having a clear definition for the purpose of AS would also be beneficial.</p>	<p>The only evidence cited relating to performance descriptors was that provided by teachers.</p>



Template for the Independent Chair's write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the Independent Chair of the final review meetings.	
Subject	Business Studies
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair's approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	Each awarding organisation provided a written submission of the evidence obtained to support their initial position, based on their consultations with new and existing HE and teacher forums. Specifically referenced in AO feedback were Nuffield research into the use of mathematics in business; a survey conducted with members of the Economics Business and Enterprise Association (EBEA) along with evidence from each AO's stakeholder advisory forum. These positions were summarised in written evidence to the review meeting.	Yes
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	A report of this meeting, which was attended by two representatives from each awarding organisation, has been submitted.	Yes
3. Final review meetings, led by the	28/06/13	Yes



independent Chair (Joint meetings, involving all four exam boards)		
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Part 2: the final recommendation for change

Consider the DfE's question: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?*

Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> Delete the word 'studies' from Business Studies Replace 'gain an holistic understanding of business' with 'gain an holistic understanding of <i>business in a range of contexts</i>. Replace 'generate enterprising and creative solutions to business problems and issues' with 'generate enterprising and creative <i>approaches</i> to business <i>opportunities, problems and issues</i>' Replace 'acquire a range of relevant business and generic skills, including decision making, problem solving, the challenging of assumptions and the quantification and management of information' with 'acquire a range of relevant business and generic skills, including decision making, problem solving, the challenging of assumptions and critical analysis' Add ' <i>apply numerical skills in a range of business contexts</i>' 	<p>Evidence gathered from higher education and reported upon in the individual subject templates indicates that they find the title Business Studies misleading and outdated. Moreover they wanted to ensure that business the subject takes account of a global perspective, cultural considerations and coverage of different sizes and types of organisation. Adding a range of contexts to aims and objectives was considered the best way to achieve this without imposing undue constraints. Other recommendations for change were aimed at developing strong business skills as well as higher order cognitive skills e.g. strengthen enterprise and creativity, develop critical thinking skills, use business as a medium for the development of mathematical skills. These higher order skills have been requested by HE in a number of forums and a Nuffield Study in 2012 referred to in several subject templates, made a number of recommendations relating to assessment of numerical content in Business.</p>	Yes
<p>Does subject content need to change? If so, what change is needed?</p>		Yes

<p>Subject content page 3</p> <ul style="list-style-type: none"> 2. Business Studies...” (delete “Studies”) <p>3. Replace “AS content and assessment material should be a stepping-stone to A2 content and assessment material” with “<i>The AS course must provide a free standing, coherent course of study whilst also providing progression to study at A Level</i>” (this caters for changes to AS and A2. The wording is taken from Economics subject content (no.3))</p> <p>Subject content page 4</p> <p>6. Replace “enable learners to investigate different types of organisations in various business sectors and environments recognising that they face varying degrees of competition” with “enable learners to investigate different types <i>and sizes</i> of organisations in various business sectors and environments, <i>drawing on local, national and global contexts</i>, recognising that they face varying degrees of competition”</p> <p>Replace: “enable learners to:</p> <ul style="list-style-type: none"> • identify business problems • plan appropriate investigations into such problems - promote a holistic understanding of business and enterprise - make justifiable decisions using both qualitative and quantitative methods, taking into account opportunity cost” <p>with: “enable learners to:</p> <ul style="list-style-type: none"> • identify business <i>opportunities and</i> problems • <i>investigate, analyse and evaluate business opportunities and problems</i> • make justifiable decisions using both qualitative and 	<p>Changes recommended to subject content are in line with recommended changes to the aims and objectives and are evidenced above. Other changes require no evidencing but are solutions to proposals to dissociate AS Level from A Level.</p> <p>These changes are to reflect concerns expressed by the various groups consulted, about lack of coverage of a wide range of types of organisations and the impact of globalisation and the need for this coverage to enable progression into business degrees</p> <p>The need for these changes is also evidenced by the need of HE for the development of higher order skills such as the ability to conduct independent research, analyse, evaluate. Indeed, most of these recommended changes have been proposed to address the skills requirements of HE.</p>	
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<p>quantitative methods</p> <ul style="list-style-type: none"> • <i>apply numerical skills</i> - promote an holistic understanding of business and enterprise” (this is to make more explicit requirement for evaluative and numerical skills and increase emphasis on opportunities as well as problems) <p>7. Replace “The progression from AS to A2 should be achieved through requiring learners to:” with “The progression from AS to <i>A Level</i> should be <i>demonstrated</i> through requiring learners to</p> <p>Replace: “Analyse and interpret more complex business information” with “Analyse, interpret <i>and evaluate</i> more complex business information” (mirrors changes to aims and objectives)</p> <p>Replace: “take a more strategic view when addressing business problems and issues” with “take a more strategic view <i>of business opportunities, problems and issues</i>”</p> <p>The table of core knowledge, understanding and skills on page 5 should reflect the required content for the standalone AS qualification. This has been detailed in the Chair’s report on the scrutiny meeting</p>		
<p>The rationale for awarding the category rating (1, 2 or 3) given at the top of the form</p> <p>All stakeholders consulted agreed that there was no need for</p>		<p>Yes</p>



<p>other than minimal change to update the qualifications and ensure effective progression from A Level Business Studies to HE, whether learners were continuing with Business Studies in HE or progressing on to a different subject.</p>		
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Part 3: Chair’s summarising comments

<p><u>No</u> issues remain unresolved at the end of this final review meeting.</p>
<p><u>Some</u> further actions from the awarding organisations are required at the end of this final review meeting.</p> <ul style="list-style-type: none"> • <i>Evidence identified a requirement for students to develop and use quantitative skills. To address this evidence, the subject team will draw up an indicative list of quantitative skills (at the equivalent of mathematics level 2) that can be developed in A level business. This list will now will need verification with the bodies providing evidence.</i> • <i>The subject team could examine existing papers to establish what percentage of assessment to ascribe to these quantitative skills (at the equivalent of level 2 mathematics) the meeting decided that a percentage of 10% was appropriate and will be included in the A level criteria. The quantitative skills will be assessed across the assessment objectives.</i> • <i>Change core content line of criteria (in knowledge understanding and skills) so that core content simply becomes 60% rather than a range.</i>
<p>I have <u>some</u> additional comments to make.</p> <ul style="list-style-type: none"> • <i>I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and learned societies had been consulted.</i> • <i>The subject can comfortably move to the linear A level, and this will increase opportunities for synoptic assessment.</i> • <i>Evidence has indicated that the subject title should be changes to ‘Business’.</i> • <i>There was no overwhelming evidence that internally assessed coursework should be introduced – most skills required by HE can be covered by external assessment, and the others can be covered through teaching and learning.</i> • <i>The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level in 2015.</i>



As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.

Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith'. The signature is written in a cursive style and is contained within a white rectangular box.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <p>Assessment objectives, page 7</p> <p>In order to make this table fit for purpose the middle weighting column (A2 Level) should be deleted. The other weightings remain.</p>	<p>These changes are recommended to bring the criteria into line with requirements for the AS to be dissociated from the A Level.</p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <p>• Synoptic assessment, page 7</p> <p>12. Replace “Synoptic assessment in Business Studies should take place across the two A2 units and should encourage learners to:” with “Synoptic assessment in Business [‘studies’ deleted] should take place across the <i>A Level</i> and should encourage learners to:”</p>	<p>As above</p>



<p>Do performance descriptions need to change? If so what change is needed?</p> <p>The only further changes agreed were to replace 'A' with 'A Level' in the headings for the performance descriptions</p>	
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Template for the Independent Chair's write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Chemistry
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair's approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each AO provided a report prior to the scrutiny meeting outlining their recommendations based on the evidence they had received from HE, Learned Societies, published reports and schools/colleges.</p> <p>"AQA has drawn on a variety of evidence. Teacher evidence was based on an ongoing dialogue with AQA schools and their representation at AQA's GCE Stakeholder Event in September 2012 (20 attendees across HEI, Schools and Learned Societies). Specific evidence was gathered and received from a range of universities including following HEIs: University of Southampton, University of Nottingham and Newcastle University. Learned body evidence was received from SCORE and the Royal Society of Chemistry.</p>	Yes



PEARSON



“**OCR** Feedback gathered from the OCR Chemistry HE forum – consists of 42 members including representation from 10 universities (3 Russell Group), learned bodies including The Royal Society of Chemistry and SCORE.

Research and responses were reviewed from learned bodies including The Royal Society of Chemistry and SCORE. The University of Cambridge also ran an A Level post-session review in November 2012.

“**Pearson** Spoke to a range of universities and a series of questionnaires were completed in September – October 2012 and 9 completed responses were received for Chemistry.

External Stakeholder Advisory Committee. Ten delegates attended the committee meeting in October 2012. These committees were predominantly composed of representatives from HE, with one representative from FE and schools.

Feedback was also received from SCORE in April 2012 and from the Royal Society of Cambridge and the Royal Statistical Society.

A Teacher survey was conducted using 19 panel members from the Subject Forum, 29 responses from individual teachers and from the 59 Club (Heads of Science from independent schools).

“**WJEC** has drawn on a range of sources of external advice to provide a representative set of views. The subject advisory group has evolved over time in response both to changing needs and timelines. Hence feedback has been obtained through an HEI advisory group comprising both Russell Group and the group of 1994 Universities based both in England and in Wales. Advice has also been taken from teachers through a series of dedicated sessions in teacher CPD meetings in autumn 2012, through email in May 2013 with teacher consultants in both England and Wales. Learned



PEARSON



	Societies consulted include SCORE and the Royal Society of Chemistry. Papers consulted include three Ofqual reports: 'The view of the higher education sector, teachers and employers on the suitability of A levels' (April 2012) and 'International comparisons in Senior Secondary Assessment' - issue 9: school-based assessment (2012).	
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	Meeting held on 11 th June 2013 at Pullman Hotel, St Pancras, London, included representation from two members of each AO. Report on the Scrutiny meeting provides evidence of the output from that meeting.	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)		Yes

Part 2: the final recommendation for change

Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
Do aims and objectives need to change? If so, what change is needed? To position the sciences to better reflect the improvements identified by HE and Learned Societies the Chemistry scrutiny meeting recommended changing these to the following:	Evidence in Pearson Report pages 1-4 Evidence in WJEC Report pages 1-3 Evidence in OCR Report pages 1-3 Evidence in AQA Report pages 1-2	Yes

To

AS and A level specifications in a science subject should encourage learners to:

- develop their interest in and enthusiasm for the subject, including developing an interest in further study and careers **associated with the subject**;
- appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society;
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding **of the scientific method**
- develop essential knowledge and understanding of different areas of the subject and how they relate to each other.

An additional bullet point was suggested:

- **develop confidence and competence in a variety of practical and mathematical skills.**

It was also suggested that the above be re ordered as shown below

4

3

<p>5 1 2</p>		
<p>Does subject content need to change? If so, what change is needed?</p> <p>1. Mathematical skills: To reflect the need to increase the mathematical content appropriate to Chemistry A-level the AOs have reviewed the table in Appendix 8 and have recommended the inclusion of the following and some minor changes:</p> <p>90.0 Recognise and make use of appropriate units in calculations 92.4 Remove the word 'simple' 93.9 Remove the word 'simple'.</p> <p>It was also suggested by some that further meetings might need to be held between the Awarding Organisations to look at this area as there was a lack of consensus on how mathematical skills would be assessed or whether they were just for teaching and learning.</p> <p>2. Core content: Based on the evidence provided, all AOs agreed eventually that the current 60/40 core content split should remain. There was some discussion on this issue and</p>	<p>Evidence in Awarding Body reports:</p> <p>AQA- Pages 1-2 OCR- Pages 1-3 WJEC- Pages 1-3 Pearson Pages 1-6</p>	<p>Yes</p>

WJEC suggested initially that this could be increased to 75% based on evidence received from HE. However it was decided that the 40% provides enough flexibility for AOs to work collaboratively with HE and Learned Societies to include content outside the core that would enable innovation and differentiation between specifications. A similar discussion took place over the Arrhenius equation with a similar outcome. WJEC also raised the issue of including Biochemistry within the core but the meeting agreed that this should stay in the 40%. Teachers value choice when selecting the appropriate specification for their learners.

Appendix 2: Chemistry – Knowledge and Understanding

In order to improve progression from KS4 and to enable AS to be co-teachable with A-level, based on feedback from teachers and HE, the AOs are recommending changes to the grouping of content and in some cases rewording to ensure it is more appropriate for A-level study.

These changes are:

- 35. Kinetics: - Add Boltzmann distribution at the end of the first sentence of bullet point one.
- 36. Equilibria : - Embolden last section of bullet point one-
Calculation of Kc and reacting quantities
- 39. Organic Chemistry: - Remove 'limited to 'and replace with 'to include geometric...'



PEARSON



<p>39. Organic Chemistry:- unembolden 'carbon double bond'</p> <p>In the subject criteria document all references to A2 need to be removed. The AOs agreed that the Subject criteria need to be laid out in such way that they clearly identify what topics would be included in AS and what topics would be included in the full A-level.</p>		
<p>The rationale for awarding the category rating (1, 2 or 3) given at the top of the form</p> <p>All of the AOs agreed that the criteria were broadly fit for purpose but required some minor changes in order to bring them into line with the expectations of HE.</p>	<p>As discussed above</p>	<p>Yes</p>



PEARSON



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Resolve, working with Ofqual, issues about assessment of practical skills (see main report)*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *Mathematical skills – work on exemplary material to illustrate how to embed mathematical skills (see main report)*
- *Agree on the correct assessment weighting percentage for mathematical skills (see main report)*
- *Work across science subject teams on wording of common aims and objectives and scheme of assessment (see main report)*
- *Work across science subject teams on wording and assessment weighting of common assessment objectives (see main report)*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and learned bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level in 2015.*
- *I have placed chemistry at the lower end of category 2 (nearer category 1). Mathematical are already embedded in the subject. A 2012 Ofqual report comparing qualifications across Europe found that a strength of the chemistry A level was its mathematical content. In discussion, it was pointed out that these skills could be drawn out further through multistep unstructured calculations, already allowed by the criteria.*



As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.

Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith'. The signature is written in a cursive style and is contained within a white rectangular box.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <p>In light of the feedback from stakeholders and with the decoupled AS, the AOs were in agreement that the weightings should be amended as follows for A Level. The AO’s also offered some suggestions for AS weightings but there was not agreement here.</p> <p>A01: Knowledge with Understanding AS level = 30-40% A –level = 30-40 %</p> <p>A02: Application, analysis, evaluation & problem solving AS level = 40-50% A-level = 45-55%</p> <p>A03: Experimental skills and methods AS level = 10-20% A-level = 10-20%</p> <p>The AOs are also recommending a change to the wording of the assessment objectives below to provide clarity,</p> <p>AO1- Knowledge with understanding of science- to replace first section</p>	<p>As per the Awarding Body reports</p>

<p>AO2- Application, analysis, evaluation and problem solving- to replace first section</p> <p>AO3- Remove ‘ How Science works’ with ‘Experimental Skills and methods’</p> <p>- Replace third section with:</p> <p>‘Demonstrate or describe how to generate measurements and observations that are valid and reproducible. Record results with appropriate precision and accuracy. Analyse, interpret, explain and evaluate the methodology, results and impact of their own and others’ experimental and investigative activities in a variety of ways. Choose and apply appropriate mathematical methods to analyse data and to answer questions, including multi- step problems’.</p> <p>The AOs were in agreement that no AO weighting should have a range greater than 10% as this made comparability between AOs more problematic. As there will no longer be an A2, this column should be removed from the assessment objective weightings table.</p>	
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <p>In the move from a 6 unit AS/A2 structure to a decoupled AS and two year linear A-level, Ofqual in the ‘Draft Conditions of Recognition’ have stipulated that ‘there will be no more than three assessment components for that qualification’. This change needs to be reflected in the scheme of assessment in the subject criteria.</p> <p>Synoptic assessment: The AOs agreed that moving to a two year linear qualification would in itself go some way to address synoptic</p>	<p>As per Awarding Body reports</p>

<p>assessment. It was agreed that the reference to synopticity which currently only applies to A2 should be extended and apply to both AS and A-level.</p> <p>As the AO's could not reach consensus regarding internal/ external assessment and in the light of no direction from Ofqual the AOs representing Chemistry agreed on the following wording:</p> <p>'In the up to three component AS or A Level , no more than one may be internally assessed'</p>	
<p>Do performance descriptions need to change? If so what change is needed?</p> <p>The meeting expressed concerns regarding how the current 'performance descriptors' were being used by schools and colleges. They need to be reviewed once the subject criteria have been agreed. The meeting also expressed their concern about the usefulness to AO's of these descriptors</p> <p>Proposed minor changes which require further discussion to secure agreement: <i>(subject content, aims and objectives, scheme of assessment, performance descriptors)</i></p> <p>All AOs agreed that the definition of the purpose of A-level provided by Ofqual was useful and as such, having a clear definition for the purpose</p>	<p>As per Awarding Body Reports</p>



<p>of AS would be beneficial. There were some technical issues which would require further clarification:</p> <ul style="list-style-type: none">• The calculation of the A*Grade• Any potential crossover of practical work between the AS Standalone and A Level? Can practical work be counted between the two specifications	
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Template for the Independent Chair’s write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Computing
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2 – Although all minor changes have been agreed.
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair’s approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	As indicated in the Chair’s Scrutiny Report, all AOs had consulted with representatives from HE through their consultancy panels; with the learned societies via the Joint Council and with teachers, again through their consultancy panels.	Yes
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	The scrutiny meeting was attended by representatives from all four AOs, with an independent chair; all documentation was shared in advance and a full discussion took place during.	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)	29/06/13	Yes



Part 2: the final recommendation for change

Consider the DfE's question: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
Do aims and objectives need to change? If so, what change is needed? <ul style="list-style-type: none"> • Yes – but the necessary minor changes have all been agreed by all AOs. 	See the marked-up copy of the subject criteria for details of the changes, rationale provided in writing to the Review meeting.	Yes
Does subject content need to change? If so, what change is needed? <ul style="list-style-type: none"> • Yes – but the necessary minor changes have been agreed by all AOs. 	See the marked-up copy of the subject criteria for details of the changes, rationale provided in writing to the Review meeting.	Yes
The rationale for awarding the category rating (1, 2 or 3) given at the top of the form <ul style="list-style-type: none"> • The subject has been accorded Category 2 as all AOs agreed that minor changes were necessary to address the concerns of HE and other interested stakeholders. 	Rationale provided in writing to the Review meeting.	Yes



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Defining of the required minimum mathematical content and the list of mathematical skills being developed within the A Level.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *Awarding organisations to review the extent of mathematical content within their current specifications with a view to agreeing on the correct assessment weighting percentage for mathematical skills (see main report)*
- *Awarding organisations to agree a list of mathematical skills for inclusion as an appendix to the A Level subject criteria.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and other bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level.*
- *The awarding organisations confirmed that the new A Level would be able to adopt a linear approach.*
- *The weighting for internal assessment has been agreed at 20%. There is a need to ensure that internal assessment is designed to ensure the testing of the appropriate practical skills (see main report).*
- *Evidence has indicated that the subject title should be changed to 'Computer Science'.*
- *As a GCSE has recently been introduced in this subject it is accepted that the awarding bodies' specifications have to ensure clear progression whilst also facilitating entry from those studying Computer Science for the first time.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.



Signature:

A handwritten signature in black ink that reads 'Mark E. Smith'.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

<p>Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: <i>Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?</i> i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>	
Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • Yes – in response to the de-coupling of AS and to reflect minor amendments made to the subject content. 	<p>See the marked-up copy of the subject criteria for details of the changes and rationale provided in writing to the Review meeting..</p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • Yes – in response to the de-coupling of AS and to reflect the unanimous view of both HE and all of the AOs that an element of coursework/internal assessment was required. The AOs were all of the view, supported by their technical experts that the weighting of an internal assessment component should be a common requirement set at 20%. • It should also be noted that changes to the wording of the section on Synoptic Assessment will be required but it is likely that a generic wording determined by Ofqual would be most appropriate. 	<p>See the marked-up copy of the subject criteria for details of the changes and rationale provided in writing to the Review meeting.</p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <ul style="list-style-type: none"> • Yes – to reflect minor amendments made to the subject content. 	<p>See the marked-up copy of the Performance Descriptions for the changes made.</p>



Template for the Independent Chair’s write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Economics
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair’s approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each of the four awarding organisations undertook its own review and presented a summary report based on that to the scrutiny meeting. Each awarding organisation also took account of responses from learned societies to a request for evidence from JCQ.</p> <p>The sources of external evidence noted by each awarding organisation are as follows:</p> <p>AQA: HE Expert Panel, Nuffield Foundation, Institute of Economic Affairs.</p> <p>Pearson: HE interviews, External Stakeholder Advisory Committee,</p>	Yes



	<p>Conference of the Heads of University Economics Departments (CHUDE), Nuffield Foundation, Institute of Economic Affairs, a survey conducted with members of the Economics Business and Enterprise Association (EBEA)</p> <p>OCR: Economics Subject Forum, Institute of Economic Affairs.</p> <p>WJEC: HE Advisory Group, Institute of Economic Affairs.</p>	
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	<p>A scrutiny meeting was held on 12 June 2013, with subject specialists from each of the four awarding organisations being present.</p> <p>A note of the scrutiny meeting, agreed by all participants, is available to the final review meeting.</p>	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)	28/06/13.	Yes

Part 2: the final recommendation for change

<p>Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> one additional aim/objective is proposed on the basis of 	<p>Within the evidence, the aims and objectives are considered to be</p>	Yes



<p>the evidence reviewed: ‘understand that economic behaviour can be studied from a range of perspectives’ and in the final aim/objective the skills to be developed should be described as ‘analytical and quantitative’</p>	<p>broadly appropriate. Amongst a range of suggestions for minor modification, the two which emerge as the most substantial relate to the understanding that economic behavior can be explored from a range of perspectives and the need to place more explicit emphasis on analytical and quantitative skills.</p>	
<p>Does subject content need to change? If so, what change is needed?</p> <p>In stating what the specifications must provide for learners, a reference to ‘developing a critical consideration’ is included.</p> <p>In indicating what is required of learners,</p> <ul style="list-style-type: none"> - a more explicit emphasis is placed on developing analytical and quantitative skills, with the quantitative skills in which competence should be acquired being listed as an Appendix. - explaining the supply and demand model ‘using a range of techniques’ is indicated. - in relation to markets, the requirements are clarified by reference to their benefits, the reasons they may fail and recognition of the possibility of government failure. - developing an understanding of the role and impact of the financial sector is added. - in relation to macro-economic policies, clarification is provided of the need to recognise 	<p>Greater development and use of quantitative skills is mentioned by several contributors of evidence, including the need to understand and analyse economic diagrams as a tool to depict economic phenomena or highlight specific information.</p> <p>Further discussion is needed on whether it is appropriate to identify as an Appendix to the criteria those quantitative skills in which competence should be acquired, or whether this is a matter that is more appropriately handled within individual specifications.</p>	<p>Yes</p>

<p>relationships and linkages involved, recognise the issues government faces in managing the macro-economy, identify criteria for success and evaluate effectiveness.</p> <p>Within the micro-economic theme,</p> <ul style="list-style-type: none"> - the impact of social and institutional change is added to the themes already identified - the margin and specialisation and trade (previously within the macro-economic theme) are identified as amplifications within the area of study relating to scarcity and choice - labour market is introduced as a new area of study, with amplifications being wage determination, labour market issues and government intervention. <p>Within the macro-economic theme,</p> <ul style="list-style-type: none"> - an emphasis is placed on developing an awareness of the historical context of economic ideas and theories - circular flow of income, expenditure and output is identified explicitly as an amplification within the area of study relating to the determination of output, employment and prices - the financial sector is introduced as a new area of study, with amplifications being the role of the financial sector and its impact on the real economy, financial regulation and the role of central banks. 	<p>The evidence from HE and the Institute of Economic Affairs includes encouragement to address the following aspects of content:</p> <ul style="list-style-type: none"> - more emphasis needed on basic concepts such as opportunity cost, scarcity, and the 'economic problem' of allocating finite resources - marginality and equilibrium - Labour Markets - rational/irrational behaviour of consumers. <p>Each of the above apart from the latter has been addressed in the proposals.</p> <p>Main suggestions within the evidence are:</p> <ul style="list-style-type: none"> - more emphasis on historical context of ideas and theories - more emphasis on economic controversies - basics of economic growth and its determinants, expectations, policy credibility - the importance of institutional performance for economic growth and money neutrality - more macroeconomics in the context of current debates 	
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	increased focus on financial economics with reference to the financial crisis.	
The rationale for awarding the category rating (1, 2 or 3) given at the top of the form	2 – although there are numerous suggested changes to be made to the criteria, there is a considerable degree of agreement and the changes are not difficult to implement and each is very minor and in aggregate can be considered minor.	Yes



Part 3: Chair's summarising comments

No issues remain unresolved at the end of this final review meeting.

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *Evidence identified a requirement for students to develop and use quantitative skills. To address this evidence, the subject team has drawn up an indicative list of quantitative skills that can be developed in A level economics. This list will now will now need verification with the bodies providing evidence.*
- *The subject team will also examine existing papers to establish what percentage of assessment to ascribe to these quantitative skills (at the equivalent of level 2 mathematics). The percentage will be included in the A level criteria. The quantitative skills will be assessed across the assessment objectives.*
- *Change core content line of criteria (in knowledge understanding and skills) so that core content simply becomes 60% rather than a range.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and learned societies had been consulted.*
- *Suggested changes reflect evidence that the subject needs to reflect real-world economics and financial economics.*
- *The subject can comfortably move to the linear A level, and this will increase opportunities for synoptic assessment.*
- *Feedback from higher education suggests that external assessment is more appropriate in economics.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level in 2015.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.



Signature:

A handwritten signature in black ink that reads 'Mall E. Smith' is shown on a white rectangular background.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

<p>Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: <i>Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?</i> i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>	
Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> no changes are proposed to the assessment objectives, and it is suggested that the current ranges of 20-30% weighting for each assessment objective across the overall A level assessment should be retained 	<p>The evidence included some comments about additional clarity being required, but no specific proposals emerged from this. Further consideration may be required in relation to the possible need for a reference to quantitative approaches within the assessment objectives.</p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> no changes are proposed 	<p>The evidence contained very little comment on the scheme of assessment, hence no suggestion that any change is needed from 100% external assessment. It was noted that this does include the possibility of an extended case study being used on which questions are set in an external examination.</p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <ul style="list-style-type: none"> as no changes are proposed to the assessment objectives, no changes are proposed to the performance descriptors, other than editorial adjustments where there is currently reference to AS. 	<p>The evidence contained very little comment about performance descriptors, but confirmation will be needed on whether the standards described remain appropriate for the reformed A levels.</p>



Template for the Independent Chair's write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	English Language and Literature
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair's approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each AO provided a report prior to the scrutiny meeting outlining their recommendations based on the evidence they had received from HE, Learned Societies, published reports and schools/colleges.</p> <p>AQA has engaged with teachers, HE and subject associations in a variety of ways: questionnaires, telephone interviews, stakeholder conference (28 September 2012), HE expert panel (1 March 2013) as well as through our development groups which are made up of teachers and HE reps. Via focus groups (i.e. our stakeholder conference and HE panel) and telephone interviews, AQA has engaged with 47 schools and colleges, 25 HE reps and 3 subject associations (NAWE, NATE and NAAE). In addition it has surveyed 200 schools and colleges.</p> <p>OCR has engaged with stakeholders through its English consultative forum which has met 6 times. It includes representation from school, colleges, universities (Russell Group and others – 18 in total), and sector experts. Subject groups consulted include NATE and the English Association. OCR has also consulted</p>	Yes



	<p>specifically on subject criteria with over a dozen representatives from sixth form colleges.</p> <p>Pearson engaged with: 18 HE institutions (11 Russell group); Learned societies including NATE, English Association, Poetry Society, Arts Council, English and Media Centre, Institute of Education (report commissioned by Pearson); International jurisdictions including visits (to Singapore, Hong Kong, USA). Pearson also carried out desk research (New Zealand, New South Wales, Ontario, Scotland, and International Baccalaureate) and undertook 30 teacher interviews.</p> <p>WJEC has engaged with HE through an HEI advisory group comprising both Russell Group and 19 94 Group Universities based both in England and in Wales. Members contributed through one to one discussions, through an HEI Advisory Panel meeting in the autumn 2012 and through email in April-May 2013. Advice has also been taken from teachers through a series of dedicated sessions in teacher CPD meetings in autumn 2012 and through email in May 2013 with teacher consultants in both England and Wales. Papers consulted include three Ofqual reports: 'The view of the higher education sector, teachers and employers on the suitability of A levels' (April 2012); 'International comparisons in Senior Secondary Assessment' (2012) and 'Comparative Analysis of A Level Student Work (2012) and 'QAA Subject Benchmark Statement: English (QAA, 2007). Comments in relation to learned society feedback was received from The Arts Council England.</p>	
<p>2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)</p>	<p>Meeting held on 12 June 2013 at Pullman Hotel, St Pancras, London, included representation from two members of each AO. Report on the Scrutiny meeting provides evidence of the output from that meeting.</p>	<p>Yes</p>
<p>3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)</p>	<p>29/06/13</p>	<p>Yes</p>



Part 2: the final recommendation for change

Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> Changes to the wording to clarify the requirements for language and literature and how the two disciplines can relate to each other 	c.f. 2.2, 3.1 <i>Scrutiny report</i>	Yes
<p>Does subject content need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> Changes to the wording to update the content, to clarify and exemplify requirements and to remove ambiguity 	c.f. 2.3, 3.2 <i>Scrutiny report</i> ;	Yes
<p>The rationale for awarding the category rating 2 given at the top of the form</p> <p>There are still some outstanding issues that require further discussion, namely with some of the assessment objectives, but the changes proposed and those still under consideration are not extensive and so should be achievable for introduction in 2015.</p>		Yes



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Further discussion is required to confirm the assessment objectives for the three English A Levels. In particular, consideration is needed on how best to take account of requirements relating to quality of written communication.*
- *Further discussion is required on how assessment methods can be used to best facilitate the skills required for students to progress to Higher Education as well as ensuring robustness, such that the percentage range of course work needs to be agreed.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *The awarding organisations to agree the timescale for the resolution of the issues above relating to the assessment objectives and methods of assessment. However it is under the control of the awarding organisations to ensure that agreement on these issues is reached in time for processes to take place for first teaching in 2015, provided that OFQUAL approve the changes proposed in a timely fashion.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and other bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level.*
- *The awarding organisations confirmed that the new A Level would be able to adopt a linear approach.*
- *I note that some minor changes have been made to the criteria to allow the development of both combined and integrated approaches to delivering English Language and Literature, in line with the approaches employed by Higher Education Institutions.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.



Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith' is shown on a white rectangular background.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • amend AO2 as agreed in the amended version of the subject criteria • AO1, AO3 and AO4 require rewording in order to ensure that they are discrete, easily applied and inform the required assessment. There was insufficient time to reach agreement on these and significant further discussion needs to take place on this matter 	<p>c.f. 2.4, 3.4 and 4.1 <i>Scrutiny report</i></p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • the range of weighting for the internal assessment was narrowed to 30-40% to ensure comparability between specifications 	<p>c.f. 1.1 and 3.3, <i>Scrutiny report</i></p>
<p>Do performance descriptions need to change? If so what change is needed?</p>	<p>c.f. 1.2, 4.2 <i>Scrutiny report</i>; Ofqual, <i>Fit for Purpose, the view of the higher education sector, teacher and employers on the suitability of A</i></p>



<ul style="list-style-type: none">• The performance descriptions will need to be amended to address the move to a linear specification and to accommodate the changes proposed above, particularly to those made to the assessment objectives	<p><i>levels</i>, April 2012</p>
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Template for the Independent Chair’s write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	English Language
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair’s approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each AO provided a report prior to the scrutiny meeting outlining their recommendations based on the evidence they had received from HE, Learned Societies, published reports and schools/colleges.</p> <p>AQA has engaged with teachers, HE and subject associations in a variety of ways: questionnaires, telephone interviews, stakeholder conference (28 September 2012), HE expert panel (1 March 2013) as well as through our development groups which are made up of teachers and HE reps. Via focus groups (i.e. our stakeholder conference and HE panel) and telephone interviews, AQA has engaged with 47 schools and colleges, 25 HE reps and 3 subject associations (NAWE, NATE and NAAE). In addition it has surveyed 200 schools and colleges. AQA took note of the ‘HE Benchmarks for English</p>	Yes



	<p>Language’, which was devised by a group at the HE Academy. The group includes representatives from 11 universities (Sheffield, Newcastle, UCL, Kent, Brighton, York St John, Reading, Royal Holloway, Edinburgh, Birmingham and Winchester), the leaders of the Higher Education Academy English Subject Centre and the Higher Education Academy Languages, Linguistics and Area Studies Subject Centre. AQA also referred to:</p> <p>Goddard, A. 2012. <i>Doing English Language</i>. London: Routledge.</p> <p>Goddard, A and Beard, A. 2007. ‘As Simple as ABC? Issues of Transition for English Language A Level students going on to study English Language/Linguistics in Higher Education’. <i>Report Series, 14</i>. University of London: Higher Education Academy English Subject Centre.</p> <p>OCR has engaged with stakeholders through its English consultative forum which has met 6 times. It includes representation from school, colleges, universities (Russell Group and others – 18 in total), and sector experts. Subject groups consulted include NATE and the English Association. OCR has also consulted specifically on subject criteria with over a dozen representatives from sixth form colleges.</p> <p>Pearson engaged with: 23 HE institutions (8 Russell group); Learned societies including NATE, English Association, Poetry Society, Arts Council; English and Media Centre; Institute of Education (report commissioned by Pearson); Committee for Linguistics in Education; International jurisdictions including visits (to Singapore, Hong Kong, USA). Pearson also carried out desk research (New Zealand, New South Wales, Ontario, Scotland, and International Baccalaureate) and undertook 44 teacher interviews.</p> <p>WJEC has engaged with HE through an HEI advisory group comprising both Russell Group and 1994 Group Universities based both in England and in Wales. Members contributed through one to one discussions, through an HEI Advisory Panel meeting in the autumn 2012 and through email in April-May 2013. Advice has also been taken from teachers through a series of dedicated sessions in teacher CPD meetings in autumn 2012 and through</p>	
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	email in May 2013 with teacher consultants in both England and Wales. Papers consulted include three Ofqual reports: 'The view of the higher education sector, teachers and employers on the suitability of A levels' (April 2012); 'International comparisons in Senior Secondary Assessment' (2012) and 'Comparative Analysis of A Level Student Work (2012) and 'QAA Subject Benchmark Statement: English (QAA, 2007). Comments in relation to learned society feedback was received from The Arts Council England.	
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	Meeting held on 12 June 2013 at Pullman Hotel, St Pancras, London, included representation from two members of each AO. Report on the Scrutiny meeting provides evidence of the output from that meeting.	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)	29/06/13	Yes

Part 2: the final recommendation for change

Consider the DfE's question: <i>Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?</i> i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
Do aims and objectives need to change? If so, what change is needed? <ul style="list-style-type: none"> all agreed minor changes to improve clarity – addition of 'engage creatively...with programme of 	c.f. 1.2, 3.1 <i>Scrutiny report</i>	Yes



study'		
<p>Does subject content need to change? If so, what change is needed?</p> <ul style="list-style-type: none">all agreed minor changes to the wording of the content to address the change to a linear specification, to improve clarity and to meet the requirements of HE and other stakeholders	<p>c.f. 1.3, 3.2 <i>Scrutiny report</i></p>	Yes
<p>The rationale for awarding the category rating 2 given at the top of the form</p> <p>There are still some outstanding issues that require further discussion but the changes proposed and those still under consideration are not extensive and so should be achievable for introduction in 2015.</p>		Yes



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Further discussion is required to confirm the assessment objectives for the three English A Levels. In particular, consideration is needed on how best to take account of requirements relating to quality of written communication.*
- *Further discussion is required on how assessment methods can be used to best facilitate the skills required for students to progress to Higher Education as well as ensuring robustness, such that the percentage range of course work needs to be agreed.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *The awarding organisations to agree the timescale for the resolution of the issues above relating to the assessment objectives and methods of assessment. However it is under the control of the awarding organisations to ensure that agreement on these issues is reached in time for processes to take place for first teaching in 2015, provided that OFQUAL approve the changes proposed in a timely fashion.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and other bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level.*
- *The awarding organisations confirmed that the new A Level would be able to adopt a linear approach.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.



Signature:



Date: 3/7/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

<p>Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: <i>Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?</i> i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>	
Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> There was agreement that these should be changed to improve clarity and remove ambiguity but there was not agreement as to what the changes should be. Further discussion is required. 	<p>c.f. 2.1, 4.1 <i>Scrutiny report</i></p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> all agreed that there should be a range in the weighting for the internal assessment to allow flexibility in the relative sizes of the three assessment components, but that it should be narrowed to 30-40% to improve comparability between specifications. 	<p>c.f. 1.4 and 3.3, <i>Scrutiny report</i></p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <ul style="list-style-type: none"> The performance descriptions will need to be amended to address the move to a linear specification and to accommodate the changes proposed above, particularly to those made to the assessment objectives. 	<p>c.f. 1.5, 4.2 <i>Scrutiny report</i>; Ofqual, <i>Fit for Purpose, the view of the higher education sector, teacher and employers on the suitability of A levels</i>, April 2012</p>



Template for the Independent Chair's write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	English Literature
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair's approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each AO provided a report prior to the scrutiny meeting outlining their recommendations based on the evidence they had received from HE, Learned Societies, published reports and schools/colleges.</p> <p>AQA has engaged with teachers, HE and subject associations in a variety of ways: questionnaires, telephone interviews, stakeholder conference (28 September 2012), HE expert panel (1 March 2013) as well as through our development groups which are made up of teachers and HE reps. Via focus groups (i.e. our stakeholder conference and HE panel) and telephone interviews, AQA has engaged with 47 schools and colleges, 25 HE reps and 3 subject associations (NAWE, NATE and NAAE). In addition it has surveyed 200 schools and colleges.</p> <p>OCR has engaged with stakeholders through its English consultative forum</p>	Yes



	<p>which has met 6 times. It includes representation from school, colleges, universities (Russell Group and others – 18 in total), and sector experts. Subject groups consulted include NATE and the English Association. OCR has also consulted specifically on subject criteria with over a dozen representatives from sixth form colleges.</p> <p>Pearson engaged with: 32 HE institutions (16 Russell group); Learned societies including NATE, English Association, Poetry Society, Arts Council, English and Media Centre, Institute of Education (report commissioned by Pearson); International jurisdictions including visits (to Singapore, Hong Kong, USA). Pearson also carried out desk research (New Zealand, New South Wales, Ontario, Scotland, and International Baccalaureate) and undertook 32 teacher interviews (plus survey of 330 English teachers).</p> <p>WJEC has engaged with HE through an HEI advisory group comprising both Russell Group and 1994 Group Universities based both in England and in Wales. Members contributed through one to one discussions, through an HEI Advisory Panel meeting in the autumn 2012 and through email in April-May 2013. Advice has also been taken from teachers through a series of dedicated sessions in teacher CPD meetings in autumn 2012 and through email in May 2013 with teacher consultants in both England and Wales. Papers consulted include three Ofqual reports: 'The view of the higher education sector, teachers and employers on the suitability of A levels' (April 2012); 'International comparisons in Senior Secondary Assessment' (2012) and 'Comparative Analysis of A Level Student Work (2012) and 'QAA Subject Benchmark Statement: English (QAA, 2007). Comments in relation to learned society feedback was received from The Arts Council England.</p>	
<p>2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)</p>	<p>Meeting held on 12 June 2013 at Pullman Hotel, St Pancras, London, included representation from two members of each AO. Report on the Scrutiny meeting provides evidence of the output from that meeting.</p>	<p>Yes</p>
<p>3. Final review meetings, led by the</p>	<p>29/06/13</p>	<p>Yes</p>



independent Chair (joint meetings, involving all four exam boards)		
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Part 2: the final recommendation for change

<p>Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • minor changes to improve clarity 	c.f. 1.2, 3.1 <i>Scrutiny report</i>	Yes
<p>Does subject content need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • Some revised wording has been agreed • There was agreement that there should be a review of the rules on periods of texts but there was disagreement as to how much prescription there should be. Further discussion is needed on this. • Unseen texts – there was consideration of a proposal to include the use of unseen texts in assessments. Further discussion is needed to reach agreement on this matter. 	c.f. 1.3, 2.1, 2.2, 3.2, 4.1, 4.2 <i>Scrutiny report</i>	Yes
<p>The rationale for awarding the category rating 2 given at the top of the form</p> <p>There are still some outstanding issues that require further</p>		Yes



<p>discussion, but the changes proposed and those still under consideration are not extensive and so should be achievable for introduction in 2015.</p>		
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Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Further discussion is required to confirm the assessment objectives for the three English A Levels. In particular, consideration is needed on how best to take account of requirements relating to quality of written communication.*
- *Further discussion is required on how assessment methods can be used to best facilitate the skills required for students to progress to Higher Education as well as ensuring robustness, such that the percentage range of course work needs to be agreed.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *The awarding organisations to agree the timescale for the resolution of the issues above relating to the assessment objectives and methods of assessment. However it is under the control of the awarding organisations to ensure that agreement on these issues is reached in time for processes to take place for first teaching in 2015, provided that OFQUAL approve the changes proposed in a timely fashion.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and other bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level.*
- *The awarding organisations confirmed that the new A Level would be able to adopt a linear approach.*
- *Evidence indicated the value of 'unseen' texts as part of assessment. Following discussion it was agreed that within the criteria the scheme of assessment should include reference to 'a text which has not been previously named for study, set within a context to be defined by the awarding organisation'.*
- *There was agreement in the final review meeting on the prescription of texts within the twelve text minimum. It was agreed that including a Shakespeare play, three pre-1900 works, with some also favouring a post 2000 work as well.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.



Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith'. The signature is written in a cursive style and is contained within a white rectangular box.

Date: 3/7/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> There was agreement that these should be changed to improve clarity and remove ambiguity but there was not agreement as to what the changes should be. Further discussion is required. 	<p>c.f. 2.3, 4.3 <i>Scrutiny report</i></p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> all agreed that there should be a range in the weighting for the internal assessment to allow flexibility in the relative sizes of the three assessment components, but that it should be narrowed to 30-40% to improve comparability between specifications 	<p>c.f. 1.4 and 3.3, <i>Scrutiny report</i></p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <ul style="list-style-type: none"> The performance descriptions will need to be amended to address the move to a linear specification and to accommodate the changes proposed above, particularly to 	<p>c.f. 1.5, 4.4 <i>Scrutiny report</i>; Ofqual, <i>Fit for Purpose, the view of the higher education sector, teacher and employers on the suitability of A levels</i>, April 2012</p>



those made to the assessment objectives.	
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Template for the Independent Chair’s write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Geography
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair’s approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each AO provided a report prior to the scrutiny meeting outlining their recommendations based on the evidence they had received from HE, Learned Societies, published reports and schools/colleges.</p> <p>“AQA has drawn on a variety of evidence. Teacher evidence was based on an ongoing dialogue with AQA schools and their representation at AQA’s GCE Stakeholder Event in September 2012 (20 attendees across HEI, Schools and Learned Societies). Specific evidence was gathered and received from the five following HEIs: University of Southampton, University of Nottingham, Newcastle University, Cardiff University (all are members of the Russell Group) and Brighton University. Members from the above universities, along with Royal Holloway, University of London, form AQA’s HE expert panel. The panel met</p>	Yes



	<p>in March 2013 and informed AQA's thinking. Learned body evidence was received from The Royal Geographical Society (RGS), The Geographical Association (GA) and the Meteorological Society. Evidence was also taken from the Nuffield report 'Mathematics in A level assessments'.</p> <p>“OCR Feedback gathered from the OCR Geography HE forum – consists of 29 members including representation from 10 universities (3 Russell Group), learned bodies including The Royal Meteorological Society, Field Studies Council, The Geographical Association, Ordnance Survey and 9 schools/sixth form colleges.</p> <p>Research and responses were reviewed from learned bodies including The Royal Geographical Society, The Geographical Association, The Royal Meteorological Society, and the Zoological Society of London.</p> <p>Research from HE conducted by Cambridge Assessment was reviewed. Ofqual 'Review of standards in GCE A level Geography 2001 and 2010' was considered. OCR Centres and assessors' feedback was considered.”</p> <p>“Pearson 10 university interviews (conducted November - December 2010) with university academics from 7 universities. All of the universities involved in this research were English universities. 71% of these universities were Russell Group and the remaining universities were from 1994 group.</p> <p>28 university interviews (conducted 2012 to 2013) with university academics from 24 universities. Of the universities spoken to, 15 were Russell Group universities, 4 were 1994 group universities, 2 were Million+ group and 3 were University Alliance group. All of the universities spoken to were UK based universities. 87% of the universities we spoke to were English based universities.</p> <p>External Stakeholder Advisory Committee. Ten delegates attended the</p>	
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	<p>committee meeting on 26th October 2012. Delegates included one representative from the GA, two teachers, and seven HE representatives. The HE delegates were all based at English universities and 71% of these universities were Russell Group.</p> <p>53 teachers participated in our on-line survey review the GCE Geography subject criteria.”</p> <p>“WJEC has drawn on a range of sources of external advice to provide a representative set of views. The subject advisory group has evolved over time in response both to changing needs and timelines. Hence feedback has been obtained through an HEI advisory group comprising both Russell Group and the group of 1994 Universities based both in England and in Wales. Members contributed through one to one discussions, through an HEI Advisory Panel meeting in the autumn 2012 and through email in April-May 2013. Advice has also been taken from teachers through a series of dedicated sessions in teacher CPD meetings in autumn 2012, through email in May 2013 with teacher consultants in both England and Wales and from the teacher representative body the Geographical Association. Learned Societies consulted include the Royal Geographical Society, the Royal Meteorological Society and COBRIG (Council of British Geography). Papers consulted include three Ofqual reports: ‘The view of the higher education sector, teachers and employers on the suitability of A levels’ (April 2012); ‘International comparisons in Senior Secondary Assessment’ - issue 9: school-based assessment (2012) and ‘Review of standards in GCE A level Geography’ (April 2012).”</p>	
<p>2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)</p>	<p>Meeting held on 11th June 2013 at Pullman Hotel, St Pancras, London, included representation from two members of each AO. Report on the Scrutiny meeting provides evidence of the output from that meeting.</p>	<p>Yes</p>



3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)	2/7/13	Yes
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Part 2: the final recommendation for change

<p>Consider the DfE’s question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>		
Content recommendations that require approval	Evidence gathered for recommendation	Chair’s approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • That ‘physical’ geography should be emphasised within the aims and objectives (c.f. Recommendation 4, <i>Scrutiny report</i>) 	<p>c.f. 1.2.1, <i>Scrutiny report</i></p>	<p>Yes</p>
<p>Does subject content need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • That the subject content is amended (c.f. Recommendations 1-3, <i>Scrutiny report</i>) to: <ol style="list-style-type: none"> a. continue to reflect the high-level nature of subject content within the subject criteria b. address the balance and relationship between human and physical geography c. address the need for learners to use a range of quantitative and qualitative geographical skills d. reflect the skills required to enable learners to 	<p>c.f. 1.2, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 2.1, <i>Scrutiny report</i>; Ofqual, <i>Fit for Purpose, the view of the higher education sector, teacher and employers on the suitability of A levels</i>, April 2012</p>	<p>Yes</p>



progress to HE e. reflect progression from key stage 4 f. be suitable for the linear A-level and standalone AS qualifications		
The rationale for awarding the category rating (1, 2 or 3) given at the top of the form All of the AOs agreed that the criteria were broadly fit for purpose but required some minor changes in order to bring them into line with the expectations of HE.	c.f. Part 1 above	Yes



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Core content - The geography A level criteria document does not currently specify a percentage of core content. With a view to bringing the exam boards' specifications closer together and preparing students more consistently for progression to degree courses, the subject teams will work with Ofqual to see if a subject core can be established and, if so, what percentage of the qualification the core should represent. In the first instance, the subject teams will analyse recent course specifications and exam papers for commonality.*
- *Fieldwork – There is consensus from HE and learned societies that fieldwork should be a requirement in A level geography. There is also evidence from HE that if this is assessed externally it wouldn't prepare students for degree courses. However, the discussion raised issues about the robustness of internal assessment. The subject teams will work with Ofqual and schools to find ways of assessing fieldwork that will prepares students for progression to degree courses but are also robust. Once agreed, this assessment model will be adopted by all of the exam boards. Subject teams also agreed to work out an assessment percentage for fieldwork.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *Quantitative skills - There is concern from higher education and learned societies about the decline of quantitative skills in geography, and this is echoed in the Nuffield Foundation report Mathematics in A level assessments. Starting from the Nuffield report, and work being done in other subjects (economics, business), the subject team will prepare an appendix to the criteria listing quantitative skills used in A level geography at level 2 and above. They will also look for opportunities to exemplify these skills, showing which parts of the subject content they might apply to. It was agreed that an analysis of recent papers would also be useful for this exercise. The subject team will also try to establish the assessment percentage attached to these level 2 quantitative skills.*
- *The subject team will make some minor changes to the amended criteria: wording of Subject content criteria, paragraph 2 should reflect decoupling of AS; reword 'think like a geographer' in Synoptic assessment, paragraph 11; 'A level' rather than 'A2' in performance description heading.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and learned societies had been consulted.*
- *The subject can comfortably move to the linear A level, and this will increase opportunities for synoptic assessment.*



- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level in 2015.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.

Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith'. The signature is written in a cursive style and is contained within a white rectangular box.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • That Ofqual amends the: <ol style="list-style-type: none"> a. specified range for assessment objective weightings (c.f. Recommendation 5, <i>Scrutiny report</i>) b. balance of assessment objective weightings for the linear A-level and standalone AS qualifications (c.f. Recommendation 6, <i>Scrutiny report</i>) c. wording of AO2 and AO3 (c.f. Recommendation 7, <i>Scrutiny report</i>) 	<p>c.f. 1.4.1, 1.4.2 and 1.4.3, <i>Scrutiny report</i></p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • That the scheme of assessment is amended by Ofqual (c.f. Recommendations 8 and 9, <i>Scrutiny report</i>) to reflect: <ol style="list-style-type: none"> a. a common minimum percentage of external assessment b. the flexibility for AOs to enable internal or external marking of coursework c. AO consensus that fieldwork at A-level should not be assessed by written examination 	<p>c.f. 1.5 and 2.3, <i>Scrutiny report</i></p>



<p>d. the need to maintain a consistent approach to internal and external assessment across AOs</p> <p>e. the nature of the linear A-level and standalone AS qualifications</p>	
<p>Do performance descriptions need to change? If so what change is needed?</p> <ul style="list-style-type: none">• That the performance descriptors are updated (c.f. Recommendation 9, <i>Scrutiny report</i>) to reflect any revisions made to the assessment objectives by Ofqual	<p>c.f. 1.4.3, <i>Scrutiny report</i>; Ofqual, <i>Fit for Purpose, the view of the higher education sector, teacher and employers on the suitability of A levels</i>, April 2012</p>



Template for the Independent Chair’s write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	History
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair’s approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each AO provided a report prior to the scrutiny meeting outlining their recommendations based on the evidence they had received from HE, Learned Societies, published reports and schools/colleges.</p> <p>AQA engaged with representatives from the Royal Historical Society (learned body), the Historical Association, the Schools History Project, the Better History Group, and the Prince’s Teaching Institute. It also engaged with representatives from 31 HE institutions. It has also spoken to HMI, PGCE tutors and practising teachers. It has held 2 history focus group meetings – one attended by academics (7), the other by a combination of academics and teachers (15). It has an advisory committee for history comprising 7 academics – this has met once and has additionally provided written feedback for this exercise.</p>	Yes



	<p>OCR engaged with stakeholders through its History consultative forum which has met 6 times. It includes representation from universities (Russell Group and other) schools, colleges, and subject specialist groups. There are a dozen HEIs on this group. OCR has also consulted specifically on the subject criteria with representatives from sixth form colleges.</p> <p>Pearson engaged with HE through its A level History Subject Advisory Committee (universities represented: 6 Russell Group, 2 1994 Group and 2 non-aligned) and through interviews conducted face-to-face or by phone. Total HE representatives contacted were 17 Russell Group, 4 1994 Group, 1 Million +, 3 University Alliance and 4 non-aligned.</p> <p>Teacher engagement included 22 face-to-face or phone interviews, 32 responses to a survey about subject criteria in May 2013. Also four focus groups with attendee numbers of between 6 and 8 at each.</p> <p>In addition to learned society feedback received via JCQ from Royal Historical Society, Society of Antiquaries London, Arts Council, Pearson had separate conversations with Peter Mandler from the RHS and with Rebecca Sullivan from the Historical Association. Pearson also held a meeting with Michael Maddison from Ofsted about the review of A level History.</p> <p>WJEC engaged with HE through two meetings, initially with 5 representatives from HE and then with input from further 4 representatives. It held a focus group with 6 teachers and then received further input from 5 teachers by email.</p> <p>Learned societies Feedback received by all awarding bodies from learned societies in response</p>	
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	to a request by JCQ to contribute to this review May 2013: <ul style="list-style-type: none"> Royal Historical Society Society of Antiquaries London Arts Council. 	
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	Meeting held on 11 June 2013 at Pullman Hotel, St Pancras, London, included representation from two members of each AO. Report on the Scrutiny meeting provides evidence of the output from that meeting.	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)	27/06/13	Yes

Part 2: the final recommendation for change

Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
Do aims and objectives need to change? If so, what change is needed? <ul style="list-style-type: none"> minor changes to the aims and objectives to improve clarity 	c.f. 1.2, 3.1 <i>Scrutiny report</i>	Yes
Does subject content need to change? If so, what change is		Yes



<p>needed?</p> <p>Changes to the content as follows:</p> <ul style="list-style-type: none"> • introduction of a requirement to study the history of more than country or state – as requested by HE, the RHS, the HA • introduction of a requirement to study topics from a chronological range of at least 200 years as requested by the RHS and some HE stakeholders • amended wording to improve clarity • some revision as to what is covered at AS and A level and what is required additionally at A level 	<p><i>c.f. 1.3, 3.2 Scrutiny report; the views of the RHS, HA and the higher education sector as collected by the awarding bodies</i></p>	
<p>The rationale for awarding the category rating 2 given at the top of the form</p> <p>The changes to the criteria have been agreed. Only the changes to the performance descriptions require further discussion and so the development of A level specifications in history is achievable for first teaching in 2015.</p>		<p>Yes</p>



Part 3: Chair's summarising comments

No issues remain unresolved at the end of this final review meeting.

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *Although technically outside the remit of the review the performance descriptors need slight updating to be consistent with other changes proposed, as noted above.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and other bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level.*
- *The awarding organisations confirmed that the new A Level would be able to adopt a linear approach.*
- *There was discussion regarding the stipulation in the proposed criteria that selected historical topics should come from a chronological range of at least 200 years. There was consensus in the meeting that this was appropriate. Awarding bodies would each need to consider the implementation of this alongside the other content requirements for the A Level.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.

Signature:

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • Minor changes to the wording of the assessment objectives to remove ambiguity and ensure there is a requirement to study primary sources, as requested by HE and other stakeholders 	<p>c.f. 2.2, 3.3 <i>Scrutiny report</i></p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • addition of a statement on extended writing to address the concerns of HE and other stakeholders • fixing the percentage of internal assessment at 20% to ensure comparability across specifications and putting it only in A level where it is more appropriate. 	<p>c.f. 1.4 and 3.4, <i>Scrutiny report</i></p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <ul style="list-style-type: none"> • Changes to the performance descriptions to accommodate the move to a linear specification and the minor changes made above. 	<p>c.f. 1.5, 4.1 <i>Scrutiny report</i>; Ofqual, <i>Fit for Purpose, the view of the higher education sector, teacher and employers on the suitability of A levels</i>, April 2012</p>



Template for the Independent Chair's write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Mathematics and Further Mathematics
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	3
Agreed category (1, 2 or 3) at the end of the final subject review meeting	3

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair's approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each awarding body provided a report prior to the scrutiny meeting outlining their recommendations based on the evidence they had received from HE, Learned Societies, published reports and schools/colleges.</p> <p>Learned Societies and subject associations</p> <p>The following feedback was received by all awarding bodies from learned societies and subject associations in response to a request by JCQ to contribute to this review May 2013. This feedback helped to inform the awarding body recommendations:</p> <p>RSS 16 May 2013: <i>Royal Statistical Society input to Joint Council ACME April 2013: ACME briefing on A level Mathematics and Further Mathematics Qualifications' review of A-level subject content</i></p> <p>ACME 16 May 2013: <i>ACME response letter to request for contribution to the A level review</i></p>	Yes



PEARSON



	<p>ACME September 2012: <i>ACME response to Ofqual consultation on A-level Reform</i></p> <p>ACME 16 May 2013: <i>ACME Position statement on A level reform</i></p> <p>IMA September 2012: <i>IMA response to the Ofqual Consultation on A Level Reform</i></p> <p>LMS 21 May 2013: <i>Response from the London Mathematical Society on the review of A-Level subject content</i></p> <p>In addition, Mathematics in Education and Industry sent the following paper to all awarding bodies:</p> <p>MEI 13 May 2013: <i>Changing the structure of AS/A levels in Mathematics and Further Mathematics</i> An MEI discussion paper</p> <p>Awarding bodies used some or all of the following papers to help to inform their response.</p> <ol style="list-style-type: none">1 ACME 2011: <i>Mathematical Needs: Mathematics in the Workplace and in Higher Education and Mathematical Needs: The Mathematical Needs of Learners</i>2 Nuffield 2010: Hodgen J. et al (2010) <i>Is the UK an outlier?</i>3 The Maths, Stats and OR Network 2009: Savage M. and Stripp, C. (2009) <i>Newton's Mechanics: Who Needs It?</i>,4 Smith 2004: Smith, A. (2004) <i>Making Mathematics Count: The Report of Professor Adrian Smith's Inquiry into Post-14 Mathematics Education</i> (The Smith Report) The Stationery Office Ltd5 Ofqual 2012: <i>International Comparisons in Senior Secondary Assessment</i>6 Institute of Physics 2011: <i>Mind the Gap</i>7 Nuffield 2012: <i>Mathematics in A level assessments</i> Nuffield Foundation	
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- 8 Ofqual(2012: *Fit for Purpose? The view of the higher education sector, teachers and employers on the suitability of A levels*
- 9 RSS 2012: Porkess, R (2012) *The Future of Statistics in our Schools and Colleges*, Royal Statistical Society and the Actuarial profession
- 10 MEI 2012: *How might A level Mathematics be improved? An MEI position paper*
- 11 HE Academy 2011: Koenig, J. (2011) *A survey of the mathematics landscape within bioscience undergraduate and postgraduate UK higher education*
- 12 Research in Mathematics Education 2008: Brown, M. Brown, P. & Bibby, T. *Research in Mathematics Education*. Vol. 10, No. 1, March 2008, 3-18.
- 13 Nuffield 2012: *Towards Universal participation in post-16 mathematics*
- 14 JMC 2011: *Digital technologies and mathematics education*
- 15 Ofqual 2012: *Ofqual Corporate Plan 2012-2015*
- 16 National HE STEM programme 2011: *HE STEM News Spring/Summer 2011*
- 17 ACME November 2012: *Core mathematics – overarching descriptions*

AQA held a stakeholder event in September 2012 attended by 13 HE representatives (Russell Group and others), 10 teacher representatives and 8 subject and curriculum bodies i.e. MEI, LMS, Nuffield, ATM, MA, RSS, Nanamic and ACME. An event was held for HE in February 2013 with 10 universities represented. The first of a number of teacher events took place in time to inform its response with six teachers attending this month. AQA also drew evidence from published learned society documents (see lists above and below), particularly from ACME. In addition, since the autumn, AQA has had a number of formal and informal conversations with ACME and other stakeholders. Notably, a joint awarding body/stakeholder event was hosted



	<p>by Pearson on 8 April.</p> <p>OCR has engaged with stakeholders through consultation with its Maths council (4 meetings) and Maths Consultative Forum (6 meetings). The Maths council comprises maths specialists, learned societies and HE reps. The maths consultative forum includes a good spread of universities both Russell Group and others (15 in total) ; public bodies/learned societies; teachers; HoDs; employers. OCR has also consulted specifically on the subject criteria with at least a dozen representatives from sixth form colleges</p> <p>Pearson engaged with HE through its Strategic Advisory Committee, comprising 8 HE representatives (4 Russell Group, 2 1994 Group, 1 University Alliance and 1 not aligned) and 1 from AoC. It conducted telephone interviews with 40 HE representatives from mathematics and other departments (28 Russell Group, 6 1994 Group, 5 University Alliance and 1 Million+). It also held 4 teacher focus groups with a total of 30 participants. It held a meeting specifically on A level Further Mathematics with attendees from Oxford University, Leeds University, the HE Academy, ACME, RSS, IMA, AQA, OCR and two 6th Form Colleges.</p> <p>WJEC engaged with stakeholders through its HEI advisory group comprising universities based both in England and in Wales. Members contributed through an HEI Advisory Panel meeting in autumn 2012 and through email exchanges in April-May 2013. Advice was also taken from a number of teachers in England and Wales through email in May 2013.</p>	
<p>2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)</p>	<p>Meeting held on 10 June 2013 at Pullman Hotel, St Pancras, London, included representation from two members of each AO. Report on the Scrutiny meeting provides evidence of the output from that meeting.</p>	<p>Yes</p>
<p>3. Final review meetings, led by the independent Chair (joint meetings, involving all</p>	<p>25/06/13</p>	<p>Yes</p>



four exam boards)		
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Part 2: the final recommendation for change

<p>Consider the DfE's question: <i>Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</i></p>		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> Only minor changes required to strengthen the sense that mathematics is a subject that supports other subjects and that it builds on the aims and objectives of GCSE mathematics 	c.f. 1.2 <i>Scrutiny report</i>	Yes
<p>Does subject content need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> All agreed that: <ol style="list-style-type: none"> the core content would need to be reviewed in respect of which topics went into the new stand-alone AS and of whether the total amount should be reduced to accommodate HE's request for more problem solving there should be a consideration of identifying core content for Further Mathematics. 	c.f. 1.3 <i>Scrutiny report; the views of the higher education sector as collected by the awarding bodies</i>	Yes
The rationale for awarding the category rating 3 given at	c.f. 6.1 <i>Scrutiny report</i> – this gives full details of the current	Yes



<p>the top of the form</p> <p>The view of the mathematics community in general is that the issue is not with the content but with the proposed change to move to linear qualifications. This would have a huge impact on the structures of the two A levels and, most importantly, on the uptake of the two qualifications. The issues are as follows:</p> <ul style="list-style-type: none"> • Specifications might be constructed so that there are not options – there would be either no applied content or fixed applied content; either way, learners would not be able to choose the applied content that they required for their intended progression or that they needed to support other A levels • If the rule of having only three components was imposed on Mathematics, it would be difficult to accommodate assessments of an appropriate size for the non-calculator assessment, calculator assessment and suitable applied assessments • If the rule of having only three components was imposed on Further Mathematics the number of options possible would be reduced, the suitability of the options available for students’ career choices would be diminished, and it would be difficult to include internal assessment which may be the most valid form of assessment for some options • If the rule of having only three components for Further Mathematics was relaxed, the above issues would be addressed but the assessment for those taking both A level Mathematics and A level Further Mathematics would be particularly burdensome 	<p>structures and of the potential impact of moving to a linear structure. These views were informed by feedback from the following:</p> <p>MEI 2012: <i>How might A level Mathematics be improved?</i> An MEI position paper</p> <p>MEI 13 May 2013: <i>Changing the structure of AS/A levels in Mathematics and Further Mathematics</i> An MEI discussion paper</p> <p>RSS 16 May 2013: <i>Royal Statistical Society input to Joint Council</i></p> <p>ACME April 2013: <i>ACME briefing on A level Mathematics and Further Mathematics Qualifications’ review of A-level subject content</i></p> <p>ACME 16 May 2013: <i>ACME response letter to request for contribution to the A level review</i></p> <p>ACME September 2012: <i>ACME response to Ofqual consultation on A-level Reform</i></p> <p>ACME 16 May 2013: <i>ACME Position statement on A level reform</i></p> <p>IMA September 2012: <i>IMA response to the Ofqual Consultation on A Level Reform</i></p> <p>LMS 21 May 2013: <i>Response from the London Mathematical Society on the review of A-Level subject content</i></p>	
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<ul style="list-style-type: none"> • A combination of factors might result in much reduced take up of both AS and A level Further Mathematics (i) the creation of a stand-alone AS and (ii) the influence of linearisation).in Further Mathematics is likely to reduce participation in. As ACME suggests in its position paper “Students may have started an AS level in Year 12 with the intention of dropping the subject, but have enjoyed it and taken it to a full A level. These students may no longer commence AS, or may no longer transfer onto the A level.” • Fewer centres may offer Further Mathematics because of the loss of the facility of co-teaching part of the course with Mathematics and because of reductions in funding. <p>The view of the mathematics community is these two subjects already have high demand. The qualifications compare well with international benchmarks and Ofqual noted in its international comparisons report that “A level Further Mathematics was the broadest and deepest qualification reviewed. Its inclusion of abstract and technically difficult mathematics also makes it extremely demanding.”</p> <p>If the unitised structure is retained for Mathematics and Further Mathematics, some minor amendments could be made for 2015 to meet the requirements of HE, including strengthening the assessment of proof, problem solving and modeling. These are outlined in the Scrutiny Report.</p>	<p>Ofqual 2012: <i>International Comparisons in Senior Secondary Assessment</i></p> <p>c.f. 6.2 <i>Scrutiny Report</i></p>	
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Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *The current relationship of A level mathematics and AS/A further mathematics is based on the unitised nature of the qualifications, with shared and co-teachable units. The exam boards agree that the move to linear qualifications would involve such a large scale of change that these subjects would not be ready for first teaching by September 2015.*
- *There is also major concern that a move away from unitised exams would lead to a severe setback in the uptake of subjects that have been making significant advances in increasing numbers of candidates in recent years. For this impact to be minimised, there will need to be consultation and careful modeling of the new qualifications. The exam boards do not feel that this could be done in time for first teaching in 2015, with the requirement for more depth needing careful consideration against the current breadth.*
- *These arguments are set out in the report from the exam boards' scrutiny meeting.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *See above.*

I have some additional comments to make.

- *I agree with the exam boards that A levels in mathematics and further mathematics should be placed in category 3.*
- *I asked for further details of the evidence gathered and I was satisfied that a wide range of universities and learned societies had been consulted.*
- *The exam boards have also set out recommendations to address HE requirements (e.g. more problem solving). These are set out in the report from the exam boards' scrutiny meeting.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.



Signature:

A small white rectangular box containing a handwritten signature in blue ink that reads 'Mark E. Smith'.

Date: 3/07/13

Appendix 1: recommended changes to the assessment elements of the subject criteria

<p>Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: <i>Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?</i> i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>	
Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <p>6. The actual changes that are made to assessment objectives will depend on the structure that is decided for these qualifications. Ofqual should:</p> <ul style="list-style-type: none"> • Make amendments to assessment objectives to improve clarity and to address requirements of HE to improve the assessment of proof, problem solving and modelling. • Give consideration to having different weightings for the assessment objectives for AS Mathematics, A level Mathematics, AS Further Mathematics and A level Further Mathematics 	<p>c.f. 1.4, 6.2 <i>Scrutiny report</i></p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <p>7. It is recommended that the unitised nature of the subjects is retained and that the scheme of assessment is not changed. If a linear structure is introduced, very careful consideration will need to be given to the scheme of assessment to ensure that changes do not impact in a negative way on uptake.</p>	<p>c.f. 1.5 <i>Scrutiny report; position supported by learned societies</i></p>



Do performance descriptions need to change? If so what change is needed?

8. That the performance descriptors are updated (c.f. Recommendation 9, *Scrutiny report*) to reflect any revisions made to the assessment objectives by Ofqual.

c.f. 1.6, *Scrutiny report*; Ofqual, *Fit for Purpose, the view of the higher education sector, teacher and employers on the suitability of A levels*, April 2012



Template for the Independent Chair’s write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Physics
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair’s approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	<p>Each of the four awarding organisations undertook its own review and presented a summary report based on that to the scrutiny meeting. Each awarding organisation also took account of responses from learned societies to a request for evidence from JCQ.</p> <p>The sources of external evidence noted by each awarding organisation are as follows:</p> <p>AQA: HE Expert Panel, SCORE, Institute of Physics, Ofqual, OECD, Association for Science Education,</p> <p>Pearson: External Stakeholder Advisory Committee, HEIs (by questionnaire), SCORE, Institute of Physics, Ofqual, 59 Club.</p>	Yes



	<p>OCR: OCR Science Consultative Forum, OCR HE Forum, SCORE, Ofqual</p> <p>WJEC: HE Advisory Group, SCORE, Institute of Physics, Ofqual.</p>	
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	<p>A scrutiny meeting was held on 10 June 2013, with subject specialists from each of the four awarding organisations being present.</p> <p>A note of the scrutiny meeting, agreed by all participants, is available to the final review meeting.</p>	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all four exam boards)	25/06/13.	Yes

Part 2: the final recommendation for change

<p>Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> a change to be made in the order in which the aims and objectives are listed, one being reworded to refer to practical, mathematical and problem-solving skills and 	<p>A range of possible changes is suggested in the evidence, and there is consensus on the need to refer to the practical, mathematical and problem solving skills to be developed.</p>	Yes

<p>remove reference to “how science works”, and the reference to careers is changed to those “associated with the subject” rather than “in the subject”.</p>		
<p>Does subject content need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • The main changes include the addition, or making more explicit, of the following <ul style="list-style-type: none"> - Newton’s laws of motion; - projectile motion; - principle of conservation of energy; - radian measure of angle and angular velocity; - mechanical properties of matter (stress, strain, energy stored); Young modulus, force-extension graphs) - charge curves; - interference; - electrical and gravitational potential and changes in potential energy. • The only two elements of content proposed for deletion are (i) the qualitative treatment of free and forced vibrations, damping and resonance, because these cannot be addressed satisfactorily without a quantitative treatment, which is not within scope, and (ii) appreciation that $E=mc^2$ applies to all energy changes, as it is understood that it has never been examined, and “appreciate” is not amenable to 	<p>A range of suggestions regarding additional content was considered, as detailed in the report of the scrutiny meeting. Several of the suggestions were considered to reflect the interests of individual HE teaching departments, and if the core is to continue to represent 60% of the overall specification content, then additions need to be restricted to topics on which there is a high level of agreement.</p> <p>There were few specific suggestions for content to be deleted, and this selection is based on these topics not being able to be addressed satisfactorily at this level.</p>	<p>Yes</p>

<p>assessment.</p> <ul style="list-style-type: none"> The main changes in relation to the mathematical requirements, as indicated in Annexe 8 are: <ul style="list-style-type: none"> - identifying uncertainties in measurement and the use of simple techniques to determine uncertainty when data are combined; - changing the subject of non-linear equations - solving quadratic equations - distinguishing between instantaneous and average rate of change - solving equations involving rates of change - interpreting logarithmic plots - use of small angle approximations. In relation to the modifications currently proposed, it is suggested that these should be reviewed in parallel with the process of finalising the proposals for GCSE reform. In relation to practical work, a summary of requirements could be drawn up along the lines of Annexe 8 for mathematical requirements, drawing on evidence which includes the report commissioned by the Gatsby foundation: "Improving the assessment of practical work in school science" (Reiss, Abrahams and Sharpe, October 2012). 	<p>There is extensive evidence from HEIs and from SCORE regarding the need to strengthen the mathematical requirements.</p> <p>Proposals for reforms to GCSE Science and Mathematics are currently under consultation. Account will need to be taken of the final form of these, although the first and second cohorts for the reformed A Levels will be progressing from current GCSEs.</p> <p>The Gatsby report is considered to be one of the most helpful recent reviews that provide detailed suggestions in relation to practical work.</p>	
<p>The rationale for awarding the category rating (1, 2 or 3) given at the top of the form</p>	<p>2 – although there are numerous suggested changes to be made to the criteria, there is a considerable degree of agreement and the changes are not difficult to implement.</p>	<p>Yes</p>



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *Resolve, working with Ofqual, issues about assessment of practical skills (see main report)*
- *There needs to be further exploration of what synoptic assessment would mean in practice for a linear physics A level.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *Mathematical skills – work on exemplary material to illustrate how to embed mathematical skills (see main report)*
- *Agree on the correct assessment weighting percentage for mathematical skills (see main report)*
- *Work across science subject teams on wording of common aims and objectives and scheme of assessment (see main report)*
- *Work across science subject teams on wording and assessment weighting of common assessment objectives (see main report)*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and learned bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level in 2015.*
- *The emerging physics GCSE has implication for physics A level – the subject team reported that there were different approaches to some elements of physics in the new GCSE (e.g. energy) that would affect the A level.*
- *The subject team has added an appendix to the criteria summarising practical skills in physics to address HE's requirement for the understanding of practical techniques.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.



Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith' on a white rectangular background.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> In each of the assessment objectives, the phrase “how science works” to be replaced by “working scientifically”, and within AO1 the wording to be amended to “knowledge with understanding” (the connecting word is currently “and”). The permitted weighting for AO2 is proposed to be adjusted to 40-50% (currently 35-45%) and for AO3 to 20-30% (currently 20-40%). 	<p>There is evidence that the current balance between assessment objectives is not well suited to the intended linear assessment arrangements, and there is a consensus that some of the terminology needs to be updated and also aligned with GCSEs.</p>
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> In order to provide flexibility to accommodate different views regarding how practical work may be most appropriately assessed, there should no longer be a requirement for an internally assessed element, and if such a component is included in any awarding organisation’s specification, it should have a maximum weighting of 20%. In relation to the modifications currently proposed, it is suggested 	<p>The evidence reflects a wide range of views on the assessment of practical work, and the recommendation seeks to accommodate that.</p>



<p>that these should be reviewed in parallel with the process of finalising the proposals for GCSE reform. There is scope for indicating how the mathematical requirements should be articulated in the assessments.</p>	
<p>Do performance descriptions need to change? If so what change is needed?</p> <ul style="list-style-type: none">• No changes are proposed other than the editing amendments which are required as consequence of changes to the assessment objectives.• Also, the performance descriptors should be reviewed further in the context of (i) any amendments to the assessment objectives, and (ii) any changes that may be made to the way in which A level grades are awarded.	<p>Issues relating to performance descriptors do not feature prominently in the evidence – the main points would appear to be their relationship with the assessment objectives and with the way in which grades are awarded.</p>



Template for the Independent Chair’s write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the independent Chair of the final review meetings.	
Subject	Psychology
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	2

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair’s approval
1. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	Each awarding organisation provided a written submission of the evidence obtained to support their initial position. Each has used a range of pre-existing and new Higher Education and teacher representatives and panels. For some awarding bodies these groups also included representatives from the British Psychological Society. Their responses summarise the feedback received through a range of panel meetings, one-to-one conversations, questionnaires and surveys.	Yes
2. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	A report of this meeting which summarises the main discussion points, agreements and recommendations made is provided.	Yes
3. Final review meetings, led by the independent Chair (joint meetings, involving all	25/06/13	Yes



four exam boards)		
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Part 2: the final recommendation for change

<p>Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>		
Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
<p>Do aims and objectives need to change? If so, what change is needed?</p> <p>There was no recommendation for change.</p>	<p>None of the evidence submitted indicated a need to change this section of the subject criteria.</p>	<p>Yes</p>
<p>Does subject content need to change? If so, what change is needed?</p> <p>The following recommendations were made:</p> <p>Recommendation 2 The recommended new wording for point 13 was: 'In the 'how science works - psychology' part of assessment objective 3, learners are required to carry out ethical investigative activities appropriate for the study of psychology at this level.'</p>	<p>In coming to Recommendation 2 the review group brought together evidence from previous iterations of A-level psychology specifications, when coursework was allowed which occasionally demonstrated that certain research topics were not ethically acceptable. It was noted that the BPS has guidelines for teachers and students about selecting appropriate studies. The group wanted to recognize the feedback received: that this is an area that continues to have risk associated with it and this change would help to reinforce the need to pay attention to this important area. The evidence for this change was taken from the BPS and several HE representations that advocated more emphasis on doing practical work rather than just knowing about how to do it. The change to 'required' also accords with the proposed changes in wording to the Assessment Objectives.</p>	<p>Yes</p>



<p>Recommendation 3 In section 55, paragraph one should read 'in addition to the AS level, A level specifications must require learners to develop further'. In the second paragraph to read 'Learners must have an understanding of different approaches in psychology.....'</p> <p>Recommendation 4 It was agreed to make two minor changes to section 53:</p> <p>In the opening sentence remove the word 'methods' because the sub sections articulate where methods are relevant. In the first bullet point amend to 'methods and techniques for collection of quantitative and qualitative data including experimentation, observation, self-report, and correlational analysis;' to recognise that correlation is not a technique for collection.</p>	<p>For Recommendation 3 the review group took the opportunity to tidy up the grammar and consistency of the document across sections 51 and 55.</p> <p>For Recommendation 4 the review group once again was keen to ensure that section 53 was improved to correct the meaning.</p>	
<p>The rationale for awarding the category rating (1, 2 or 3) given at the top of the form. Overall the recommended changes to the existing criteria were very modest, which is why this is category 2.</p>	<p>A consensus of the evidence from HE and during the meeting was that minor changes are needed to the subject criteria; the most contentious issue was around removing two of the core areas of study as recommended by the BPS. There was not a common view across HE in this area and therefore no change was recommended. This issue is reported more fully in appendix 2.</p>	Yes



PEARSON



Part 3: Chair's summarising comments

Some issues remain unresolved at the end of this final review meeting.

- *It would be helpful to have clarification from Ofqual on what synoptic assessment would mean in practice for a linear psychology A level.*

Some further actions from the awarding organisations are required at the end of this final review meeting.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and learned societies had been consulted.*
- *Mathematical skills – work on exemplary material to illustrate how to embed mathematical skills (see main report).*
- *Agree on the correct assessment weighting percentage for mathematical skills (see main report).*
- *Work across science subject teams on wording of common aims and objectives and scheme of assessment (see main report).*
- *Work across science subject teams on wording and assessment weighting of assessment objectives, although in psychology it is agreed that the wording of AO3 will be different and AO2 and AO3 will have different weightings (see main report).*
- *Responding to the requirement from HE and learned societies for a greater emphasis on practical work, and to standardise the approach of the exam boards, the subject teams will look at the wording of assessment objective 3. While practical work will continue to be externally assessed, the rewording will reflect the requirement that students need to know how to carry out practical and to demonstrate practical application of that knowledge. One recommendation was that the 'some' might be useful, capturing the idea that some practical skills can be externally assessed.*

I have some additional comments to make.

- *I asked for further details of the evidence supporting these changes and I was satisfied that a wide range of universities and learned bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level in 2015.*
- *It was agreed that the scheme of assessment should remain wholly externally assessed.*



As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.

Signature:

A handwritten signature in blue ink that reads 'Mark E. Smith'. The signature is written in a cursive style and is placed on a white rectangular background.

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: *Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?* i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <p>Recommendation 1 In the first paragraph of AO3 add 'demonstrate and' to 'describe ethical, safe and skilful practical techniques and processes, selecting qualitative and quantitative methods'. This was to match the wording in the assessment objective to the performance descriptor and help reinforce the importance of doing practical work.</p> <p>In the second paragraph delete 'know how to' from the start of the sentence which now reads 'make, record and communicate reliable and valid observations and measurements with appropriate precision and accuracy, through using primary and secondary sources.' This was to reinforce the importance of doing rather than theoretically knowing how to do practical skills.</p> <p>Recommendation 5 It was recommended that assessment objectives should remain the same with the exception of AO3 where changes to the wording are</p>	<p>HE feedback consistently emphasised the importance of demonstrating practical skills in psychology. Therefore in order to reinforce this point some minor, but important, changes to the wording of AO3 are in Recommendation 1. In Recommendation 5 the argument for narrowing the percentage range allowed for AO3 is mainly resulting from technical arguments to improve comparability of standards across awarding organization specifications. It also ensures that the minimum weighting for this objective is now higher.</p> <p>In recommending these changes it is acknowledged that a check across all the separate sciences will be needed to ensure that the sections which are currently common remain so, or through this process require evidence-based change specific to that subject.</p>



<p>provided above. It was also recommended that the width of the band of weighting for AO3 should be reduced from 20-40% to 25-35% to enable better comparability of standards across awarding organisations. A similar recommendation is made for AS.</p>	
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <p>No changes were recommended.</p>	<p>The majority evidence from HE was to maintain 100% external assessment.</p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <p>It was noted that changes to AO3 need to be reflected in minor changes to the performance descriptors.</p>	<p>There was no evidence from HE for any substantive change to the performance descriptors.</p>



Template for the Independent Chair's write-up of the final GCE subject review meetings

The bulk of this form is to be completed by representatives from the awarding organisations. Shaded areas are to be completed by the Independent Chair of the final review meetings.	
Subject	Sociology
Recommended category (1, 2 or 3) for consideration at the final subject review meeting	2
Agreed category (1, 2 or 3) at the end of the final subject review meeting	1

Part 1: the process

Stages	Evidence from awarding organisations that the process has been followed	Chair's approval
4. Initial review, involving responses from teachers, HE and learned bodies (undertaken by each exam board independently, with learned bodies engaged jointly)	Pearson was not involved in the initial review because they do not offer an A Level qualification in this subject. However, AQA, WJEC and OCR each completed a written submission to support their initial positions which were based on wide-ranging consultation across all stakeholders, and taking into account relevant research which is evidenced in the original AO templates, though the weight of teacher feedback seems to be greater than that of feedback from HE for this subject. Also referenced is Cambridge Assessment's phased research into what HE wants from undergraduates on admission to a range of subjects. These three awarding organisations attended the scrutiny meeting and reached consensus on the category that into which A Level Sociology falls. This is evidenced in the completion of the templates and the Chair's report.	Yes
5. Scrutiny meetings, involving subject specialists from each exam board (joint meetings, involving all four exam boards sharing responses)	A report of the meeting is provided which summarises the main points and outlines final agreements and recommendations.	Yes



6. Final review meetings, led by the independent Chair (Joint meetings, involving all four exam boards)	26/06/13	Yes
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Part 2: the final recommendation for change

Consider the DfE's question: Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement? i.e. looking at current A Level subject criteria is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?

Content recommendations that require approval	Evidence gathered for recommendation	Chair's approval
Do aims and objectives need to change? If so, what change is needed? <ul style="list-style-type: none"> No change required 	It was agreed that although minor changes to phrasing could be applied, overall the As and Os are still appropriate to this subject. Feedback from stakeholders indicated no requirement for change in As and Os.	Yes
Does subject content need to change? If so, what change is needed? Page 5, point 7, Themes: It was agreed that: 'For example the theme of 'socialisation, culture and identity' might be addressed through aspects of 'families' (rather than the family)but equally through aspects of 'the media' (rather than mass media) or 'youth culture' . A2 needs to be replaced by A Level wherever 'A2' occurs whether in Content, assessment objectives or other.	Suggested changes to subject content were not in discussion seen as critical. These particular change would recognise better that there are for example many different families rather than 'the family' as a single concept and reflects the requirement that stakeholders have expressed (recorded in subject templates) for more globalisation. This is a change to reflect the decoupling of AS and A Level.	Yes
The rationale for awarding the category rating (1, 2 or 3) given at the top of the form The above recommendations are for minor changes only. Awarding organisations believed that there are no real drivers for change in this subject that cannot be accommodated within the present criteria with minor changes	Whilst HE feedback does reflect the need for some fine tuning within A Level Sociology qualifications, awarding organisations believe this can be done within existing criteria and does not require significant change.	Yes



PEARSON



Part 3: Chair's summarising comments

No issues remain unresolved at the end of this final review meeting.

No further actions from the awarding organisations are required at the end of this final review meeting.

I have some additional comments to make

- *After discussion it was agreed that sociology A level should be moved from the suggested category 2 into category 1. The few suggested minor changes have been prompted by the subject team rather than higher education and the learned societies.*
- *I asked for further details of the evidence and I was satisfied that a wide range of universities and learned bodies had been consulted.*
- *The awarding organisations confirmed that they would be able to deliver a standalone AS level alongside the new A level in 2015.*
- *The awarding organisations reported that higher education feels that the quantitative skills of their sociology students are adequate. A report by the Royal Statistical Society, looking at the requirements in A levels, is due this summer and will include further evidence about this aspect of sociology A level.*
- *The sociology criteria require two themes – socialisation, culture and identity; social differentiation, power and stratification – to be applied to a range of substantive areas. In the view of the subject team, this means that the subject already lends itself to synoptic assessment.*

As the independent Chair I am in a position to verify that the process followed by each of the exam boards' expert panels for reviewing specification content has been robust, comprehensive and followed good governance procedures, and that the results of the review process have been fairly recorded in this paper.

Signature:

Date: 3/07/13



Appendix 1: recommended changes to the assessment elements of the subject criteria

<p>Awarding organisations have also agreed recommendations relating to the assessment elements of the subject criteria. These are not part of the formal approval process but are detailed in this appendix for the record. Again they are in response to the question the DfE posed awarding organisations: <i>Do the current GCE subject criteria, as exemplified by current qualification specifications, support the successful progression of individuals who have been awarded a GCE in a given subject to undergraduate study either in that subject or in a subject for which a GCE in the subject is a standards entry requirement?</i> i.e. looking at current A Level subject criteria, is there anything that needs to change to enable awarding organisations to develop the qualifications that will meet HE needs, in accordance with the feedback gathered?</p>	
Assessment recommendations for information only	Evidence gathered for recommendation
<p>Do assessment objectives (including the weighting) need to change? If so, what change is needed?</p> <ul style="list-style-type: none"> • Only to change from referencing A Level instead of A2 	
<p>Does the scheme of assessment, including internal/external and synoptic assessment, need to change? If so, what change is needed?</p> <p>No.</p>	<p>Agreement was reached across awarding organisations that the issues raised by HE e.g. the need for students to develop research skills, can be addressed within the current scheme of assessment.</p>
<p>Do performance descriptions need to change? If so what change is needed?</p> <p>Again, only to change to referencing A level.</p>	