

Guidance on preparing students for 'stretch and challenge' in the revised A2 assessments

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Background

The current GCE A level specifications were revised for first teaching in 2008. A key part of these revisions was to introduce 'stretch and challenge' into A2 assessments to prepare students better for the skills required in higher education and employment.

The awarding bodies were given guidance that 'stretch and challenge' questions should:

- use a variety of stems in questions for example analyse, evaluate, discuss, compare –
 to elicit a full range of response types, thereby avoiding a formulaic approach
- ensure that sections of questions are connected, thereby avoiding questions that are too atomistic
- require extended writing in all subjects
- use a wider range of question type to address different skills, ie not just short answer and structured questions, but open-ended questions, case studies, etc
- use improved synoptic assessment in all A2 assessments.

There is now a more consistent approach to the assessment of the quality of written communication. This is assessed in questions requiring extended writing. Ideally these questions will be assessed using levels of response mark schemes with quality of written communication descriptors integrated into the mark bands.

Achievement on 'stretch and challenge' will be recognised, rewarded and reported through an additional A* grade. The A* grade will be awarded for the A level qualification only (not for the AS qualification or at unit level). The A* grade will be awarded to candidates who have achieved:

- a grade A overall (ie 80% of the maximum uniform marks for the whole A level qualification)
- 90% of the maximum uniform marks on the aggregate of the A2 units.

Implications of the changes for teaching and learning

Teachers will need to scrutinise carefully the sample assessments and mark schemes (for both internal and external assessments) to identify what changes have been made in their subject specification.

Questions

Points to note:

- In some subjects, there may be question stems that were not used previously, eg 'discuss', 'assess', and these will require some extended writing and may be marked using levels of response mark schemes. (See example 1.)
- In some subjects, there may be new longer essay style questions. (See example 2.)
- All A2 units will contain some synoptic assessment.

Mark schemes

Points to note:

- 'Describe' and 'explain' questions may continue to be point marked but there may be restrictions, eg one mark for each point made and then additional marks for expansion of the point. This will encourage and reward in-depth answers. (See example 3.)
- 'Discuss' questions will usually be marked using levels of response / banded mark schemes. Students may be required to assess the pros and cons and present and justify an argument to achieve full marks. (See examples 1 and 4.)
- Synoptic assessment will be a part of all A2 units and so students will need to be prepared for this. (See examples 4, 5 and 6.)
- There may be increased demand in the top mark bands of levels of response mark schemes. (See example 4, 5 and 6.)
- The changes to the assessment of quality of written communication mean that candidates will achieve full marks on some questions/tasks only if they have good quality of written communication. (See examples 4, 5 and 6.)

The A* grade

The introduction of the A* grade may change resitting behaviour of some high-ability candidates. Students who are comfortably on target to achieve a grade A and are aiming to achieve an A* would be better advised to concentrate on their A2 units than to resit AS units in order to maximise their uniform marks.

Examples

The following have been selected from the awarding bodies' sample assessments for the revised A levels to illustrate the points to note in the new examinations.

Example 1 - OCR computing unit F453

Question 3a) Discuss the use of different computer architectures for different problem solutions.

Mark scheme

High level response [6-8 marks]

Candidates will show a clear understanding of the problem and answer the question. Candidates will accurately and clearly, as a minimum give both positive and negative implications and a discussion will take place. The information will be presented in a structured and coherent form appropriate to a discussion. There will be few if any errors in spelling, grammar and punctuation. Technical terms will be used appropriately and correctly.

Medium level response [3-5marks]

Candidates will show an understanding of the problem and may answer the question from one viewpoint only. Candidates may only give either positive or negative implications. The information will be presented in a structured format appropriate to a discussion. There may be occasional errors in spelling, grammar and punctuation. Technical terms will be mainly correct.

Low level response [0-2 marks]

Candidates may demonstrate a limited understanding of the problem. Information may be a list of points, with no implications. Information will be poorly expressed and the presentation of the information may not be appropriate for a discussion. There will be a limited, if any, use of technical terms. Errors of grammar, punctuation and spelling may be intrusive.

Points to be made:

- Von Neumann architecture
- involves the use of data and instruction being held together in memory
- sequential processing
- involves the use of a sequence of instructions carried out in a specific order to solve a problem
- following a specific algorithm
- where the order will change the outcome
- suits any example where the outcome is dependent on steps being taken in a defined order eg the solution to a formula
- necessarily time hungry because it uses a single processor
- · parallel processing
- uses multiple processors
- to carry out instructions at the same time
- requires complex processing to adapt the sequential algorithm
- speeds up arithmetic processes
- · mention of co-processing
- mention of array processing
- used in time dependent operations which require large amounts of processor time
- eg weather forecasting
- · explanation of interdependency of conditions in physical blocks

Example 2 - AQA biology unit 5

Question 11 Write an essay on one of the following topics.

EITHER (a) N

(a) Mean temperatures are rising in many parts of the world. The rising temperatures may result in physiological and ecological effects on living organisms. Describe and explain these effects.

OR (b) The causes of variation and its biological importance.

You should write your essay in continuous prose. Your essay will be marked not only for its scientific accuracy, but also for your selection of relevant material from different parts of the specification.

The maximum number of marks that can be awarded are

Scientific content 16
Breadth of knowledge 3
Relevance 3
Quality of written communication 3

General principles for marking essay questions

Four skill areas will be marked: Scientific content (**S**)

Breadth of knowledge (B)

Relevance (R)

Quality of written communication (Q)

These skill areas are marked independently of each other. Providing that there is sufficient evidence, and the subject content is relevant to the question answered, it is possible for candidates to obtain maximum credit for skill areas **B**, **R** and **Q**, even if they gain little credit for scientific content.

The following descriptors will form the basis for marking.

Scientific content (Maximum 16 marks)

Mark Descriptor

16 Material accurate and of a high standard throughout, reflecting a sound understanding of the principles involved and a knowledge of factual detail fully in keeping with a programme of A level study. In addition, there are some significant references to material which indicates greater depth or breadth of study.

14

12 Most of the material is of a high standard reflecting a sound understanding of the principles involved and a knowledge of factual detail generally in keeping with a programme of A level study. Material accurate and free from fundamental errors, but there may be minor errors which detract from the overall accuracy.

10

- **8** A significant amount of the content is of appropriate depth. Shows a sound understanding of most of the principles involved and a knowledge of factual detail generally in keeping with a programme of A-level study. Most of the content is accurate with few fundamental errors.
- 4 Material presented is largely superficial with only occasional content of appropriate depth. Shows some understanding of some of the basic principles involved. If a greater depth of knowledge is demonstrated, then there are many fundamental errors.
- O Such material as is relevant is both superficial and inaccurate, rarely demonstrating evidence of knowledge in keeping with a programme of A level study.

Breadth (Maximum 3 marks) Mark Descriptor

- **3** A balance account making reference to most areas that might realistically be covered in an A-level course of study.
- **2** A number of areas covered but a lack of balance. Some topics essential to an understanding at this level not covered.
- 1 Unbalanced account with all or almost all material based on a single aspect.
- **0** Material entirely irrelevant.

Relevance (Maximum 3 marks)

Mark Descriptor

- **3** All material presented is clearly relevant to the title. Allowance should be made for judicious use of introductory material.
- **2** Material generally selected in support of title but some of the main content of the essay is only of marginal relevance.
- 1 Some attempt made to relate material to the title but considerable amounts are largely irrelevant.
- **0** Material entirely irrelevant or too limited in quantity to judge.

Quality of written communication (maximum 3 marks) Mark Descriptor

- **3** Material is presented in clear, scientific English. Technical terminology has been used effectively and accurately throughout.
- **2** Account is logical and generally presented in clear, scientific English. Technical terminology has generally been used effectively and is usually accurate.
- 1 The essay is poorly constructed. Often fails to use an appropriate scientific style and terminology to express ideas.
- **0** Material entirely irrelevant or too limited in quantity to judge.

Example 3 – Edexcel design & technology product design: resistant materials technology unit 3

Question 5a) Just in time (JIT) is a production management system that is often used in business. Consider the advantages of a JIT system.

Mark scheme

A consideration that makes reference to **two** of the following examples from:

- It is a system which produces minimum waste time, materials and resources (1) therefore is more environmentally friendly (1)
- Minimises work in progress (WIP) (1) therefore reduces the amount of factory floor space needed/reduced amount of capital tied up in stock (1)
- Enables quick response manufacturing (QRM) (1) therefore the manufacturer can respond to customer demand (1)

For maximum marks **both** the lead-in and justification must be present and linked. Each bullet point indicates a single answer containing two linked points.

Answers are indicative of the responses expected of candidates. They are not exhaustive so apply professional judgement to interpret if candidate's response is appropriate, using the indicative answers as a guide.

Example 4 - Edexcel geography unit 3

Question 6(c) To what extent does GM technology provide a technological fix that is economically sustainable? (12)

Mark scheme

Indicative content

Expect a definition of sustainable, in terms of long terms economic security, plus other facets. Arguments might focus on the idea of dependency – Latin America as a low cost producer of cattle feed and other commodities for the benefit of the rich 'north'; the long term trend of falling commodity prices may be seen as likely to apply to soybeans as it does to cotton. Will this produce long term economic security? The technology is that of western TNCs and so problems that arise might only be solved by those companies, who may have no real interest in solving them. The misuse of land resources can be seen as unsustainable in the long-run as they are likely to become useless, causing falling yields and eventually leading to economic decline. The industrialisation of farming is likely to lead to a depopulated, ageing countryside and booming, young urban areas with the well known issues of Latin American megacities – neither seems economically sustainable. Counter arguments might focus on the fact that wealth has been created and that revenue is likely to lead to investment.

Synoptic linkages

- 1.1 The high inputs of GM might be seem to be resource heavy and contributing to climate change.
- 1.2 The potential for unbalanced population structures resulting from migration.
- 3.5 Approaches to development whether this technology heavy option is better or worse than more appropriate technologies, or alternative methods (organic) / development models. 3.5/1.3 Dependency on western technology and the motives of the TNCs involved; the question of trade sustainability.
- 3.6 The costs / benefits of technological fixes.

Level Mark Descriptor

Level 1 (1-4) Structure is poor or absent. A few general ideas; may not fully understand the issue of economic sustainability; likely to be one sided and bland. Lift–offs with no structure. Explanations are over simplified and lack clarity. Geographical terminology is rarely used with accuracy. There are frequent grammar, punctuation and spelling errors.

Level 2 (5-8) Structure is satisfactory. Some sound ideas; may not be fully balanced but has some support from resources and some wider ideas but not fully developed. Explanations are clear, but there are areas of less clarity. Lacks full range. Geographical terminology is used with some accuracy. There are some grammar, punctuation and spelling errors.

Level 3 (9-12) Structure is good. Balanced view, with some depth from both the resources and wider linkages; an overview which does address the issue of 'to what extent'. Descriptive language is precise. Explanations are always clear. Geographical terminology is used with accuracy. Grammar, punctuation and spelling errors are rare.

Example 5 - AQA English Literature A unit 3

Question 2

Read extracts C and D

Write a comparison of the ways Shakespeare and Hardy present the partings of people who love each other. You should consider:

- the ways the writers' choices of form, structure and language shape your responses to these extracts
- how your wider reading in the literature of love has contributed to your understanding and interpretation of the extracts.

Mark scheme

Focus: Extracts from Romeo and Juliet and The Woodlanders

Key Words: Comparison, ways present, partings, ways writers' choices shape responses, novel more moving, how wide reading contributed to understanding and interpretation

	Assessment Objective 1	Assessment Objective 2	Assessment Objective 3	Assessment Objective 4
	Candidates should be able to articulate creative, informed and relevant responses to literary texts, using appropriate terminology and concepts, and coherent written expression	Candidates should be able to demonstrate critical understanding in analysing the ways in which structure, form and language shape meanings in literary texts	Candidates should be able to explore connections and comparisons between different literary texts, informed by interpretations of other readers	Candidates should be able to demonstrate understanding of the significance and influence of the contexts in which literary texts are written and received
Band 1 0 – 13	Candidates characteristically: a. communicate limited knowledge and understanding of extracts from Romeo and Juliet and The Woodlanders and focus on partings b. make few uses of appropriate terminology or examples to support their interpretations c. attempt to communicate using inaccurate language d. offer unclear lines of argument and unsupported assertion	Candidates characteristically: a. identify few aspects of structure, form or language in the two extracts b. assert some aspects with reference to how they shape meaning c. make limited references to the two extracts and pay little attention to ways uses	Candidates characteristically: a. make few comparisons between the extracts from Romeo and Juliet and The Woodlanders referring to superficial features b. make few links and connections between the two extracts and wider reading c. reflect views expressed in other interpretations or readings d. assert a narrow range of meaning	Candidates characteristically: a. communicate a limited understanding of Shakespearean and Victorian context and its influence on the two extracts
Band 2	Candidates characteristically: a. communicate knowledge	Candidates characteristically: a. identify some	Candidates characteristically: a. note comparisons	Candidates characteristically: a. comment on some
14 – 21	and some understanding of the extracts from Romeo and Juliet and The	aspects of the ways Shakespeare and	between the two extracts in terms of presentation of	of the relationships between the two extracts and their

Woodlanders and focus Hardy use structure, partings contexts on partings form or language in b. make links and b. comment on how b. present responses sixteenth and these two extracts to connections between making use of appropriate present partings nineteenth century the two extracts and terminology and examples b. comment on specific culture and historical their wider reading in to support their aspects of the two the literature of love period, drama and interpretations extracts with reference c. communicate novel genre c. communicate content to how they shape reasonable influence the reading and meaning using of the two extracts. meaning understanding of views straightforward language c. make some expressed in other making some accurately reference interpretations or appropriate d. adopt a generalised to the extracts to readings. connection approach support their responses d. show general awareness of Shakespeare's and Hardy's techniques Candidates Candidates Candidates Candidates characteristically: characteristically: characteristically: characteristically: a. communicate relevant a. identify relevant a. explore a. communicate comparisons knowledge and aspects of form, understanding of understanding of the structure and language between the two relationships extracts from Romeo and in the two extracts extracts in a between the two Juliet and The b. explore the wavs systematic way extracts and their Woodlanders and the Shakespeare and b. explore links and contexts connections between b. evaluate the focus on partings Hardy use specific aspects to shape b. present relevant the two extracts and influence of Band 3 responses using meaning their wider reading in sixteenth and appropriate terminology c. refer in detail to the the literature of love nineteenth century 22 - 31two extracts and to culture and historical and examples to support c. show clear informed responses appropriate sources period, and of the understanding of views c. structure and organise from their wider expressed in other drama and novel increasingly coherent interpretations or reading to support their genre on the ways in writing, integrating responses readings. which literary texts quotations from the texts were written and d. communicate content were, and are. and meaning through well received controlled and accurate writing Candidates Candidates Candidates Candidates characteristically: characteristically: characteristically: characteristically: a. communicate detailed a. identify significant a. analyse and evaluate a. explore and knowledge and aspects of structure. points of comparison analyse the understanding of the two form and language in between the two significance of the extracts from Romeo and relationships the two extracts extracts Juliet and The b. explore confidently b. explore connections between the two Band 4 Woodlanders and the through detailed and between the two extracts and their sophisticated critical focus on partings extracts and their contexts, making 32 - 40b. create and sustain well analysis the ways wider reading in the sophisticated organised and coherent Shakespeare and comparisons literature of love arguments, using Hardy use these c. engage sensitively b. evaluate the appropriate terminology to aspects to create with mature and influence of support informed meaning informed understanding sixteenth and interpretations c. make reference in with different readings nineteenth century and interpretations. c. structure and organise detail to the two culture and historical their writing using an extracts and to period, and of the appropriate critical register, appropriate sources drama and novel

and integrating appropriate quotations d. communicate content and meaning through sophisticated, cogent and coherent writing	from their wider reading to support their responses	genre on the ways in which literary texts were written and were

Example 6 – OCR history unit F966 option B Key Theme: The Challenge of German Nationalism 1789-1919

Question 2 How far do you agree with the view that Kaiser William II managed German nationalism more effectively than Metternich and Bismarck? **[60]**

Mark scheme

Focus: Evaluation of the management of German nationalism in this period by Metternich, Bismarck and William II.

Indicative content

Candidates must address the theme over the full period. Candidates should focus on how effectively Metternich, Bismarck and William II managed German nationalism. They will undoubtedly be more successful if they define 'managed' in their answer. Candidates might define the ways in which the three were (or were not) effective: for example in controlling, harnessing or using nationalism. Clearly all three had different aims and different circumstances, which could enable candidates to make convincing cases for all of them. By 1848/49 no leader of the nationalist movement with mass appeal emerged. From 1809 to 1848 the nationalist movement was too weak to challenge the Metternich System; arguably this demonstrates Metternich's effective control over German nationalists. Equally Metternich fled Vienna in 1848, though his downfall was hardly dominated by German nationalism. Many candidates may argue in favour of Bismarck because of his critical role in the 1860s in the creation of the Second Reich; they may argue that he managed German nationalism by hijacking the nationalist cause for Prussia's ends. This too could be considered effective management of German nationalism. William II's search for world power was undoubtedly populist, mirroring the development of radical nationalism but it placed Germany in a vulnerable and dangerous position. The ultimate outcome of his policies was defeat in the Great War and humiliation at Versailles. Alternative explanations are possible and examiners must be open to alternative approaches. If in doubt, consult your Team Leader.

Mark descriptors

ASSESSMENT OBJECTIVES	AO1a	AO1b
Total mark for each question = 60	Recall, select and deploy historical knowledge appropriately, and communicate knowledge and understanding of history in a clear and effective manner.	Demonstrate understanding of the past through explanation, analysis and arriving at substantiated judgements of: - key concepts such as causation, consequence, continuity, change and significance within an historical context; - the relationships between key features and characteristics of the periods studied
Level IA	 Uses a wide range of accurate and relevant evidence Accurate and confident use of appropriate historical terminology Answer is clearly structured and coherent; communicates accurately and legibly. 18-20 	 Excellent understanding of key concepts (eg. continuity and change) relevant to analysis in their historical context Excellent synthesis and synoptic assessment Answer is consistently and relevantly analytical with developed explanations and supported judgements

Level IB	Uses accurate and relevant evidence Accurate use of a range of appropriate historical terminology Answer is clearly structured and mostly coherent; communicates accurately and legibly 16-17	 May make unexpected but substantiated connections over the whole period 36-40 Very good level of understanding of key concepts (eg. continuity and change) in their historical context. Answer is consistently focused on the question set Very good level of explanation/ analysis, and provides supported judgements. Very good synthesis and synoptic assessment of the whole period 32-35
Level II	 Uses mostly accurate and relevant evidence Generally accurate use of historical terminology Answer is structured and mostly coherent; writing is legible and communication is generally clear 14-15 	 Good level of understanding of key concepts (eg. continuity and change) in their historical context Good explanation/ analysis but overall judgements may be uneven Answer is focused on the issues in the question set Good synthesis and assessment of developments over most of the period
Level III	 Uses relevant evidence but there may be some inaccuracy Answer includes relevant historical terminology but this may not be extensive or always accurately used Most of the answer is structured and coherent; writing is legible and communication is generally clear 12-13 	 Shows a sound understanding of key concepts, especially continuity and change, in their historical context Most of the answer is focused on the question set Answers may be a mixture of analysis and explanation but also description and narrative, but there may also be some uneven overall judgements; OR answers may provide more consistent analysis but the quality will be uneven and its support often general or thin Answer assesses relevant factors but provides only a limited synthesis of developments over most of the period
Level IV	 There is deployment of relevant knowledge but level/ accuracy will vary. Some unclear and/or underdeveloped and/or disorganised sections 	 Satisfactory understanding of key concepts (eg. continuity and change) in their historical context Satisfactory focus on the question set Answer may be largely

	Mostly satisfactory level of communication 10-11	descriptive/narratives of events, and links between this and analytical comments will typically be weak or unexplained Makes limited synoptic judgements about developments over only part of the period 20-23
Level V	 General and basic historical knowledge but also some irrelevant and inaccurate material Often unclear and disorganised sections Adequate level of communication but some weak prose passages 8-9 	 General understanding of key concepts (eg. continuity and change) in their historical context Some understanding of the question but answers may focus on the topic and not address the question set OR provides an answer based on generalisation Attempts an explanation but often general coupled with assertion, description / narrative Very little synthesis or analysis and only part(s) of the period will be covered 16-19
Level VI	 Use of relevant evidence will be limited; there will be much irrelevance and inaccuracy Answers may have little organisation or structure Weak use of English and poor organisation 4-7 	 Very little understanding of key concepts (eg. continuity and change) in their historical context Limited perhaps brief explanation Mainly assertion, description / narrative Some understanding of the topic but not the question's requirements 8-15
Level VII	 Little relevant or accurate knowledge Very fragmentary and disorganised response Very poor use of English and some incoherence 0-3 	 Weak understanding of key concepts (eg. continuity and change) in their historical context No explanation Assertion, description / narrative predominate Weak understanding of the topic or of the question's requirements 0-7