

QCDA online consultation for the Advanced Diploma in Science (principal learning)

The consultation is open from 9 February until 4 May 2010 and welcomes responses from anyone with an interest in the Advanced Diploma in Science.

The purpose of the consultation is to receive your views in order to shape the final statement. The statement will be used by awarding organisations to create principal learning qualifications to teach the Advanced Diploma in Science from September 2012.

If you have any questions about the consultation process, questionnaire or the Diploma line of learning statement, please contact QCDA at info@qcda.gov.uk. If you have any other issues or questions please contact Nicola Charleton on survey@pyetaiit.com or 01423 509433.

The consultation is open until 5.00pm on 4 May 2010.

In order to answer the following questions, please first refer to and review Section 2 of the consultation line of learning statement for the Advanced Diploma in Science.

1) Which ONE of the following best describes the views being communicated through this response? (Please tick ONE only)

I am solely representing my own views (please go to Q3)	
I am representing the views of a specific organisation (please go to Q2)	✓

2) IF you are representing the views of a specific organisation please tick ONE only:

Awarding Body/Organisation	
Careers guidance organisation	
Diploma Development Partnership (other than for Science)	
Diploma Development Partnership for Science	
Employer	
Further Education College/Sixth Form College	
Higher Education Institution	
Learning and Skills Council	
Local Authority	
Professional Body/Learned Society	
School	
Sector Skills Council/Body	
Subject Association	
Teaching union	
Training provider	
Other (please specify):	
Curriculum Development Organisation	

3) In the context of your answer to Q1 or Q2 what is your main job role/position:

Programme Leader (Curriculum) for Mathematics in Education and Industry

4) Have you participated in any previous online or event consultation activities during 2008/2009 regarding the Advanced Diploma in Science?

Yes (please go to Q4a)	✓
No (please go to Q5)	

4a) Please specify your involvement (optional)

Diploma in Science consultation Sept/Oct 2008

When the line of learning statement for the Advanced Diploma is approved, the awarding organisations will use it, the line of learning criteria and a toolkit (also produced by the science Diploma development partnership) to develop principal learning qualifications. These qualifications will be used to teach the Advanced Diploma in Science from September 2012.

Please answer the following questions based on reading all seven topics in the consultation line of learning statement.

Please rate these questions from 1 to 10 where 1 is the lowest and 10 is the highest:

5) How would you rate the potential of the topics to MOTIVATE learners at this level?

Please rate from 1 to 10

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6) How would you rate the potential of the topics to form a qualification that is DIFFERENT from other Science qualifications currently available at Advanced level?

Please rate from 1 to 10

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7) Does the Principal Learning contain all the SCIENCE you would expect to see at Advanced level?

Yes (please go to Q8)	
No (please go to Q7a)	

You may wish to answer one or both of questions 7a and 7b as appropriate

7a) Please explain which aspects of science content you believe are incorrect?

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7b) Please explain which aspects of science content you believe are missing?

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8) The Diploma is designed as a multidisciplinary qualification. It draws on the three main scientific disciplines of biology, chemistry and physics and on a broader range of scientific disciplines. Thinking about this, does the principal learning contain FUNDAMENTAL SCIENTIFIC CONTENT required for learners at Advanced level?

Yes (please go to Q9)	
No (please go to Q8a)	

8a) Please explain what fundamental scientific content appears to be missing?

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9) Thinking about the MATHEMATICAL content in the principal learning, have we got the LEVEL OF DEMAND about right for learners at Advanced level?

Yes (please go to Q10)	
No (please go to Q9a)	✓

9a) Please explain which aspects of the MATHEMATICAL content you believe have been written at a level either above or below that required for Advanced level:

Above the required level:

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Below the required level:

Some aspects will have been learnt at GCSE and will also be revisited in Functional Skills e.g. arithmetic and computation.

It is appropriate to revisit and extend the algebraic and statistical content of GCSE.

10) Does the content cover the TYPE of MATHEMATICS you would expect to see in a science qualification at Advanced Level?

Yes (please go to Q11)	
No (please go to Q10a)	✓

10a) Please explain which aspects of the MATHEMATICAL content you believe are either included and should not be, or are missing?

Included and should not be:

Missing:

The exclusion of calculus will have a detrimental effect on students who wish to take their scientific studies further. I would expect to see further algebraic content e.g. solution of quadratic equations and numerical methods for solving equations.

Although reference is made to statistical techniques, it is not clear that the ideas of bias, significance and confidence which are referred to in the line of learning are statistical ideas and should be taught alongside the statistical techniques to ensure understanding.

The Diploma is made up of three components (as listed below) all of which the learner must achieve to enable completion and be able to progress into higher education, apprenticeships and/or employment.

- **principal learning** that is the new and mandatory part of the Diploma
- **generic learning** made up of personal, learning and thinking skills (PLTS), functional skills, the project and 10 days' work experience, and
- **additional and specialist learning (ASL)** that is the flexible part of the Diploma and can be made up of existing qualifications such as single science qualifications or new qualifications.

Question 11 is for respondents representing the views of Higher Education Institutions only. If you do not meet this criteria please continue to Question 12.

11) On the basis of the information available at this stage, and specifically thinking about your own higher education institution's entry requirements, does the content (i.e. the knowledge, understanding and skills) form a basis for PROGRESSION to a broad range of higher education courses?

Yes (please go to Q12)	
No (please go to Q11a)	

11a) Please explain your answer in relation to the following Higher Education routes?

Applied science:

Pure science:

Other:

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12) On the basis of the information available at this stage, does the content (i.e. the knowledge, understanding and skills) form a basis for PROGRESSION to higher education?

Yes (please go to Q13)	
No (please go to Q12a)	✓

12a) Please explain your answer in relation to the following Higher Education routes?

Applied science:

See 10a. The consultation documents say that HE are concerned about “the declining standard of mathematical skills among higher education entrants”. It is, therefore, essential to remedy this in the content of the diploma.
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Pure science:

See above.

Other:

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13) On the basis of the information available at this stage, please rate (from 1 to 10 where 1 is the lowest and 10 is the highest) the suitability of the content (i.e. the knowledge, understanding and skills) as a basis for PROGRESSION to:

Please rate EACH from 1 to 10:

Apprenticeships (Advanced Level)	
Employment	

14) If you have rated any of the choices in Q13 below 5 please explain this:

Apprenticeships (Advanced Level):

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Employment:

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15) Taking into account the six equality strands – race, age, gender, disability, sexual orientation and religion and belief – to what extent do you agree or disagree that the topics could promote equality and diversity?

Please tick ONE Only

Strongly Agree	
Agree	
Disagree	
Strongly Disagree	
Neither agree nor disagree	✓

16) Please explain your answer in Q15 and relate it, where possible, to any of the specific equality strands.

The topics seem to be neutral in terms of the equality strands. However, care must be taken that the short topics (60 GLH), i.e. topics 2, 3, 4, do not turn out to be significantly more demanding by trying to pack too much into a shorter time. That would disadvantage students who do not cope well with pressure.

Thank you for participating. The findings will be used to help shape the line of learning statement and influence the development of the Advanced Diploma in Science ready for first teaching in 2012.

You have now finished the survey, please save this form and return to Nicola Charleton on n.charleton@pyetait.com or alternatively print a copy and post to the following address:

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