



AS and A Level Design and Technology

Introduction

AS and A Level Design and Technology are being reformed in Wales for first teaching from September 2017. The reformed AS and A Level Design and Technology will be developed and delivered by WJEC, and will be the only versions of the qualifications available to learners on state funded programmes in Wales, as no other exam board has decided to develop these qualifications for use in Wales. As part of the reform process we are asking for views on the proposed content, structure and assessment of the reformed qualification.

We have developed the proposals in this questionnaire through consultation with a number of stakeholders including WJEC, school and college practitioners, universities, Estyn and the Welsh Government. The outcomes of this questionnaire will help inform the development of approval criteria and regulatory conditions for the new AS and A Level Design and Technology. The specifications and sample assessment materials for these qualifications will be developed and approved on the basis of the approval criteria published by Qualifications Wales.



AS and A Level Design and Technology

Subject aims and content

The current A Level Design and Technology subject aims and content can be found at the links below:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/371160/11-10-18-gce-design-and-technology.pdf

The subject aims and content for the reformed A Level Design and Technology in England have changed as a result of placing more emphasis on mathematics, science, technical principles and designing and making principles.

The Department for Education (DfE) in England published the subject content for the reformed A Level Design and Technology (for England) in December 2015, the link to which can be found below:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/485436/D_and_T_A_level.pdf

We propose that for the reformed A Level Design and Technology in Wales, the subject aims and subject content align to the aims and content specified by the DfE to allow for:

- comparability between the AS and A Level in Wales and the AS and A Level in England;
- to ensure portability of the qualification across the UK;
- to ensure progression to Further and Higher Education and employment.

Q1: To what extent do you agree/disagree with the proposed subject aims and content for the A Level Design and Technology in Wales?

- I strongly agree
- I agree
- I neither agree nor disagree
- I disagree
- I strongly disagree
- I don't know

Comments (we would encourage you to make a comment, particularly if you disagree with the proposal)



AS and A Level Design and Technology

Focus areas

Focus areas exist in the current A Level Design and Technology as specified through the current A Level Design and Technology subject criteria:

'AS and A Level specifications in Design and Technology should also enable learners to specialise in a cognate area or areas such as product design, systems and control, or food. In developing AS and A Level specifications all focus areas should be of equal demand'

A Level Design and Technology is currently being reformed in England. The Department for Education (DfE) and Ofqual (the qualification regulator in England) have decided that the focus areas for the reformed A Level Design and Technology in England should be:

- Design engineering
- Fashion and textiles
- Product design

We propose retaining the requirement for learners to apply their specialist knowledge, skills and understanding in design and technology to a specific area of focus. To support progression we are proposing that the same choice of focus areas is offered at GCSE, AS and A Level.

The areas of focus we propose are intended to balance the need to develop a broad knowledge and understanding of the subject, whichever area they choose to specialise in, and emphasise the importance of the principles and process design, rather than the specific materials used. We propose the following areas of focus:

1. Product design
2. Design engineering
3. Fashion and textiles
4. Communication design

The new focus area of 'Communication design' is proposed to ensure that knowledge and understanding of emerging design and technology practices can be undertaken through A Level Design and Technology. Communication design covers aspects of design technology, including graphic design, and the communication of information through printed and digital media. Practical skills developed in this new focus area could include developing a website, developing a company brand or producing promotion material through printed and digital media.

The Food technology focus area has been removed from the existing GCSE Design and Technology and incorporated into the new GCSE Food and Nutrition qualification. It has also been removed from the new A Level Design and Technology, but not replaced with a standalone A Level qualification. We do not propose re-introducing this focus in to the new AS and A level Design and Technology in Wales.

Q2: To what extent do you agree/disagree with the proposed focus areas for A Level Design and Technology in Wales?

- I strongly agree
- I agree
- I neither agree nor disagree
- I disagree
- I strongly disagree
- I don't know

Comments (we would encourage you to make a comment, particularly if you disagree with the proposal)



AS and A Level Design and Technology

Assessment objectives

Assessment objectives determine how the subject content should be assessed.

The Assessment Objectives and their weightings in the current A Level Design and Technology are:

Objective	Requirements	A Level
AO1	Candidates should demonstrate specific knowledge and understanding and be able to apply that knowledge and understanding in combination with appropriate skills in their designing; and should communicate ideas and outcomes and demonstrate strategies for evaluation.	40-60%
AO2	Candidates should be able to demonstrate and apply skills, knowledge and understanding of relevant materials, processes and techniques, and use materials and equipment to produce suitable and appropriate outcomes; and should communicate ideas and outcomes and demonstrate strategies for evaluation.	40-60%

The following assessment objectives and weightings are proposed for reformed Design and Technology qualifications in England (as of December 2015):

Objective	Requirements	AS Level	A Level
AO1	Identify, investigate and outline design possibilities to address needs and wants	10-15%	10-15%
AO2	Design and make creative prototypes that are fit for purpose	20-25%	20-25%
AO3	Analyse and evaluate – <ul style="list-style-type: none"> • design decisions and outcomes, including for prototypes made by themselves and others • wider issues in design technology 	20-25%	20-25%
AO4	Demonstrate and apply knowledge and understanding of – <ul style="list-style-type: none"> • technical principles • design and making principles 	35-40%	35-40%

We propose that for the reformed A Level Design and Technology in Wales the reformed assessment objectives and weightings for England should be used to secure comparability between the reformed A Level Design and Technology in Wales and its counterparts in England. It would be an expectation that the awarding body ensures the detailed content specified at A Level is compatible with the assessment objectives and secures appropriate progression between each level of study.

We therefore propose the following assessment objectives and weightings for the reformed qualifications in Wales:

Objective	Requirements	AS Level	A Level
AO1	Identify, investigate and outline design possibilities to address needs and wants	10-15%	10-15%
AO2	Design and make prototypes that are fit for purpose	20-25%	20-25%
AO3	Analyse and evaluate – • design decisions and outcomes, including for prototypes made by themselves and others • wider issues in design technology	20-25%	20-25%
AO4	Demonstrate and apply knowledge and understanding of – • technical principles • design and making principles	35-40%	35-40%

Q3: To what extent do you agree/disagree that the assessment objectives and weightings should apply to A Level Design and Technology in Wales?

- I strongly agree
- I agree
- I neither agree nor disagree
- I disagree
- I strongly disagree
- I don't know

Comments (we would encourage you to make a comment, particularly if you disagree with the proposal)



AS and A Level Design and Technology

Non examination assessment (NEA)

The current specifications for A Level Design and Technology include non examination assessment (presently identified as 'coursework').

Engagement with stakeholders in Wales emphasised the need to ensure that the subject content and assessment arrangements reflect the iterative design process: to ensure that learners have the opportunity to explore contexts, develop ideas, explore unfamiliar options and adopt non-prescriptive approaches to finding solutions, evaluate, refine and produce outcomes.

These activities take place over an extended period of time and are inextricably linked to each other. Non examination assessment allows for evidence towards the assessment to be collected at different points throughout the learner's design and production processes, ensuring that the full design journey can be captured and assessed.

We recognise that the skills identified in each of the assessment objectives contribute to a successful design and make project outcome. We propose that a proportion of all the assessment objectives should be assessed against the non examination assessment. We will require an awarding body to give a rationale for the specific balance of assessment objectives achieved across the exam and the non examination assessment within its specification.

We propose that both a portfolio of evidence and an artefact should be produced and assessed as part of the non examination assessment. We also propose that the non examination assessment should place a greater emphasis on the application of practical skills than on the documentation of the design process, as in the current specifications.

Non examination assessment requirements

Presently, the weighting between examinations and non examination assessments at A Level is 40% and 60%, respectively. In England a 50/50 weighting in reformed A Level Design and Technology qualifications is proposed. Stakeholders in Wales felt that these changes were appropriate and reflected an increase of demand in the subject content. We propose that Wales also adopts a 50/50 weighting for A Level Design and Technology.

Q4: To what extent do you agree/disagree that NEA at AS and A Level Design and Technology should have an assessment weighting of 50%?

- I strongly agree
- I agree
- I neither agree nor disagree
- I disagree
- I strongly disagree
- I don't know

Comments (we would encourage you to make a comment, particularly if you disagree with the proposal)



AS and A Level Design and Technology

Continuing professional development/resources

Q5: What support and resources do you feel centres and teachers may require to achieve maximum readiness to deliver the revised specification? We would particularly welcome any further information regarding continuing professional development and resources needed for the delivery of the Communication Design focus area.

Please provide comments



AS and A Level Design and Technology

Equality impact

The Equality Act 2010 states that public bodies must have 'due regard', when making decisions, to ensure there is no discrimination, harassment or victimisation of individuals or groups, to ensure equality and to foster good relations in relation to protected characteristics (age, sex, disability, sexual orientation, race, religion, marriage and civil partnership, pregnancy and maternity and sexual reassignment).

Q6: With this in mind, please highlight below if you feel any of this proposal has the potential to have a positive or negative impact on individuals with protected characteristics and whether any of the proposal would cause accessibility issues for learners in Wales.



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Personal Details

Participants under the age of 16 are requested NOT to fill in this section.

If you supply contact details, we may contact you for clarification of your answers. Qualifications Wales (QW) will not share these details, or details of your answers with any third party.

Personal Details

Name

Company

Email Address

Are you responding as an individual or on behalf of your organisation?

- Individual
- Organisation

Please select the type of organisation or choose 'not applicable' if responding as an individual

- School
- College
- University
- Qualification Awarding Body
- Government (Local, National, UK or EU)
- Non-Applicable
- Other (please specify)

Are you a: (please select as appropriate)

- Teacher
- College Lecturer
- University Lecturer
- Student
- Parent
- Other (please specify)