

GCSE DESIGN AND TECHNOLOGY



**Summary of decisions and analysis of responses
to our consultation on reforming GCSE Design and
Technology for first teaching in September 2017**

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Executive Summary

Between 4 April and 15 May 2016, Qualifications Wales consulted on proposals for a reformed GCSE Design and Technology qualification to be Approved for first teaching in Wales from September 2017. A copy of the consultation proposals and questions is available at [this link](#).

In July 2016 we published *Approval Criteria for GCSE Design and Technology (2016)*¹, which set out the detailed requirements for how the reformed qualification should be designed and assessed. The requirements are informed by the responses to our online consultation and by views expressed by learners through a supplementary engagement exercise.

This report summarises the responses we received to the consultation of the proposals and explains the decisions that we took in light of these, which are reflected in the *Approval Criteria for GCSE Design and Technology (2016)*¹.

This report is available in English and in Welsh. Respondents' comments have been translated, where appropriate, in accordance with the language of the report.

Percentages used throughout this document have been rounded to the nearest whole number.

Background

GCSE Design and Technology is being reformed in Wales for first teaching from September 2017, as part of a wider programme of reforms to GCSEs, AS and A levels. The only awarding body who will develop and offer the reformed GCSE Design and Technology qualification in Wales will be WJEC, as it is the only awarding body who has agreed to develop reformed GCSEs designed specifically for award in Wales.

The proposals on which we consulted were developed through engagement with a number of stakeholders including the awarding body WJEC, schools and further education institutions (FEIs), higher education institutions (HEIs) and the Welsh Government (WG).

Summary of proposals and decisions

Aims and Objectives

We proposed a set of aims and objectives for the reformed qualification, which we have broadly retained in the Approval Criteria, with some minor amendments.

¹ [Approval Criteria for GCSE Design and Technology](#)

Content

We proposed that the content to be studied and assessed in the new qualification should cover four focus areas. We have retained three of these areas in the Approval Criteria.

Assessment Objectives

We have adopted the proposed assessment objectives on which we consulted, however small changes have been made to the assessment weightings.

Assessment

As proposed, the qualification will not be tiered and will be assessed through both non-examination assessment and written examination.

Consultation responses

In total, 55 respondents completed all, or part of, the online consultation for GCSE Design and Technology. Of these, 53 participants responded as individuals and 2 responded as parents. 30 responded on behalf of an organisation, 4 responded as other and 21 did not complete this section of the consultation. Of those who responded on behalf of an organisation, 30 represented schools, 1 represented curriculum leaders, 1 an industry specialist, 1 head of technology faculty and 1 a design and technology technician.

Subject aims and objectives

For the reformed GCSE Design and Technology qualification we proposed the following subject aims and objectives:

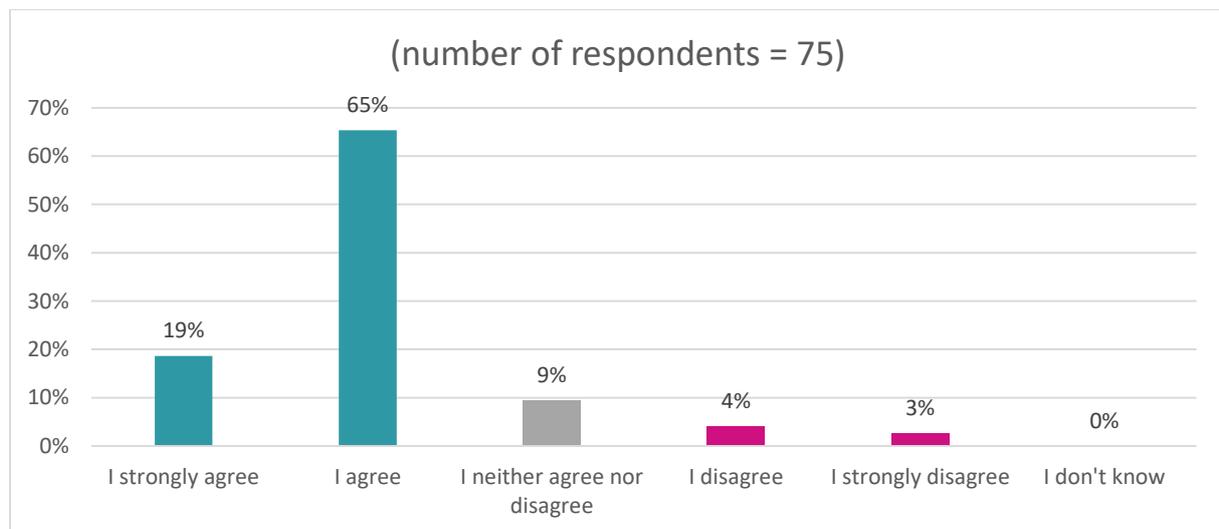
- *GCSE specifications in Design and Technology must enable learners to:*
 - *develop an appreciation of the importance of creativity and innovation to good design practice;*
 - *actively engage in the processes of design and technology to develop as effective and independent learners;*
 - *understand key designing and making principles;*
 - *use their knowledge, skills and understanding to make decisions regarding design in order to make quality products;*
 - *analyse existing products and produce practical solutions to needs, wants and opportunities, recognising their impact on quality of life;*
 - *work independently and collaboratively;*
 - *critically analyse links between the principles of good design, existing solutions and technological knowledge;*
 - *understand the underlying technical principles within design and technology in their specific focus area, with emphasis on emerging technologies, materials and practices.*

In our consultation, we asked:

Question 1: To what extent do you agree/disagree with the proposed subject aims and content for the GCSE Design and Technology in Wales?

As illustrated in Chart 1 below, the majority (84%) of respondents either agreed or strongly agreed with the proposal, 9% neither agreed nor disagreed and 7% disagreed or strongly disagreed.

Chart 1. Showing responses to question 1 of the GCSE Design and Technology consultation.



- Of those who agreed or strongly agreed with our proposals one respondent stated “strongly agree with the aims of this qualification but think that there should still be scope for teachers to work from their own areas of strength and expertise”.
- One respondent who disagreed stated “the curriculum should be based upon building technical knowledge and skills”.

Following the consultation, we have decided to retain the proposed aims and objectives, subject to the following minor amendments:

- in 1.3 ‘understand key designing and making principles’ has been replaced with ‘understand the key principles of designing and making’
- in 1.4 ‘make decisions regarding design in order to make quality products’ has been replaced with ‘make design decisions in order to make a quality prototype’
- in 1.5 ‘products’ has been replaced with ‘prototypes’
- 1.6 has been removed
- 1.6 is now 1.7
- 1.7 is now 1.8.

Subject content

For the reformed GCSE Design and Technology qualification, we proposed that the subject content should cover the following four key content areas:

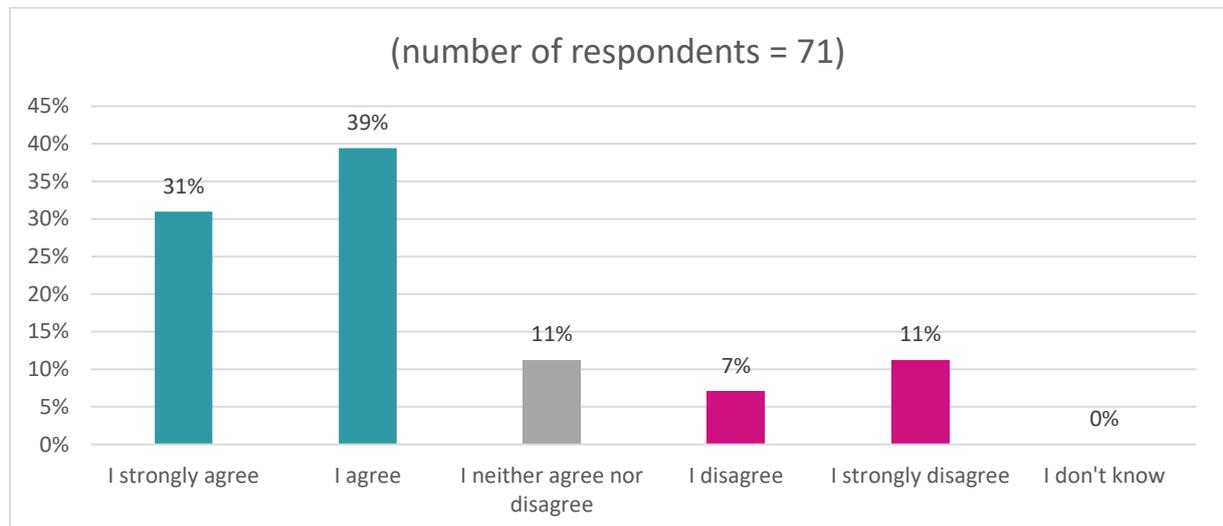
- Product design
- Engineering design
- Fashion and textiles
- Communication design

In our consultation, we asked:

Question 2: To what extent do you agree/disagree with the proposed focus areas for GCSE in Wales?

As Chart 2 below shows, the majority of respondents (71%) agreed or strongly agreed with the proposal. Eleven percent neither agreed nor disagreed and 18% disagreed or strongly disagreed.

Chart 2. Showing responses to question 2 of the GCSE Design and Technology consultation.



- Of the respondents who agreed or strongly agreed with the proposal, respondents stated “I feel that keeping separate areas of study is paramount to achieving the best results for the students”.
- Of those who disagreed or strongly disagreed with the proposal, several respondents commented that they would prefer to retain Resistant Materials as a focus area, with one respondent stating “I am aware that many view this as a craft based subject that is out of date. This is tremendously shortsighted and restrictive”.

- One respondent who neither agreed nor disagreed with the proposal commented that the introduction of Communication Design may “take emphasis away from the more practical and technical aspects of the subject which are vital to have as much focus as possible”.

We have decided to remove Communication Design to leave three focus areas of Product Design, Fashion and Textiles and Engineering Design to ensure alignment with AS and A Level Design and Technology and this is reflected in the *Approval Criteria for GCSE Design and Technology* (2016)¹.

3. Assessment objectives and weightings

We proposed the following assessment objectives and weightings for the reformed GCSE Design and Technology qualification:

Table 1. Proposed assessment objectives and weightings for the reformed GCSE Design and Technology.

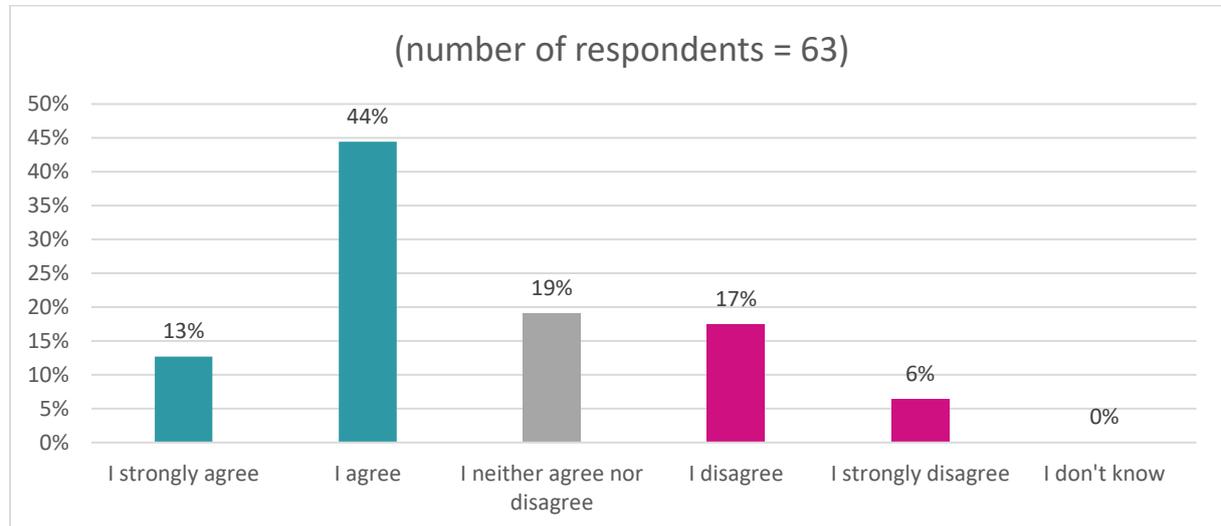
Objective	Requirements	GCSE
AO1	Identify, investigate and outline design possibilities to address needs and wants	10%
AO2	Design and make products that are fit for purpose	30%
AO3	Analyse and evaluate – <ul style="list-style-type: none"> • design decisions and outcomes, including for products made by themselves and others • wider issues in design technology 	20%
AO4	Demonstrate and apply knowledge and understanding of design and technology principles.	40%

In our consultation, we asked:

Question 3: To what extent do you agree/disagree that the assessment objectives and weightings above should apply in Wales?

As Chart 3 below shows, the majority of respondents (57%) agreed or strongly agreed with the proposal, 19% neither agreed nor disagreed and 23% either disagreed or strongly disagreed.

Chart 3. Showing responses to question 3 of the GCSE Design and Technology consultation.



- Respondents who agreed/strongly agreed with the proposal commented:
 - “I feel this would be a fairer way of assessment and rather than making just a prototype they are actually making a finished model”
 - “The percentage for the final examination is appropriate for the subject”.
- Of the 23% of respondents who either disagreed or strongly disagreed one respondent stated “not enough weighting on the making element”.
- One respondent who neither agreed nor disagreed with the proposal commented that marks “must be awarded to those who have skills in the ability to make things well as in the design aspects of the subjects”.

Following the consultation, the following amendments have been made to the final assessment objective weightings:

- AO2 will contribute to 40% of the qualification
- AO3 will contribute to 10% of the qualification
- In AO1 ‘Identify, investigate and outline’ has been amended to ‘identify, investigate, analyse and outline’
- In AO2 ‘Design and make products that are fit for purpose’ has been replaced with ‘Design and make prototypes and evaluate their fitness for purpose’
- In AO3 ‘design decisions and outcomes, including for products made by themselves and others’ has been replaced with ‘design decisions and outcomes in relation to products’.

Assessment

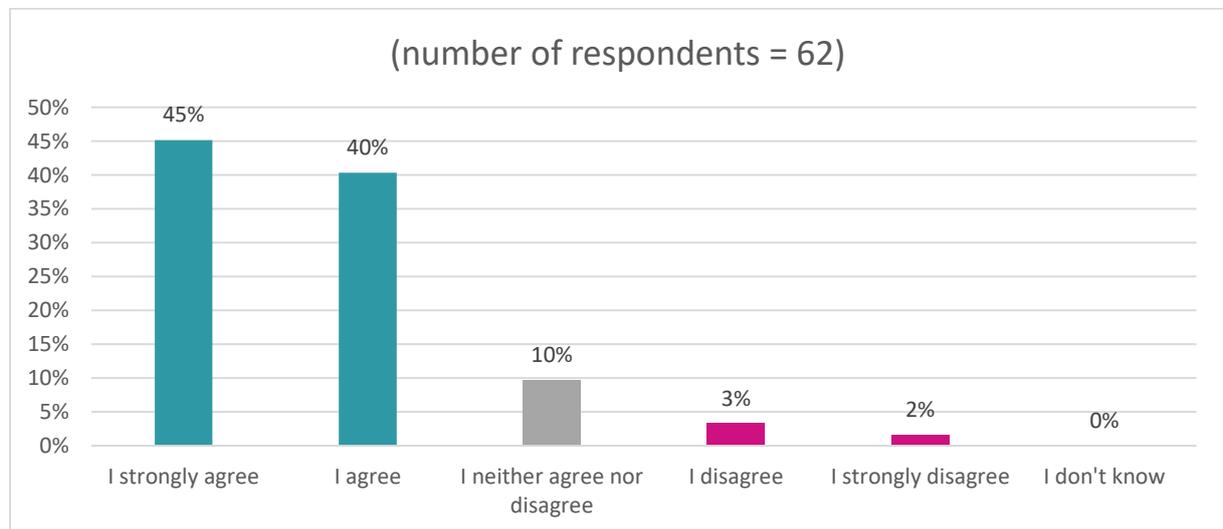
We proposed that the reformed GCSE Design and Technology qualification be assessed through both written examinations and non-examination assessment (NEA).

In our consultation, we asked:

Question 4a: To what extent do you agree/disagree that [sic] with the above proposal?

Chart 4 below shows that 85% of respondents agreed or strongly agreed with the proposal, 10% neither agreed nor disagreed and 5% disagreed or strongly disagreed.

Chart 4. Showing responses to question 4 of the GCSE Design and Technology consultation.



- Of the respondents who agreed/strongly agreed with the proposal, one respondent stated “this will enable slightly weaker students who aren’t very good at writing but are excellent at practical skills to benefit”.
- A respondent strongly disagreed with the proposal commented “it should show how pupils have come up with ideas and developed it into a final solution”.

We have decided that GCSE Design and Technology qualification should be assessed through both written examination and NEA.

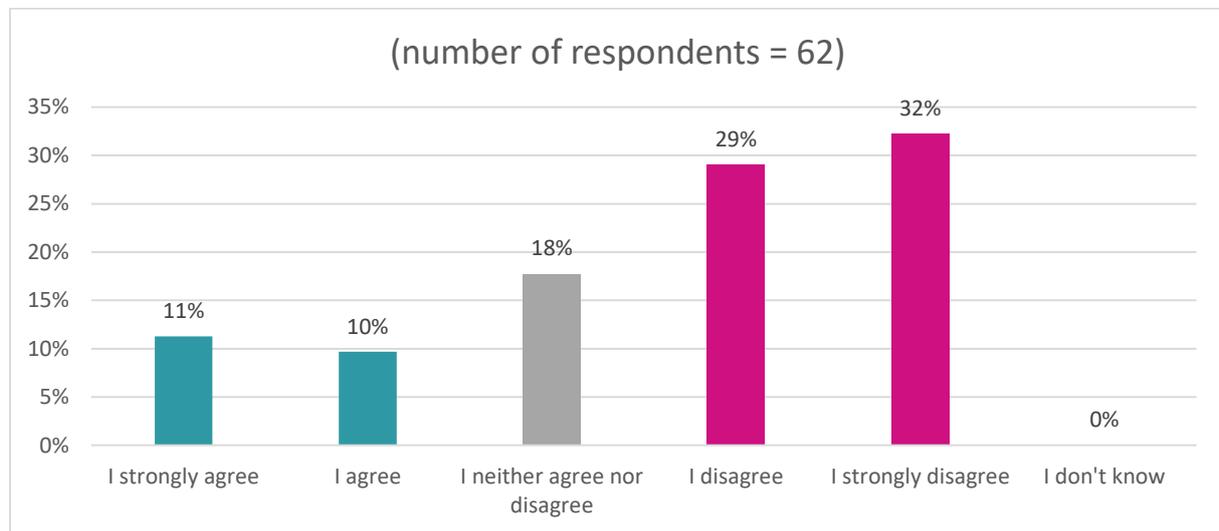
Non-examination assessment weighting

We proposed that NEA in GCSE Design and Technology should have an assessment weighting of 50%. In our consultation, we asked:

Question 4b: To what extent do you agree/disagree that non-examination assessment in GCSE Design and Technology should have an assessment weighting of 50%?

As Chart 5 below shows, 21% of respondents agreed or strongly agreed with the proposal and 61% disagreed or strongly disagreed with the proposal. A further 18% neither agreed nor disagreed.

Chart 5. Showing responses to question 5 of the GCSE Design and Technology consultation.



- Of the respondents who disagreed or strongly disagreed with the proposal, respondents stated:
 - “The current non examination assessment weighting of 60% works better for the type of pupil who usually has strengths in D&T subjects”
 - “60/40 split helps the lower ability pupils achieve. Having 50% will hinder pupils results if they under perform under exam conditions”
 - “It should be kept as it is or changed to 70%/30% (exam)”.
- A respondent who agreed with the proposal stated “I believe there should be more weighting to the exam”.

To ensure alignment with AS and A Level Design and Technology we have decided to adopt the proposal, therefore reformed GCSE Design and Technology will have a NEA weighting of 50%.

Tiering

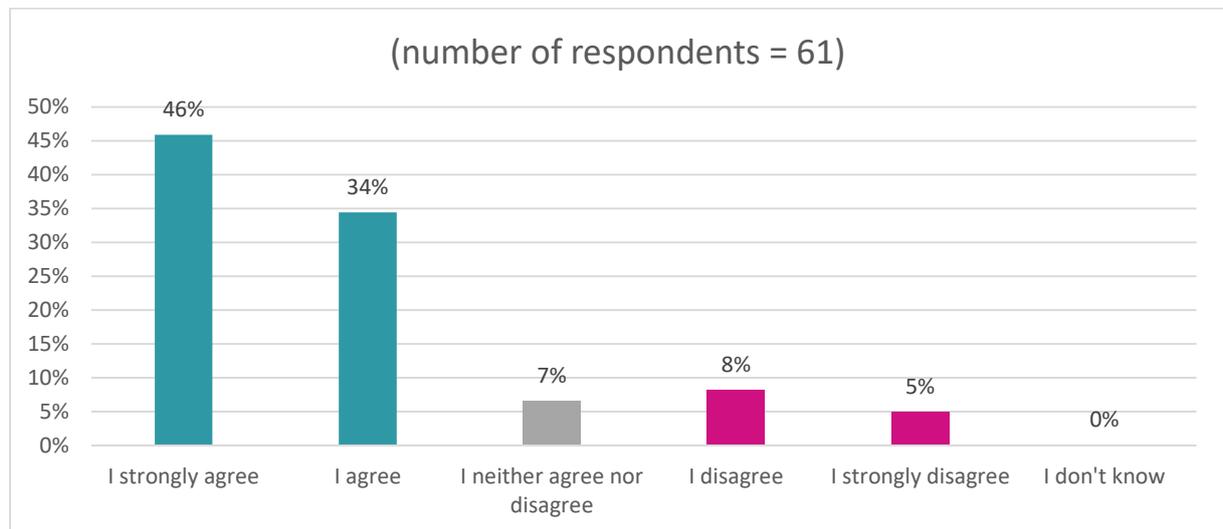
We proposed that the reformed GCSE Design and Technology qualification will not be tiered.

In our consultation, we asked:

Question 5: To what extent do you agree/disagree with the proposal that GCSE Design and Technology should not be tiered?

As Chart 6 below shows, the majority (80%) of respondents agreed or strongly agreed with the proposal, 13% disagreed or strongly disagreed and 7% neither agreed nor disagreed.

Chart 6. Showing responses to question 6 of the GCSE Design and Technology consultation.



- Of the respondents who agreed or strongly agreed, respondents stated:
 - “Having only 1 paper is fairer to all candidates”
 - “Tiering causes confusion for parents and pupils. Tiered exams cause lack of understanding undervaluing results”.

We have decided that the new GCSE qualification should not be tiered. We expect that assessment is designed in a way that is accessible to the whole cohort of candidates taking the qualification.

Support and Resources

In all our consultations, we asked respondents the following question:

What support and resources do you feel centres and teachers may require to achieve maximum readiness to deliver the revised specification? Please provide comments

Those who responded to this question highlighted, amongst others:

- * the need to provide textbooks and online resources;
- * the potential benefits of centrally-organised CPD events and INSET training;
- * the need for exemplar exam papers and sample assessment materials;
- * and the usefulness of model answers to indicate the expected level of response.

We will share the points raised with the awarding body, consortia and Welsh Government.

Impact on individuals with protected characteristics

In all our consultations, we asked respondents the following question:

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.

For the reformed GCSE Design and Technology consultation, no respondents highlighted any positive or negative impacts on individuals with protected characteristics.

Further information

Enquiries about this document should be directed to:

Enquiries
Qualifications Wales
Q2 Building
Pencarn Lane
Imperial Park
Coedkernew
Newport
NP10 8AR
Enquiries@qualificationswales.org