GCE Examiners' Report

Design And Technology

GCE

Summer 2025

Introduction

Our Principal Examiners' report provides valuable feedback on the recent assessment series. It has been written by our Principal Examiners and Principal Moderators after the completion of marking and moderation, and details how candidates have performed in each unit.

This report opens with a summary of candidates' performance, including the assessment objectives/skills/topics/themes being tested, and highlights the characteristics of successful performance and where performance could be improved. It then looks in detail at each unit, pinpointing aspects that proved challenging to some candidates and suggesting some reasons as to why that might be.[1]

The information found in this report provides valuable insight for practitioners to support their teaching and learning activity. We would also encourage practitioners to share this document – in its entirety or in part – with their learners to help with exam preparation, to understand how to avoid pitfalls and to add to their revision toolbox.

Further support

Document	Description	Link
Professional Learning / CPD	WJEC offers an extensive programme of online and face-to-face Professional Learning events. Access interactive feedback, review example candidate responses, gain practical ideas for the classroom and put questions to our dedicated team by registering for one of our events here.	https://www.wjec.co.uk/home/professional-learning/
Past papers	Access the bank of past papers for this qualification, including the most recent assessments. Please note that we do not make past papers available on the public website until 12 months after the examination.	Portal by WJEC or on the WJEC subject page
Grade boundary information	Grade boundaries are the minimum number of marks needed to achieve each grade. For unitised specifications grade boundaries are expressed on a Uniform Mark Scale (UMS). UMS grade boundaries remain the same every year as the range of UMS mark percentages allocated to a particular grade does not change. UMS grade boundaries are published at overall subject and unit level. For linear specifications, a single grade is awarded for the subject, rather than for each unit that contributes towards the overall grade. Grade boundaries are published on results day.	For unitised specifications click here: Results, Grade Boundaries and PRS (wjec.co.uk)

[1] ***Please note that where overall performance on a question/question part was considered good, with no particular areas to highlight, these questions have not been included in the report.***

Exam Results Analysis	WJEC provides information to examination centres via the WJEC Portal. This is restricted to centre staff only. Access is granted to centre staff by the Examinations Officer at the centre.	Portal by WJEC
Classroom Resources	Access our extensive range of FREE classroom resources, including blended learning materials, exam walk-throughs and knowledge organisers to support teaching and learning.	https://resources.wjec.co.uk/
Bank of Professional Learning materials	Access our bank of Professional Learning materials from previous events from our secure website and additional pre-recorded materials available in the public domain.	Portal by WJEC or on the WJEC subject page.
Become an examiner with WJEC.	We are always looking to recruit new examiners or moderators. These opportunities can provide you with valuable insight into the assessment process, enhance your skill set, increase your understanding of your subject and inform your teaching.	Become an Examiner | WJEC

Contents **Page**

Executive Summary

This report provides a comprehensive overview of candidate performance across the 2025 AS and A Level Design and Technology qualifications, including Engineering Design, Fashion & Textiles, Product Design, and the Non-Exam Assessment (NEA). While there are encouraging signs of progress, several recurring themes highlight areas for continued development in teaching, learning, and assessment.

AS Level Overview

Engineering Design

- **Improved performance** noted, with stronger analytical skills and subject knowledge.
- **Designing skills varied**; candidates using conventional techniques for mechanical/electronic systems performed better.
- **Time management** remains a concern, particularly for **Question 6 (50% of total marks)**, where rushed responses led to lower scores.
- **Recommendation**: Use WJEC's **Digital Resources** for exam preparation and time allocation strategies.

Fashion & Textiles

- Paper was accessible, but **performance varied** due to insufficient preparation and lack of technical vocabulary.
- **Lower scoring candidates** often restated questions without deeper insight.
- **Extended responses** lacked structure and planning.
- **Recommendation**: Emphasise structured writing, use of technical terminology, and engagement with **blended learning resources**.

Product Design

- Paper followed a familiar format and was accessible, but **technical knowledge gaps** limited higher achievement.
- Fewer questions were left unanswered, indicating improved engagement.
- **Question 6 (50% of marks)** again highlighted the need for better time management.
- **Recommendation**: Encourage use of **past papers, OERs, and the Question Bank** to build confidence and depth.

AS NEA

- Strong emphasis on **creativity and innovation** was evident and commendable.
- **Assessment accuracy** improved, but some centres still misapplied criteria, especially in higher bands.
- **Moderation issues** persist, particularly with documentation and sample readiness.
- **Recommendation**: Engage with **exemplar materials**, follow moderation guidance, and attend **WJEC CPD sessions**.

A Level Overview

Fashion & Textiles

- Paper structure and demand were consistent with previous years, though **entry numbers declined**.
- Candidates attempted all questions, but **technical depth** was often lacking.
- **Sustainability-related questions** (Q3, Q10) were well answered; **technical questions** (Q6, Q8) revealed knowledge gaps.
- Misinterpretation of questions (e.g., Q5, Q9) led to descriptive rather than analytical responses.
- **Recommendation**: Systematic teaching of the specification, regular practice with **exam-style questions**, and use of **online resources** are essential.

Product Design

- Candidates generally managed time well, with most completing all questions.
- **Weaker areas** included production flow charts, material calculations, and metal stamping processes.
- Encouragingly, **depth and specificity** of responses improved compared to previous years.
- **Recommendation**: Continue reinforcing technical principles and analytical skills through targeted practice and feedback.

A Level NEA

- Creativity and originality were strong across many centres.
- **Assessment accuracy** improved, with fair application of criteria in most cases.
- Persistent issues remain in some centres despite the availability of **WJEC exemplar materials**.
- **Moderation challenges** included incomplete documentation and unprepared samples.
- **Recommendation**: Centres must adhere to moderation protocols and attend **WJEC CPD events** for best practice guidance.

Cross-Qualification Recommendations

- **Time Management**: Reinforce proportional time allocation based on mark weightings, especially for high-value questions.
- **Technical Knowledge**: Strengthen delivery of specification content and subject-specific terminology.
- **Resource Engagement**: Maximise use of WJEC's **digital tools, OERs, and CPD opportunities**.
- **Assessment Practice**: Promote structured, analytical responses through regular exam-style practice and feedback.

GCE AS/A LEVEL DESIGN AND TECHNOLOGY

GCE

Summer 2025

AS ENGINEERING DESIGN – UNIT 1

Overview of the Unit

Although the number of entries for this paper had not increased significantly, the responses by candidates had improved compared to previous years. Many were able to demonstrate in-depth understanding of the subject content and had the analytical skills that are required to achieve at the higher levels. Designing skills were varied. Those candidates who were able to use conventional techniques to illustrate mechanical and electronic systems achieved higher grades.

Candidates should be reminded to consider the total number of marks available for each question and to allocate a proportional amount of time accordingly. The marks for Question 6 are worth 50% of the total for the paper, and this section should take approximately fifty minutes to complete. In some cases, it was evident that candidates had not left sufficient time to answer Question 6 in the detail that is required. As in previous years, responses to the latter sections of this question appeared to be rushed, and as a result, were given low marks.

Centres are strongly encouraged to direct candidates to the Digital Resources Section of the WJEC Website, where an examination walkthrough can be used to help candidates prepare for answering the type of questions that might be anticipated.

Comments on individual questions/sections

Q.1 **(a)** This question was well answered by most candidates. They were able to make clear links between functionality and the requirements of potential consumers.

(b) Candidates were able to discuss the incremental and radical technological developments that have impacted on handheld lighting products since the 1960s. This was again well answered by the majority with many achieving full marks.

Q.2 **(a)** A few candidates demonstrated an understanding of velocity ratio and were able to apply the correct formula. In many cases it was apparent that they were not sufficiently prepared for answering questions of this type.

(b) Those candidates who had a clear understanding of relevant mechanical systems were able to achieve full marks for this question.

(c) This question provoked varied responses. Those who understood the use of keys and keyways to provide positive location of spur gears on rotating shafts were awarded full marks.

(d) Understanding of the properties and advantages of using steel alloys was mixed. It was disappointing to note that many candidates did not fully appreciate the ways in which physical properties of materials can be improved through the production of alloys.

Q.3 Most candidates achieved Level 2 and above. Those who provided a justified analytical argument for selecting thermoplastic materials that related to the named product achieved high marks. The use of technical terminology was varied. In several cases, it was disappointing to note that the candidates did not fully understand issues related to structural integrity and sustainability.

Q.4 Most students were able to identify logic gates and were able to accurately describe the conditions that needed to be met to activate the valve. The truth table had been accurately completed by many students. The general understanding of sequential logic had clearly improved compared to previous years.

Q.5 **(a)** Most candidates were able to identify two advantages of using additive manufacturing to produce prosthetic limbs but only a few were able to provide justification. Consequently, the majority were restricted to lower marks.

(b) With one exception candidates did not demonstrate a detailed understanding of the potential advantages of using additive manufacturing techniques in less economically developed economies. As a result, they had difficulty accessing this question and achieved lower-level marks.

Q.6 The responses to this question in general were significantly better than the responses to comparable questions in previous years. Candidates were able to demonstrate a good understanding of a wide range of relevant technological issues.

(a) Many candidates demonstrated a good understanding of the technological developments that have enabled e-scooters to evolve into a viable form of transport.

(b) Most candidates were able to provide three specification points that would facilitate the development of an e-scooter but only a few provided the justification that is required to achieve full marks.

(c) To achieve good marks for this section candidates, need to be able to use conventional techniques to illustrate mechanical locking devices. Those who had prepared for this type of question were able to access higher marks. The quality of graphic skills and the ability to produce quick annotated sketches remains an area that needs improvement.

(d) The response to this type of question had improved significantly. Candidates were able to draw viable electronic circuits and use standard conventions to represent components. It was pleasing to note some good answers which were given full credit.

(e) Responses to this question were generally poor. With few exceptions candidates did not know how to design and draw electronic encasements which include proposals for mounting components. In future centres are encouraged to focus on the development of graphic skills which would better prepare candidates to answer questions of this type. Candidates also need to know how to design products which:

- have structural integrity
- meet the restrictions that are imposed by manufacturing processes such as injection moulding or vacuum forming
- lend themselves to disassembly and recycling

(f) Candidates produced varied responses to this question with the majority given credit for identification of the major issues. Those who were able to develop their answers with analytical justification achieved higher marks.

Areas for Improvement:

- Improve knowledge and understanding of mechanical components and related systems.
- Develop graphic communication skills so that candidates can quickly sketch and illustrate design concepts and ideas.
- Increase awareness of broad design and technological issues particularly in relation to sustainability and environmental consequences.
- Develop analytical skills in order that candidates can provide justification when producing extended written responses.

GCE AS/A LEVEL DESIGN AND TECHNOLOGY

GCE

Summer 2025

AS FASHION &TEXTILES – UNIT 1

Overview of the Unit

The AS Level Fashion and Textiles examination paper remained consistent with previous series in terms of both content and level of demand. As with most examinations, some questions proved more challenging than others, depending on the topic area. While the paper was accessible to most candidates, performance varied significantly, with a noticeable number of students underperforming, likely due to insufficient preparation for the level of challenge presented by the AS course.

A common pattern among lower scoring candidates was the inability to construct detailed, coherent responses. Many answers lacked the subject-specific knowledge and technical terminology required to access the higher mark bands. In contrast, high achieving candidates demonstrated a strong command of the material, producing responses that were well organised, clearly written, and supported by precise, relevant detail. These responses reflected a solid understanding of the specification content and an ability to apply it thoughtfully and analytically. For many students, greater attention to planning, structure, and developing ideas more fully would have enhanced the overall quality of their answers, especially in extended response sections.

One of the most frequent issues observed was a tendency to restate the question without applying any deeper insight or contextual understanding. This approach often limited the marks that could be awarded, as it failed to demonstrate meaningful engagement with the content. Additionally, several candidates did not read questions thoroughly, leading to responses that were either incomplete or off-target.

Time management also remains a key area for improvement. Candidates must be reminded to use the mark allocations at the end of each question as a guide to the expected depth and breadth of their responses. This is especially important for extended questions, such as Question 6, which is worth 50% of the total marks. Such questions demand thoughtful planning and a substantial investment of time (approximately 50 to 55 minutes) to answer effectively.

To support progress, both teachers and students are encouraged to engage fully with the range of blended learning resources available. These include digital learning tools, topic organisers, and revision packs, all of which offer valuable support in strengthening knowledge, improving exam technique, and addressing areas of identified weakness.

Comments on individual questions/sections

Specific areas for improvement

Areas for improvement	Classroom resources	Brief description of resource
Designers	https://resources-legacy.wjec.co.uk/Pages/ResourceSingle.aspx?rlid=4106	Knowledge organiser Blended learning
Environment	https://resources-legacy.wjec.co.uk/Pages/ResourceSingle.aspx?rlid=4106	Knowledge organiser Blended learning
Natural and synthetic fibres - Wool and Nylon	https://resources-legacy.wjec.co.uk/Pages/ResourceSingle.aspx?rlid=2627	Knowledge organiser Blended learning
CAD CAM	https://resource.download.wjec.co.uk/vtc/2020-21/ko20-21_1-10i/wjec/wjec_ko_2-1-d.pdf	Knowledge organiser Blended learning

GCE AS/A LEVEL DESIGN AND TECHNOLOGY

GCE

Summer 2025

AS PRODUCT DESIGN – UNIT 1

Overview of the Unit

The 2025 AS Level Product Design paper closely followed the established format for the current qualification and tested a a wide range of topics across the specification. The usual differentiation allowed low mark tariff questions to be highly accessible, and more challenging and demanding questions with higher tariffs that required candidates to demonstrate their knowledge and understanding in extended responses. The increasing number of resources, include a number of past papers and mark schemes, OER and question banks allows all candidates to become familiar with the format of the paper.

Even though the paper was accessible to all candidates, it is still evident that they lack in-depth knowledge of certain aspects of the specification that would be expected at this level. Some responses lacked technical knowledge and understanding that would have enabled them to access marks expected at AS level.

Compared to previous years, there was a decrease in questions ‘not attempted’ or only ‘partially attempted’ which is pleasing. A significant number of candidates achieved a total mark below 40 and, in some cases, well below, with very few achieving total marks above 65.

Candidates should be reminded to consider the total number of marks available for each question and to allocate a proportional amount of time accordingly. The marks for Question 6 are worth 50% of the total for the paper and this section should take approximately sixty minutes to complete.

Centres are strongly encouraged to direct candidates to the Digital Resources Section of the WJEC Website where an examination walk through can be used to help them prepare for answering the type of questions that might be anticipated. There is also the Question Bank resource and OERs from previous years which are extremely useful.

Comments on individual questions/sections

Q.1 **(a)** A number of candidates did not give specific reasons for the designer choosing to use the same blade connector for both razors; many gave benefits for the consumer. Many candidates gave clear reasons and justified how it could be customer friendly and would save the manufacturer money and time on setting up a new production line.

(b) **(i)** This was answered well, and candidates were able to give clear benefits to the user of using an aluminium alloy for razor 2.

(ii) Some candidates described this process as being quicker and cheaper which was not correct and not credited. Many were able to identify the additional time and cost the processes would take but also explained that this could turn into an increased profit and target market.

Q.2 There were mixed responses to this question. Firstly, some candidates did not seem to understand the term 'collaborated' and then used their answer to share any knowledge they had of Bethan Gray, totally ignoring the mention of the watch manufacturer. Others could identify the traits of Bethan Gray's work in the watch but then failed to analyse the benefits to the designer and manufacturer. This restricted their marks as it showed a simplistic knowledge of the question.

However, many candidates showed a clear understanding of the question and gave in-depth and well-explained benefits for both the designer and manufacturer. Their responses were expressed fluently and showed detailed knowledge. Level four answers addressed the benefits of increased exposure, increased profits, development of skills for both parties, interest from other brands/designers to grow their target market even further, and how both parties could learn from each other during the collaboration.

Q.3 **(a)** This part of the question was answered well overall. Most candidates gave expanded or detailed responses regarding the information gained from the foam model. The main reason for candidates being awarded one or two marks was related to the depth of their answer. Most candidates could explain that a model could be used to check dimensions, test in the environment where it would be used, and to show it to the target market for feedback.

(b) Some candidates interpreted this question as writing a risk assessment. The question specifically asked about the issues linked to making a foam model. The majority of candidates answered this well and could identify a range of health and safety issues and gave examples of PPE and preventative measures that could be taken. Many mentioned issues linked with hot wire cutters, glue guns, saws, and ventilation due to the particles that would come off the foam; some candidates also mentioned the need for training when using the equipment so that they could minimise health and safety risks.

Q.4 **(a)** This was weakly answered as candidates did not understand the benefits of running a simulation. Many candidates simply stated generic responses regarding the benefits of CAM (for example, explaining that it is quicker than making a model, that the drawing can be edited quickly etc). A small minority correctly linked their answer to the specific benefits of a simulation with some detailed answers referring to checking the run time, checking speeds and identifying any manufacturing errors.

(b) Candidates answered this part of the question more positively than 4(a). They could describe the information provided from the image and scale, identifying the weaker areas. The main reason why candidates may not have been awarded four marks was because they didn't address the second part of the question where they needed to explain how the information could be used in the development of the clip. Some candidates explained that the material may need to be changed or the thickness to eliminate the weaker areas.

Q.5 Overall, this question was answered quite well. The main issue was that candidates either didn't address both parts of the question (the material and the processes) or they didn't evaluate their suitability and instead explained how stainless steel was made and how stamping and press forming are carried out which isn't what the question required. Candidates must ensure they relate their answer to the product shown in the stem of the question. Some candidates gave well-rounded answers and addressed the suitability of stainless steel, press forming and stamping in detail. To achieve higher marks, many candidates needed to show a more in-depth knowledge of the properties of stainless steel.

Q.6 **(a)** There was a very mixed response to the design element this year. Many candidates did not address the three bullet points and missed out on valuable marks. Annotation of designs was often weak and did not offer any additional information. For example, writing next to a sketch of the phone holder design that it "expands for different sizes" shows no knowledge of how this would work and gives a limited response. Many candidates also failed to explain how the smartphone holder would adjust to different angles. Candidates need to ensure they use the criteria as a checklist and that annotation and sketches explain their idea in full. Candidates can still access the top mark bands even if they are not highly skilled at sketching – they can use more annotation to support their design solution. Candidates could also use more sketches showing close-up or exploded details – many candidates drew one sketch for each part of the question and rely on that to show all aspects and very often it does not show the finer details.

(b) This aspect was answered quite well overall with candidates addressing a range of social, moral and environmental issues. Many structured their answer clearly and addressed one aspect at a time. Candidates who were awarded less than half marks may not have written in detail or may not have address all issues; the maximum mark was three if only one issue was discussed. Candidates must ensure they follow the command word and the marks available as an indicator of how much detail is required.

(c) Candidates responded to this question very well. There was a range of ideas presented, and some were shown through good quality sketches. Many candidates used annotation effectively to explain their idea. Many candidates used exploded drawings to aid their answer which was very effective. For candidates who gained lower marks, many had not designed a method that was 'quick and easy' as the question asked, or it wasn't a viable option.

(d) **(i)** Candidates answered this question well. The majority could identify a range of properties that would be required for the handle grip materials and could justify their point. A minority of candidates named a material that would be suitable, which wasn't needed, and didn't always address the properties. Candidates must ensure they read the question carefully so that their answer is focused.

(ii) This question was answered poorly overall. Numerous candidates gave a scale of manufacturing as opposed to a manufacturing process, with many incorrectly writing 'batch' or 'mass' production. Many candidates did include injection moulding or blow moulding in their response, which was correct, but they didn't describe the process as the question asked. A high number of candidates gave advantages of their identified process, which did not answer the question.

(e) Candidates answered this question well overall. Some candidates gave very detailed answers where they named specific modern materials that could be used and could explain how the materials would improve the performance and aesthetics. Many showed in-depth knowledge of carbon fibre. Some candidates also mentioned the use of photochromic materials and nitinol. Some candidates only addressed one part of the question, either the performance or aesthetics, which capped their mark at three marks. Again, candidates need to ensure they focus on the requirements of the question so that they do not lose marks.

GCE AS/A LEVEL DESIGN AND TECHNOLOGY

GCE

Summer 2025

AS NEA – UNIT 2

Overview of the Unit

It has been encouraging to observe a strong emphasis on creativity and innovation across many centres this year, with a number of candidates producing impressive and original final outcomes. The commitment to nurturing inventive thinking is clearly evident and should be commended.

In general, assessment across the majority of centres was applied fairly and with greater accuracy than in 2024. However, when awarding marks, particularly within the higher bands, it remains essential that the assessment criteria and mark band descriptors are interpreted and applied precisely. Close attention must be given to the specific wording of each band to ensure that marks awarded are fully justified.

Despite some improvements, some of the issues highlighted in previous reports continue to appear in certain centres. This is concerning, especially considering that the WJEC has made a wide range of exemplar NEA materials available to support effective standardisation. Teachers are strongly encouraged to engage with these resources and implement the guidance and recommendations provided.

This report should be used in conjunction with the individual centre feedback report to support reflective practice and continuous improvement. In addition, all teaching staff are encouraged to attend the annual free CPD sessions offered by the WJEC. These sessions provide valuable insight into best practices and assessment standards.

Some centres are still facing challenges with the administration of the moderation process. To ensure a smooth and equitable moderation experience for all candidates, it is vital that centres fully adhere to the moderation requirements outlined in the specification. Please ensure that all required documentation, including marksheets and candidate portfolios, is complete and readily accessible. Moderators may request additional samples beyond the original sample and, being prepared for this is crucial to avoid delays or complications.

Comments on individual questions/sections

Identifying and Investigating Design Possibilities

It was encouraging to see some candidates undertaking excellent and focused research to support the identification of meaningful design opportunities. The assessment criteria require candidates to explore a broad range of real problems or opportunities in order to develop informed and relevant design briefs. However, in several cases, the research lacked focus, with some investigations being overly general and not clearly linked to the core problem or need. All research, including case studies of designers, practitioners, and companies, should directly inform or support the chosen design context. Unconnected or superficial research contributes little to the development of a clear design brief.

Candidates should be encouraged to adopt a range of investigative strategies, including interviews, observational studies, data collection, and user profiling, and to clearly communicate how these findings influence the direction of their project.
Notably, the use of AI tools was more apparent this year, with many candidates referencing and analysing AI-generated insights. While AI is not prohibited, it must be used appropriately as a design tool rather than a shortcut. Candidates must evaluate and contextualise AI outputs. Work produced solely by AI without candidate input, analysis, or reflection will not be awarded additional credit, and misrepresentation of AI-generated content as original work will be treated as malpractice.

Developing a Design Brief and Specification

This continues to be an area where many centres assess generously. There should be clear evidence of progression from the research to the formulation of the design brief and specification. Candidates must demonstrate a solid understanding of the task ahead, grounded in their investigative work. High-quality specifications should include measurable, technical, and clearly defined criteria, including tolerances and materials, which guides iterative development. Too often, vague or generic specifications were submitted, lacking the detail needed to direct design decisions effectively.

To access the higher mark bands, specifications can evolve over time, reflecting the candidate’s development of understanding through research, modelling, and feedback. An initial specification that is iteratively refined is a strong indicator of a potential high-level meaningful response. Specifications should remain central to decision making throughout the project and form the foundation of the final evaluation.

Generating and Developing Design Ideas

This section showed notable improvement compared to 2024, with many candidates presenting clear, visual, and iterative development journeys. Candidates who engaged in regular modelling and testing, whether physical, digital, or CAD-based, were more successful in refining their ideas and justifying design decisions.
Centres where candidates sought and incorporated target market feedback stood out, as this strengthened the rationale behind the final design choice. Sketchbooks, when used effectively, supported this process as dynamic working documents.

However, a common issue remains, some candidates committed to a final design too early, limiting their exploration of alternatives. Teachers should encourage broader concept generation before narrowing down to a single idea.

Quality of sketching varied significantly, and in some cases, design communication could be improved with more detailed, dimensioned drawings suitable for interpretation by a third party. Candidates should also be guided to consider social, moral, and sustainability issues, embedding these within their design thinking.

Manufacturing a Prototype

To achieve top band marks, candidates must produce a well-made, functioning prototype, demonstrating precision, care, and appropriate choice of materials and processes. This year, there were discrepancies in marking across centres, with some awarding top marks for outcomes that lacked accuracy and finish. An expectation is to see evidence of a logical and achievable manufacturing plan, including sequencing, tooling, and health and safety considerations. Documentation should be detailed enough that a third party could understand and replicate the process.

High-quality outcomes showed evidence of effective time management, iterative testing, and refinements made during manufacture. Centres must ensure that marking reflects the standard outlined in the criteria where the quality of outcome, accuracy, and functionality must align with the level of marks awarded.

Analysing and Evaluating Design Decisions and Prototypes

Many candidates produced well-written final evaluations that addressed the design brief and specification, incorporated user feedback, and assessed performance through testing. However, the depth and criticality of evaluation varied widely.

Centres should carefully consider the amount of time allocated to this section. Some of the best examples involved video evidence of end-user testing, product in-situ trials, and interviews to assess performance. Simulations and stress testing, where relevant, added value to the analysis. High-scoring candidates often used annotated sketches, digital edits, or CAD to propose realistic modifications. A robust specification containing both qualitative and quantitative measures was crucial to enabling effective final evaluations.

This section carries significant weighting and must be given appropriate emphasis in the delivery of the course. The evaluation should demonstrate a comprehensive understanding of the product's success and areas for further improvement.

General

Teachers play a key role in guiding candidates toward meeting the assessment criteria with rigour and integrity. Consistent reference to the WJEC materials, including exemplar NEAs, marking guidance, and CPD resources is essential in supporting both staff and learners. Continued professional development, including attendance at the free CPD events held at the Innovations exhibitions during the Autumn term, is strongly encouraged.
By working collaboratively and making full use of the support and resources provided, we can continue to raise standards and deliver a high-quality experience for all learners in Design and Technology.

GCE AS/A LEVEL DESIGN AND TECHNOLOGY

GCE

Summer 2025

A LEVEL FASHION & TEXTILES – UNIT 3

Overview of the Unit

The GCE A Level Fashion and Textiles 2025 examination paper followed a structure, style, and level of demand consistent with previous series. The questions covered topics from the specification and assessed candidates' knowledge, understanding, and skills developed during the two-year course of study. There has been a decrease in the number of candidates entered for this qualification.

The paper was considered very accessible with all candidates attempting every question although some questions posed greater difficulty than others. Most candidates demonstrated sufficient breadth of knowledge that allowed them some credit, but many continue to lack the depth of technical understanding required to achieve the highest marks. Subject-specific technical knowledge remains an area of concern. Overall, candidate performance is consistent with previous series.

As all questions are set in a context, it is essential that candidates thoroughly read and carefully consider all relevant information prior to formulating a response. Too often, crucial details are missed, resulting in responses that are either incorrect or incomplete. Regular practice with exam-style questions is fundamental to mitigating this issue.

There were examples of excellent responses throughout the paper however these questions related to overarching principles rather than subject specific technical knowledge. Question 10, one of the AO3 questions, was one of the most accessible on the paper. Most candidates demonstrated a sound understanding of issues related to sustainability which was the basis for this question. Similarly question 3 indirectly related to sustainability, was also answered well. Contrary to the typical pattern, question 7 which focussed on fibres was the most accessible on the paper.

Questions 5 and 9 illustrate situations where candidates should pay closer attention to the focus of the questions, as some key details were overlooked. The responses to these questions tended to be descriptive rather than directly addressing the main points. Question 5 required discussion of market research supporting innovation rather than general market research. Question 9 asked for a critical analysis of existing products in relation to innovation, instead of a general assessment.

The least accessible question on the paper was question 8. Candidates did not know what subcontractors are or why manufacturers use them. A common misconception here related to bought-in components. Question 6 required candidates to demonstrate knowledge and understanding of the textile industry. Most did not know what Computer Integrated Manufacturing (CIM) was or how automated machinery is used to lay out and cut fabrics. Candidates need to be taught the content of the specification, systematically and thoroughly throughout the duration of the two-year course. Candidates need to be familiar with examination style questions and how to answer in a way that will enable them to maximise on the marks available. There are resources online to support future candidates with their preparations for the written examinations.

Comments on individual questions/sections

Resources

Document	Description	Link
PDF text-book style; power point-presentation. Knowledge organisers.	Classification of fibres and fabrics	https://resources-legacy.wjec.co.uk/Pages/ResourceByArgs.aspx?subId=8&lvlId=1
Worksheets, activities, presentation. Knowledge organisers.	Materials and components relevant to Fashion and Textiles	https://resources-legacy.wjec.co.uk/Pages/ResourceByArgs.aspx?subId=8&lvlId=1
Online exam review	Feedback on exam performance	https://oer.wjec.co.uk/Pages/ProjectByArgs.aspx?subId=18&lvlId=1
Question Bank	Create your own question papers	https://www.wjec.co.uk/home/question-bank/#tab_1

GCE AS/A LEVEL DESIGN AND TECHNOLOGY

GCE

Summer 2025

A LEVEL PRODUCT DESIGN – UNIT 3

Overview of the Unit

The Unit 3 examination includes a mix of structured and extended writing questions. It aims to assess learners' knowledge and understanding of technical principles, designing and making principles along with their ability to analyse and evaluate design decisions and wider issues in design and technology. The examination covers assessment objectives:

AO3
Analyse and evaluate:
- Design decisions and outcomes, including for prototypes made by themselves and others
- Wider issues in design and technology

AO4
Demonstrate and apply knowledge and understanding of:
- Technical principles
- Design and making principles

Overall, the majority of candidates demonstrated effective time management throughout the examination, successfully allocating adequate time to address all questions. Although a few candidates occasionally left questions unanswered or submitted brief responses, this was more indicative of gaps in subject knowledge than issues with time allocation.

In particular, areas such as production flow charts (Q4b), calculations related to material usage (Q4), and an understanding of the metal stamping process (Q7b) revealed a lack of the depth and clarity expected at A-Level. These topics often exposed weaker conceptual grasp rather than rushed execution.

Nonetheless, there are encouraging signs of progress. Compared to the previous examination series, candidates are showing a noticeable improvement in the depth and specificity of their responses. This suggests a growing understanding of the subject content, and it is promising to see that the overall quality and detail of answers at A-Level are steadily improving.

Comments on individual questions/sections

High-Performing Questions

Candidates demonstrated strong performance in Questions 1, 3, 6 and 9, which assessed practical applications of design and manufacturing principles.

Q.1 This question required candidates to redesign a factory layout for cell production and discuss the benefits of VR/AR in manufacturing. Many provided well-structured responses, with clear sketches of workstations and detailed explanations. Key strengths included:

(a) & (b) Factory Layout Redesign:

- Most candidates provided well-structured workstation sketches with clear annotations.
- Common efficiency improvements included reduced material handling, minimised workflow interruptions, and optimised space utilisation.

(c) VR/AR Applications:

- Strong responses highlighted training simulations, remote maintenance assistance, and assembly line visualisation as key benefits.
- Some candidates referenced industry case studies such as automotive sector using AR for assembly guidance.

Q.3 This question required candidates to discuss teamwork dynamics in design processes and the role of annotations in design development. Key strengths included:

(a) Brainstorming Techniques:

- Brainstorming strengths: Idea diversity, collaborative innovation.
- Brainstorming weaknesses: Dominant team members, unstructured sessions leading to inefficiency.
- Examples of structured brainstorming methods were occasionally cited.

(b) Design Communication:

- Candidates emphasised the importance of sketches and annotations in clarifying design intent.
- Some referenced real-world scenarios such and designers using annotations for iterative design feedback.

Q.6 Candidates needed to evaluate the advantages and disadvantages of CIM with industry examples, this was completed to a good standard on the whole with the key strengths including:

Advantages of CIM:

- Most cited automation efficiency, reduced labour costs, and improved product consistency.
- Strong responses included specific examples such as Lego's automated production lines, automotive robotics.

Disadvantages of CIM:

- Commonly mentioned challenges included high initial investment, technical complexity, workforce retraining needs.
- A few candidates discussed socioeconomic impacts such as the job displacement concerns.

Q.9 Candidates generally performed well on this question, with many providing structured, well-reasoned comparisons between manufacturing in the UK versus developing countries. The candidates were able to apply both economic and ethical considerations effectively. Characteristics of successful responses included:

- The UK offers a highly skilled workforce but at higher wages, while developing countries provide lower labour costs but may require additional training.
- UK sites benefit from reliable infrastructure and shorter lead times, whereas developing nations might lack transportation networks, increasing logistical challenges.
- Stricter UK environmental and safety regulations increase compliance costs but enhance product standards and brand reputation.
- Manufacturing in developing countries risks accusations of exploitation if working conditions are poor, damaging brand image.
- Offshoring production may reduce costs but increase carbon emissions from shipping, conflicting with sustainability goals.

Low-Performing Questions

Candidates found Questions 4, 7, and 10 particularly challenging, with significantly lower average scores.

Q.4 The question involved calculating material cost comparisons, where many struggled with the problem and miscalculating how many coasters fit on a sheet to be able to calculate the costs. The common errors included:

(a) Calculation Mistakes:

- Incorrect division or trying to calculate the area when determining the number of coasters per sheet.
- Omitting the final cost-saving calculations despite correctly calculating the number per sheet.
- The errors suggest weaknesses in applied arithmetic, particularly in multi-step problem-solving involving material analysis and cost analysis.

Q.7 This question tested technical knowledge of fastener functions and manufacturing processes. Weak responses often lacked precision. Common weaknesses included:

(a) Imprecise Terminology:

- Describing washers as merely "for protection" without specifying functions like load distribution or going on to explain how it protects the materials.

(b) Incomplete Process Representation:

- Providing sketches of metal stamping that lacked critical stages and sketches that didn’t include annotations to help explain the process.
- Misapplying manufacturing terms by confusing stamping with casting or injection moulding machining.

Q.10 This question assessed candidates’ ability to connect sustainability principles to regulatory and design considerations. While some referenced circular economy concepts such as extended product lifespans and reduced waste, others provided superficial responses, including:

- Overgeneralised claims for example "repair is good for the environment" without tying them to design for disassembly, standardisation of parts, or legislative impacts.
- Failing to address how repairability might conflict with cost or product aesthetics/performance.
- Lack of regulatory awareness for example not mentioning policies like the EU’s Right to Repair directive or their influence on product design decisions.

GCE AS/A LEVEL DESIGN AND TECHNOLOGY

GCE

Summer 2025

A LEVEL NEA – UNIT 4

Overview of the Unit

It has been very encouraging to see a strong emphasis on creativity and innovation across many centres this year. A number of candidates produced highly original, well-executed final outcomes, reflecting a clear commitment to nurturing inventive thinking and this is to be commended.

Overall, assessment accuracy has improved in comparison to 2024, with the majority of centres applying the criteria fairly. Where adjustments were necessary, they were made both positively and negatively to ensure alignment with national standards. However, it remains essential that assessment criteria and mark band descriptors are interpreted with precision, particularly when awarding marks in the upper bands. Close reference to the exact wording within each band is critical to ensure marks are fully justified.

Despite some progress, recurring issues highlighted in previous reports persist in a number of centres. This is of particular concern given the extensive range of exemplar NEA materials available via WJEC to support effective standardisation. Teachers are strongly encouraged to review and implement the guidance within these resources.

This report should be read alongside the individual centre feedback report to inform reflective departmental practice and drive improvement. All teaching staff are also urged to attend the free WJEC CPD events offered during the Autumn term as part of the Innovations exhibition. These sessions provide essential insight into effective practice and accurate assessment.

Some centres continue to experience difficulties with the administrative requirements of moderation. For the moderation process to run smoothly and equitably, it is vital that all procedural requirements outlined in the specification are followed closely. Centres must ensure that all required documentation, including marksheets, portfolios, and digital evidence is complete and accessible. Moderators may request additional candidate work beyond the original sample, so being prepared for this is essential to avoid unnecessary delays or disruption.

Comments on individual questions/sections

Identifying and Investigating Design Possibilities

Several candidates carried out thoughtful and purposeful research, which led to the development of well-considered design opportunities. The assessment criteria require candidates to identify a broad and meaningful range of real-world problems or opportunities to inform the design brief.

However, some submissions demonstrated unfocused or overly general research that lacked a clear link to the identified need. All research, including case studies on designers, practitioners, or companies should directly support the chosen design context. Unrelated or surface-level investigations do not contribute meaningfully to project development. Candidates should be encouraged to employ a range of research strategies such as interviews, user observation, data analysis, and product disassembly. These methods help generate insight and must be clearly linked to how the project evolves.

The use of AI tools was more evident this year. While permitted, AI should be used only as a design tool. Candidates must analyse and interpret AI-generated content. Sole reliance on AI without meaningful candidate input or reflection will not attract credit and may constitute malpractice if presented as original work.

Developing a Design Brief and Specification

This remains an area where overgenerous assessment is still evident. A clear and logical progression from research to a focused design brief and detailed specification is essential. Stronger candidates demonstrated a deep understanding of the design context, underpinned by measurable, technical, and realistic specification points, including tolerances, materials, and functional criteria. Specifications should act as a guide throughout the design process and evolve as further decisions are made.

Weaker work tended to present generic or unmeasurable criteria, which did not effectively inform decision-making or development. To access the higher mark bands, specifications can evolve over time, reflecting the candidate's development of understanding through research, modelling, and feedback. An initial specification that is iteratively refined is a strong indicator of a potential high-level meaningful response. Specifications should remain central to decision making throughout the project and form the foundation of the final evaluation.

Generating and Developing Design Ideas

This section showed clear improvement from 2024, with more candidates communicating their iterative design process through sketching, modelling, and testing. Centres that supported this iterative journey, especially where candidates gathered and acted upon user feedback, demonstrated strong practice. Candidates who used a combination of 2D sketching, CAD, and physical modelling were often able to refine ideas more effectively. However, some candidates still progressed to a final idea too early, limiting their exploration of alternatives. Teachers should encourage the generation and development of a wider range of concepts before committing to a final direction. The quality and consistency of sketching and communication varied significantly between centres. More use of dimensioned drawings, exploded views, and third-party communication tools is recommended. Candidates should also be guided to consider social, moral, and sustainability issues, embedding these within their design thinking.

Manufacturing a Prototype

For high-band marks, candidates are expected to produce a well-finished, accurately made prototype that functions effectively. While several excellent examples were seen, inconsistencies in marking were noted and particularly where high marks were awarded despite poor accuracy, finish, or functionality. Candidates should provide clear manufacturing plans, including stages of production, tooling, material use, and health and safety considerations. Documentation should enable a third party to understand and reproduce the product.

Strong candidates demonstrated clear time management, iterative improvements during manufacture, and the ability to solve technical problems. Centres must ensure that awarded marks accurately reflect the prototype's precision, complexity, and quality of outcome.

Analysing and Evaluating Design Decisions and Prototypes

Most candidates were able to produce final evaluations that considered the design brief and specification. However, the depth and insight of these evaluations varied widely.
High-scoring work included detailed testing and feedback from end users, in-situ testing and performance analysis, and realistic proposed modifications supported by annotated visuals or CAD. These candidates also made good use of qualitative and quantitative criteria from their specifications to structure their evaluations.

Some centres provided excellent examples using video evidence of testing and interviews. Simulations and stress testing added further value, where appropriate. Centres are reminded that this section carries significant weighting, and sufficient time should be allocated for candidates to produce a meaningful and well-supported evaluation.

General

Teachers play a vital role in ensuring that candidates engage with the assessment objectives rigorously and with integrity. It is important that centres make consistent and regular use of the WJEC exemplar NEA materials, guidance documents, and marking support. Internal standardisation processes should be strengthened to promote consistency in assessment across teaching groups.

Teachers are also encouraged to make use of the free CPD sessions provided by WJEC at the Innovations exhibitions each Autumn. These events offer valuable professional learning and a chance to stay up to date with assessment standards and expectations.
By working collaboratively, engaging with professional development, and making full use of the resources available, centres can continue to raise standards and ensure that learners experience a high-quality and rewarding journey through A Level Design and Technology.

Supporting you

Useful contacts and links

Our friendly subject team is on hand to support you between 8.30am and 5.00pm, Monday to Friday.
Tel: **029 2240 4303**
Email: designandtechnology@wjec.co.uk
Qualification webpage: AS/A Level Design and Technology

See other useful contacts here: Useful Contacts | WJEC

CPD Training / Professional Learning

Access our popular, free online CPD/PL courses to receive exam feedback and put questions to our subject team, and attend one of our face-to-face events, focused on enhancing teaching and learning, providing practical classroom ideas and developing understanding of marking and assessment.

Please find details for all our courses here: https://www.wjec.co.uk/home/professional-learning/

WJEC Qualifications

As Wales' largest awarding body, WJEC supports its education community by providing trusted bilingual qualifications, specialist support, and reliable assessment to schools and colleges across the country. This allows our learners to reach their full potential.

With more than 70 years' experience, we are also amongst the leading providers in both England and Northern Ireland.

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