Comparing the D&T GCSE Specifications

The Exam: 50%

This summary is our one page interpretation of the accredited D&T GCSE specifications & sample exam papers. This is our opinion only & it's essential departments do their own comparisons & check the most up to date information on exam board websites.

OCR	AQA	Edexcel	Eduqas
2 hour paper	2 hour paper	1hr 45 mins paper	2 hour paper
Section A – 55 marks Focus on core principles	Section A – 20 marks Core technical principles (multiple choice/short answers)	Section A – 40 marks Core content	Section A – 75 marks Core knowledge & understanding
Section B – 45 marks Majority of the questions are focused on 'in depth' knowledge students have in one material area but there are also some broader materials questions in this section as well.	Section B – 30 marks Focus on specialist technical principles so students can focus on their material specialism. Also some general design based questions that are non material specific. Section C – 50 marks Focus on designing & making principles through a product analysis – sample questions focus on generic non-material based design questions	Section B – 60 marks Material categories (focus on specific material areas) There is a separate exam paper for each material area (which means schools will have paperwork to indicate which papers students will sit). Each paper starts off with identical content & then has material specialist section (questions are all on one paper for other boards).	Section B – 25 marks Indepth knowledge & understanding (focus on a specific material area) There are six separate question number 6 & students choose the question 6 that relates to their material area. This numbering system could confuse some students if they don't read the instructions carefully.
• Exam could be described as a 'long & thin' model with broader knowledge content where students need to know more about a wider range of materials (the long bit) but with less depth of knowledge (the thin bit). This can feel daunting but has its advantages. • Potentially more open ended questions on knowledge common to all material areas e.g. industrial practice. • Specification gives less detail than other boards in some areas. This could offer more freedom for how things are taught but some teachers may not like the lack of structure & limited specific content.	• Exam could be described as a 'long & thin' model similar to OCR because it requires a broader knowledge of materials but with less depth. Note the exam has changed quite a bit since the draft & this description is different to how we originally described it. • The multi choice questions potentially make the testing of some of the broader materials content less daunting. • Potentially more open ended questions on knowledge common to all material areas e.g. industrial practice. • Although the exam has a 'long & thin' feel the learning content is 'fatter' than OCR in depth with quite a bit of specific content listed (particularly bearing in mind that what is listed can be tested). There are both advantages & disadvantages of this.	• Exam could be described as 'short & fat' as less generic content is tested (the short bit) with more detailed testing on a specialist material area. The depth of knowledge for the specialist material area is however deeper (the fat bit) so section B potentially requires more specialist knowledge. • Exam offers a strong focus on a specialist material area. This could be an advantage (e.g. it allows students to develop a strong specialism) & a disadvantage (potentially a lot more to teach). • The spec gives lots of detail on the specific theory content. This gives a detailed structure for schemes of work but could increase the amount that needs teaching along with reducing freedom on how time is used.	• Harder to classify but has a similar 'long and thin' approach to OCR & AQA, although possibly requiring a little more in depth knowledge. • At first glance the breakdown of the marks suggests there is less focus on a specialist material area but there are actually specialist questions in both sections of the paper. • In Q6, which is very focused on a specialist material area, the questions are quite traditional for some material areas.
• Spec is based on Designing Our Tomorrow research on authentic design practices by Cambridge University. • Spec is divided into 8 areas with key questions which could be useful as a focus for KS3 planning. • Spec maps maths against GCSE maths which is useful when coordinating with the maths department.	The accredited version of the spec has a different feel compared to the draft spec, particularly for the NEA & format of the exam. There is more of a 'whole D&T' focus similar to OCR, particularly for the exam.	Edexcel are offering free text books for schools who enter students for their specification (note that if you later decide not to enter students for this board the books have to be paid for).	• Eduqas is part of WJEC & in the past their supporting resources have been good. • Other boards have moved away from pure technical knowledge in systems & electronics to a wider focus on products & user needs. Electronics & systems specialists may find Eduqas more appealing as the skills & knowledge are more in line with traditional qualifications.
• Specs focus on 'authentic real world D&T' with a clearer definition of D&T & a better dividing line between art, craft & D&T. • Maths based questions make up 15% of the exam & are linked to 'real' D&T situations (all maths content is already taught in maths and is high end KS3). • There is no design question in the format of the current GCSE. • All specs have advantages & disadvantages. OCR has potentially the most radical approach, followed closely by AQA & Eduqas. Some have been more forward thinking than others about what D&T is and what it will be in the future. This potentially makes them feel more daunting. • The broader material focuses for all specs is on an understanding of material properties & uses rather than students becoming skilled practitioners in making products & using equipment.			

The Non Exam Assessment (NEA): 50%

OCR	AQA	Edexcel	Eduqas
40 hours (guide only)	30-35 hours	None specified	Maximum 35 hours
Preference for e-portfolio. 24 pages (guide only as formats will vary e.g. PowerPoint, Word, or range of other e-portfolio formats).	20 A3 folder pages	20 – 30 folder pages	Number of pages not mentioned
• The sensitive design of public spaces can enhance users' experiences & interactions with that space. Explore a space in your locality with the view to enhancing the users' experience within that space. • Explore the theme 'personalities' & use this exploration as the basis for designing a product. • Dining can be a wonderful social & cultural experience that does not always focus on the eating of food. Explore ways design can enhance the experiences for any of the stakeholders involved.	• A high profile sporting event • Addressing the needs of the elderly • Children's learning & play	3 'themes' each with 2 questions as contextual challenges. Students choose one question. • Improving living & working (How can living spaces also be used for a work environment? How can objects be used for different purposes in a living or working environment?) • The sporting arena (How can technology improve a sporting situation? How can merchandise be used to promote a sporting situation?) • Expanding human capacity (How can an aid for people with disabilities improve their capacity to perform a given task? How can we provide more protection for humans from the environment?)	• Sustainability and our future needs • Improving the daily life of elderly people • Outdoors pursuits & physical fitness
Explore **20** Create: Design Thinking (generating/developing/models etc) **24** Create: Design Communication (focus on quality of ideas, logical flow & progression & communication) **16** Create: Final prototypes **20** Evaluate **20**	Identifying & investigating design possibilities **10** Producing a design brief & specification **10** Generating design ideas **20** Developing design ideas **20** Realising design ideas **20** Analysing & evaluating **20**	Investigate **16** Design ideas **8** Review of initial ideas **8** Development of design ideas into a chosen design **12** Communication of design ideas **8** Review of chosen design **6** Make **36** Evaluate **6**	Identifying & investigating design possibilities **10** Developing a design brief & specification **10** Generating & developing design ideas **30** (includes models/prototypes) Manufacturing a prototype **30** Analysing & evaluating design decisions & prototypes **20**
• Grading seems daunting as visually different. Grades VERY structured with each objective split into specific things to look for when marking, along with specific descriptors for bands of marks (approach is used in many universities). Potentially more reading but could reduce teacher annotation if used as a mark sheet. Grade in each mark band is decided on based on whether the work 'just meets' the criteria, is 'adequate' or 'convincing'. • 'Create' broken into 3 sections 2 of which align with the 'design' sections from other boards & one of which aligns with 'making'. • Design Communication section is a new approach with marks specifically allocated within designing for the quality of ideas & how they flow. • Approach based on DOT (Designing Our Tomorrow) research on authentic design by Cambridge University which uses concepts of explore, create, evaluate and manage. 'Manage' is useful as it acknowledges skills students need to take design risks, make decisions & prioritise.	• The marking of the NEA has changed quite a lot in the accredited spec & the distribution of marks is more similar to OCR than the other specs. • Uses same visual linear layout they use in the current GCSE although the sections that are marked are different. • The designing section has been combined with the making under the heading 'Design & make prototypes that are fit for purpose'. This is then broken down into 3 subsection each worth 20 marks (generating design ideas, developing design ideas, realising design ideas). • As generating & developing ideas are marked as 2 separate sections compared to the current spec where they are marked as one, this means there's more detail on the marking of these areas.	• A similar approach to OCR with each objective being split into specific things to look for. • Has same advantages as OCR in that potentially gives a ready made annotation sheet with very specific criteria to mark against as well as same disadvantages in that there is potentially a lot of reading to do. • Presentation is as a list rather than being in table format.	• Some sections of work are presented as an informal A3 sketchbook e.g. for research & generating & developing ideas, with other sections being presented in a more formal way e.g. decisions made, technical details that would enable a third party to make the product. Both formats are handed in for assessment. • Assessment statements laid out in linear format. Possibly less detailed information on each area of the marking criteria than other specs which has advantages & disadvantages.
• NEA is controlled assessment so it's important teachers read the rules in each spec as the level of student support & feedback is limited. • All specs focus on an iterative approach as well as on avoiding stereotypical responses & design fixation when designing. • Contextual challenges are released on 1st June & students have to use these as a starting point for writing their own design brief. • A 'prototype' could be a highly finished product, made as proof of concept prior to manufacture, or working scale models of a system where a full-size product would be impractical. • The broader approach in the specs means students can mix materials in a project & get credit for this making designing a more authentic process. This could help break down gender stereotypical uses of materials. There is however still freedom for students to focus on one material.			