GCSE Design and Technology - NEA Guide

2.4 Communication of design ideas (AO2 8 marks)

Exemplars of 2.3 Communication of design ideas

Use this live link to view the latest exemplar materials for this assessment grid.

Stage		What students need to do:		
2.4	Communication of design ideas	1	Use a range of communication techniques and media to present the design ideas, including:	
		a	freehand sketching (2D and/or 3D)	
		t	annotated sketches	
			cut and paste techniques	
			digital photography/media	
		•	2 3D models	
		f	isometric and oblique projection	
		g	perspective drawing	
		l l	orthographic and exploded views	
		i	assembly drawings	
		j	system and schematic diagrams	
		,	computer-aided design (CAD) and other specialist computer drawing programs.	
			Communicate the design ideas clearly and effectively using written techniques.	

What the NEA content requires students to do:

2.4a Use a range of communication techniques and media to present the design ideas.

Students are encouraged to apply a range of different techniques throughout their design and development work. This will involve choosing appropriate techniques at different stages to demonstrate their understanding of how and when to use different communication techniques in the context of a D&T project.

It is important to note that only the communication of design ideas, both the initial design ideas and development of chosen design idea, will be credited for 2.4. This will require students to:

- Apply more than one graphical technique (to show appropriate application).
- Apply CAD within the design and/or development stages.
- Use writing to explain decisions, changes being made, ideas or to outline intentions.

GCSE Design and Technology - NEA Guide

2.4b Communicate the design ideas clearly and effectively using written techniques.

Students are required to use written communication throughout their portfolio of work, though are welcome to use audio and video to complement this written element. Written work includes the breadth of potential written activities that a student may do, including work that is summative, analytical, or used to explain thinking, ideas, intentions, and planning.

Level	Mark	2.4 Communication of design ideas (AO2 8 marks)
	0	No rewardable material.
Level 1	1-3	Basic selection and partially appropriate use of graphical techniques to communicate design ideas.
		Basic selection and partially appropriate use of computer-aided design (CAD) techniques to communicate design ideas.
		 Basic selection and partially appropriate use of written techniques to communicate design ideas.
Level 2	4-6	 Relevant selection and generally appropriate use of graphical techniques to communicate design ideas.
		 Relevant selection and generally appropriate use of computer-aided design (CAD) techniques to communicate design ideas.
		 Relevant selection and generally appropriate use of written techniques to communicate design ideas.
Level 3	7-8	 Considered selection and fully appropriate use of techniques to communicate design ideas.
		 Considered selection and fully appropriate use of computer-aided design (CAD) techniques to communicate design ideas.
		 Considered selection and fully appropriate use of written techniques to communicate design ideas.

How this assessment grid differentiates student evidence of communication.

2.4 Communication of design ideas will relate to two sections of the portfolio; 2.1 design of ideas; and 2.3 development of design ideas into a chosen design. These two bodies of evidence provide students with sufficient opportunity to demonstrate that they can:

- 1. Write effectively about their design ideas, and explain their thinking, decision making, and intentions relating to their design ideas.
- 2. Write using correct technical D&T language, which includes correct reference to materials, processes, and techniques. Students will be able to link each of these appropriately to design ideas. (i.e. parts designed to be formed by vacuum forming will feature the physical characteristics of the process)
- 3. Apply a graphical technique to communicate design ideas (e.g. 2D or 3D sketching).
- 4. Apply at least one further graphical technique which demonstrates they have an understanding of its purpose and application (e.g. cross section views, exploded views, thumbnails, magnified views, etc).
- 5. Apply Computer Aided Design (CAD) purposefully towards designing ideas.

Important

There is no credit in this section for Computer Aided Manufacture (CAM), which is awarded in grids 3.1 and 3.2 to avoid double crediting work.

Spelling, Punctuation, and Grammar (SPAG) of the students writing should not influence the level decision for 2.4.