

# OCR A-Level Design and Technology: Design Engineering – H404A: WBHS Summer 2021 Assessment Record

Record produced and finalised by:

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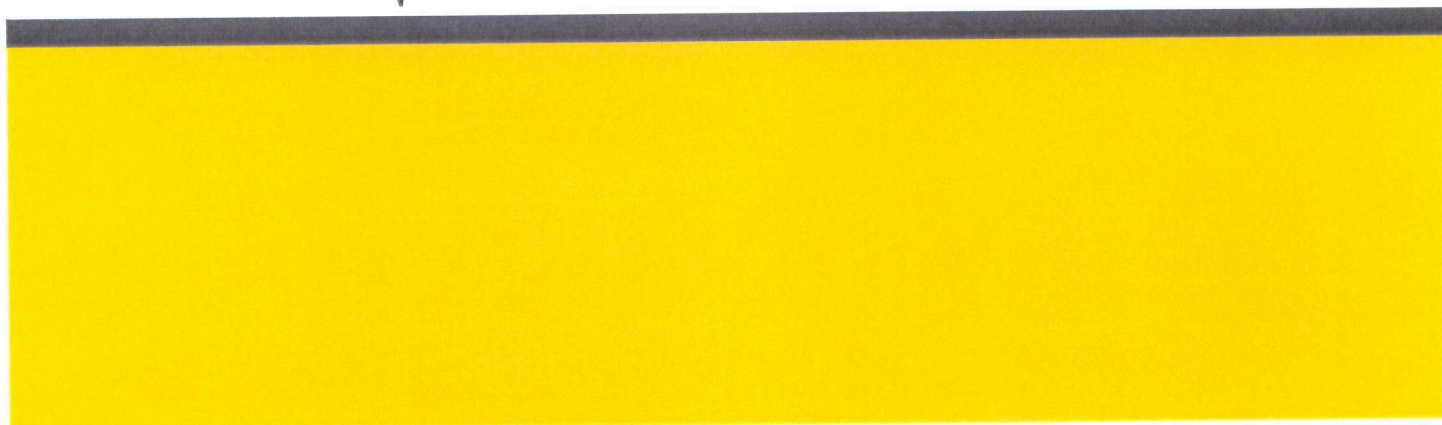
Date: 5th July '21

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Role: TEACHER OF DESIGN TECHNOLOGY

Signature: S Gray

Date: 5/7/21



|  | Type of Assessment | Assessment Objectives |     |     |     | Level of Control (H, M, L)   | Standardisation and moderation  |
|--|--------------------|-----------------------|-----|-----|-----|--|---|
|  |                    | AO1                   | AO2 | AO3 | AO4 |  |   |
| Non Examined Assessment project set June 2020 and submitted 23 <sup>rd</sup> April 2021  | NEA                | Y                     | Y   | Y   | N   | Task setting = M<br>In school practical work = M<br>Other work = L | <i>The re-written marking scheme was used and also contained exemplars from the HoD to provide key decision making points. The final marks for all students were arrived at and agreed in a moderation sessions with all 3 involved members of staff. (10-5-21 &amp; 11-5-21, IMT, SG, SDA)</i> |
| Written Assessment.<br>A written exam made from A level questions from prior exams (from papers inaccessible to students).<br>It covered both aspects of H404-1 Principles of..., and H404-2 Problems solving in...<br>All students sat the paper on 10 <sup>th</sup> May. | Written exam paper |                       |     | Y   | Y   | H  | <i>Marking scheme was produced by HoD and was from exam board documents with suitable clarification. The paper was split, and a member of staff marked a certain question from all students (10-5-21 – 11-5-21, IMT, SG, SDA)</i>   |

|   |            |   |   |   |   |   |  |
|---|------------|---|---|---|---|---|--|
| <p><b>"The Gate"</b><br/>An in-depth report into the design, assembly and installation of the secure access gate to school covering all aspects of the materials and control system in contains<br/>This was submitted as a PowerPoint in March of 2020</p> | PowerPoint | Y | N | Y | Y | L | <p><i>Marked by a single teacher but as an internally generated assessment there are no external comparators (IMT, March 2020)</i></p> |
|---|------------|---|---|---|---|---|--|

**If an assessment objective has been omitted at subject cohort level please briefly outline the reasons why:-**

**All AO's have been covered.**

**Outline the rationale for the choice of assessment evidence used, i.e. why the evidence above was used and how it supported the grading decision:-**

The NEA was started at the time designated by the exam board and we used the day in School in June 2020 to spend some time explaining and clarifying early context setting.

Design Contexts were negotiated (via email) with students and their investigations continued over the summer.

Decision were taken, after discussions with the exam board, during the Autumn term and early 2021 that it would be impossible to produce a manufactured final product and so the criteria were changed to expect a more in depth "proof of concept". This was undertaken in a series of videos that would provide suitable evidence of the full and successful functioning of their system and allow a number of operational parameters to be seen and proved.

Subsequently, the students continued to produce a full commercial level design for mass manufacture as they would in normal circumstances.

The marking scheme was rewritten to reflect these changes.

Task setting is Medium LoC as the Context for the work is agreed after discussions and negotiations with HoD. Some aspects of empirical work is Medium LoC as informal yet direct supervision is ensured. Other testing and experiments and all recording is low LoC as it is undertaken at various locations often without direct supervision. This follows the usual exam board procedures from other years.

A written examination was sat on 10<sup>th</sup> May 2021 that covered aspects, approximately pro rata, of the two papers they would have sat normally – Principles of Design Engineering and Problem Solving in Design Engineering. Questions were chosen to cover the full range of questions both in content and approach and also covered the compulsory maths elements of the content. This reflected the terminal and synoptic assessment that the students would have normally sat.

The gate project is a sizeable piece of work set in Year 12 where students undertake a full analysis of various factors of the design, installation, operation and safety of the school access gate. This is presented as a PowerPoint including videos, diagrams, recorded voice overs similar to what they will undertake in the Y13 coursework and in the past has proved to be a very good indicator of future performance.