DESIGN TECHNOLOGY

Overall grade boundaries

Grade:	E	D	C	B	A
Mark range:	0 - 7	8 - 15	16 - 22	23 - 28	29 - 36

The range and suitability of the work submitted

The range and suitability of the work was mostly appropriate for the requirements of a design technology extended essay. As in previous years, the least successful essays were historical/developmental accounts of a technological subject e.g. an historical account of the development of mobile phones. Based on the essays seen there is a greater awareness and understanding of the nature of design technology as a discipline than in previous sessions.

Candidate performance against each criterion

Criterion A: research question

It is important to ensure that the research question is not too vague. In the most successful essays the RQ was clearly stated in the introductory stage of the essay. Some less successful essays had very specific research questions but the essay then focussed on general information e.g. an essay which starts out as an investigation on wind powered cars but then becomes an essay on generating energy from wind.

Criterion B: introduction

To score well in this criterion it is important to ensure that the introduction focuses on the context of the research question and does not become a general introduction outlining the historical development of a technology.

Criterion C: investigation

It is important that a wide range and variety of sources are consulted. The least successful essays relied solely on information from Internet sites. The most successful essays gathered additional primary information from testing, designing, making and interviews. Many students gathered information from surveys. The most successful essays involved the surveying of large numbers of people.

Criterion D: knowledge and understanding of the topic studied

This was the most successful criterion as the majority of students had good knowledge and understanding of the topic studied. The most successful candidates understood that design technology is a science subject and displayed clear understanding of the scientific and technological concepts used in their extended essay.

Criterion E: reasoned argument

The most successful candidates supported their ideas with data and information gathered from primary sources, in particular practical activity and testing.

Criterion F: application of analytical and evaluative skills

The most successful essays included a comprehensive evaluation. Some candidates unsuccessfully attempted to pad out their essay with a general description of the IB Design Cycle.

Criterion G: use of language

The most successful essays made effective and correct use of scientific and technological language.

Criterion H: conclusion

In a number of unsuccessful conclusions the candidate summarised the work but did not directly address the research question

Criterion I: formal presentation

In a subject like design technology the illustrative material is often central to understanding the essay. Too many essays lacked clear illustrative material. This includes diagrams, photographs, charts and illustrations. Unfortunately, too many images were either too small or unclear. Some diagrams and charts with text were so small that the text was unreadable. There were charts and graphs photocopied in black and white which included colour keys.

Criterion J: abstract

Most abstracts included all three elements - RQ, scope and conclusion.

Criterion K: holistic judgement

The most successful candidates displayed creativity and innovative ideas. Many essays evaluated products for example testing and comparing the performance of tennis racquets. For this topic to achieve high marks for criteria K it would be expected that the essay involves the design of a new improved racquet or a modification which results from the testing and research.

Recommendations for the supervision of future candidates

The role of the extended essay supervisor remains important, in particular at the beginning of the extended essay process when the candidate is formulating their ideas and developing the research question. The supervisor must fully appreciate the nature of design technology. Students should be encouraged to carry out their own practical activity. This may involve testing existing products, developing prototypes, simulation and constructing a product that

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they have designed. The best essays will include a detailed practical evaluation of an original idea or product.

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