GCE Design and Technology Graphics Product (A2)

Exemplar Commentary 3

Title: Promotional pack for veterinary group.

Unit: 6GR04

The project submitted is recognisably related to the list of suggested projects in the A2 specification and fits in the Conceptual design pathway. The product fits within the product/industrial design category. It also offers obvious possibilities for 2 and 3d design opportunities.

A – Research and Analysis

On *page 1* we see an introductory page that clearly justifies in a mature and detailed way, why the problem is a relevant issue for the designer to tackle. This connects realistically with the client. The clients indicate the parameters of the project; this has the beginnings of a very detailed analysis. A design brief is offered and on page 2 we have a full and detailed analysis of the problem taking full account of the clients demands/wishes in this problem. This candidate demonstrates a mature and realistic commercial approach to the design issue.

The research appears a little wordy but is relevant and not preconceived, there are a number of elements to this design problem and sometimes it is not possible to compact this information into a few pages. It tackles the issues raised in the analysis and seems to be a genuine exploration of the problem. The needs analysis on page 2 reflects the research undertaken, this is a good example of a commercial methodology and a maximum mark is allocated. **(Mark Range 3-4)**

B – Product Specification

In the specification we are presented with a series of detailed points, there are some comments here that may be rather too fussy, but they do appear to link into the genuine research and investigation that has taken place prior to this. Many of the points lack any justification at all and sustainability needs to be looked for carefully. This said the specification provides realistic technical detail with some measurable points, but the points offered are not always justified but sustainability is in evidence. **(Mark Range 4-6)**

Design and Development

C1 – Design

The ideas section is considered to encompass pages 17-23. There are several approaches to the completion of this section; the most usual is to design the brand image or 2d element, this will then be applied to the designed packaging. Here one would expect the product to be designed first, this being the driving element; and of course a solution to that being needed before the 2d element (packaging) could be designed. It can therefore be assumed that the pages submitted are not necessarily in the order that they were completed. So my comments will address the 3d element first.

The ideas are different, realistic, workable and detailed. Strategies have been used; source material folding idea, and existing limitations set by the client have been included. Technical input and explanations are good; decisions are documented although client input is scarce.

Reduced only to minor highlights in the evaluation. This said the work is of high quality, with support material from the research being realistically considered.

We then need to consider the 2d element, a leaflet is documented, but this is little more than a desktop publishing exercise for a preconceived output. There is some discussion about font styles and colour of leaflet to use, but the general layout is not considered. The following page on slide 18 has more design work for the logo, even here it would be beneficial to have a greater exploration of the logo to be used and evidence of its development for later. It should be noted that it has been converted to a CAD version but the lead up to this is not documented. Finally on slide 18 we see more 2d design work for the package, with modelling being used to test the possibilities. This is not as thoroughly completed as the 3d section and as such we will need to consider some movement from the top of the highest criteria. Added to the fact that client input is also slim. **(Mark Range 7-10)**

C2 – Review

Client opinion is apparently sought; it's just not very convincing. However the formal comparisons made against the spec are good presented in tabulated form – which is usually to be avoided, as it tends to lack detail. But the detail in the designing is not lacking in this case. Sustainability is considered and the specification in general is covered. What needs to be borne in mind here is the plethora of information in the annotation. The detail in the annotation has assisted in overlooking the unrealistic client input and a **mark range of 3-4** is allocated.

C3 – Develop

In this section we consider pages 25-30 to be the relevant aspects and it is an excellent example of what is sought in the development of a product such as this. Whilst the candidate does not use CAD very well to test important aspects, CAD is at least used once in the development of the product and to produce the final design of the package. The development of the 2d element, which is disappointing, would have provided an ideal vehicle for the use of CAD.

However the excellent use of physical modeling is made in the development of the final design for the 3d element and involves the client. The candidate clearly understands the requirements of the development section and addresses all criteria appropriately. Some of the alternatives suggested in design ideas are more appropriately credited in development.

A final proposal is presented and there is the inclusion of a great deal of technical information and detail. **(Mark Range 7-10)**

C4 – Communicate

The candidate has used a wide range of techniques throughout the portfolio including ICT and CAD (as a presentation tool), with precision and a good deal of accuracy. The final presentation of the working drawings is clear and they have the detail required for manufacture by a third party, although there are some aspects missing. There are no drawings for the mould, although this information can be ascertained from the drawing of the insert tray, which has appeared from nowhere. However the presentation is excellent and the work communicated with style. Hence a **mark range of 4-6** has to be given, as there are enough details of the working drawing to enable third party manufacture.

D – Planning

Here we see a very thorough method of planning the manufacture of a quite complex product(s). Firstly the candidate sorts major tasks into identifiable batches. The detail is then considered in a formal step by step flow chart. The order of events being established, timings are then applied on a Gantt chart. This is not ideal, but all angles have been covered. Health

and safety issues are documented fully and there are quality control checks within the flow chart. **(Mark Range of 4-6)**

Making

E1 – Use of tool and Equipment

A range of tools and equipment has been selected, they are appropriate to the task at hand and we can see they have been applied with precision accuracy. There appears to be a high level of safety awareness for self, with a little reference to others in the folder. The candidate has utilized CAM outputs in balance with hand skills and other techniques. Including; hand shaping of acrylic, sheet aluminum work, turning, vacuum forming, vinyl cutting, laser cutting and modeling with polymorph. The precision and accuracy with which some of the hand skills have been used is exemplary so a **mark range of 7-9** is allocated.

E2 – Quality

A detailed understanding of the working properties of the selected materials and justification of their use has not been evidenced formally, but the justification of material selection in the development section is clear. The product produced (3d) is of high quality and demanding to make to this quality, but the 2d element is not in the same category. The 2d element (packaging) has been produced rather less carefully and the crispness seen in the rest of the work is lacking. This said the work undertaken on the leaflets, produced using reasonably complex desktop publishing techniques and to a high standard. The lack of crispness in the packaging and the insert, made as rather an after thought it seems, leads us to be unable to allocate maximum marks in this section and the candidate should be given a **mark range of 11-16**

E3 – Complexity of Demand

The 3d element is a complex working prototype and should be allocated high marks, the "d element is also demanding in that the leaflets produced are not a standard size and they are well laid out. The package though, feels less thoroughly made. It utilizes a reasonably demanding net and has quite simplistic graphics applied to it, the simplistic outcome could be justified from a sustainability point of view, but it isn't. However it would seem harsh to down grade this from the maximum because of a lack of this justification, so a **mark range of 7-9** is allocated.

F – Testing and Evaluating

A range of tests has not been justified, that compare the final outcome to the specification. However the performance of the product, against the specification has been tested in detail. Objective evaluative comments have been documented from the point of view of the designer as well as various third party opinions including the client; there is also evidence of the client actually physically testing the product. Life cycle assessment is not looked at in detail but it is considered in relation to the use of recyclable materials etc. Modifications are suggested. The lack of justified testing points and the realistic life cycle analysis means that this candidate has just accessed the top assessment criteria. **(Mark range of 7-10)**