Design & Technology Units 3&4  2011

D&T units 3&4 cover all aspects of product design and manufacture including: the role of the designer, product development in industry, comparison of similar products and marketing.

Unit Assessment consists of:

- School Assessed Coursework (SAC)
- School Assessed Task (SAT)

**Unit 3**

Outcome 1  SAC  SAC "The designer, client and end user in product development"

Outcome 2  SAC  "Product development in Industry"

Outcome 3  SAT  "Designing for others" Design Folio must be completed and the product manufacture should be near completion.

**Unit 4**

Outcome 1  SAC  "Product analysis and Comparison."

Outcome 2  SAT  "Product Manufacture"

Outcome 3  SAT  Product evaluation and promotion

**Note:**
School Assessed Task (SAT) Design Folio, Production and Evaluation is completed over Units 3&4. This must be finished and submitted before the end of Term 3.
KICK START

Preparation to be completed over the holidays

The SAT in units 3&4 consists of the Design, Manufacture, Evaluation and promotion of a product.
It is essential that you complete the following exercise in preparation for the start of the school year to maximise practical class time, equipment use and to help you achieve the best results.

1. Obtain a client; they can be a relative, neighbour or friend.

2. In consultation with your client decide what it is they would like you to design and manufacture.

3. Keep a "Client Consultation Log" - provided.

4. Determine the specifications (particulars or needs) of the product.

5. Write a short statement of your clients requirements (statement of problem); get your client to read it for understanding and confirmation.

6. Prioritize the specifications - most important to least important and give a reason for priority. Consult with client & get them to sign off the specifications.

7. Draw sketches of a number of suitable designs that will solve the problem. Make notes on your drawing and include dimensions.

8. Consult with client on the most suitable design; alter the design to suit if necessary.

9. Complete a detailed drawing and get the client to sign it off.

10. Keep client consultation log up to date.

11. Keep a record of ALL research undertaken regarding the product. Eg. Internet sites, magazine articles, distributors, shops
DESIGN BRIEF

In your discussions with the client you are required to find out their needs and the reasons for them.

EXAMPLE

NEED     My client has asked me to design and manufacture a stand for their computer.

REASON   They need this because at present their computer and printer etc. are spread out on a table and are very untidy.

Client’s name and background information.
________________________________________________________________________

Client needs.

What do they want you to make?
________________________________________________________________________

Reason
________________________________________________________________________

Where does it have to fit?
________________________________________________________________________

Reason
________________________________________________________________________

What shape should it be?
________________________________________________________________________

Reason
________________________________________________________________________

What colour should it be?
________________________________________________________________________

Reason
________________________________________________________________________

What finish is required?
________________________________________________________________________

Reason
________________________________________________________________________
What materials are most suitable?

Reason

When do they want it finishing by?

Reason

What is their budget?

Reason


Using the responses above construct a statement that outlines the requirements of your client.

EXAMPLE

My client requires a table that can be used in their bedroom beside the bed.

The height of the table has to be convenient when my client is in bed.

The size must fit with available space of 650mm and needs to accommodate a table lamp, clock, books etc.

The colours used should compliment the room decor and the lamp should be finished by May 3 and because of a restricted budget must not exceed a budget of $105.

List the four most important specifications (particulars or needs) in order of priority.
Design & Technology unit 3&4 client consultation log

<table>
<thead>
<tr>
<th>Date</th>
<th>Stage of design process</th>
<th>Nature of discussion</th>
<th>Client feedback</th>
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VCE DESIGN AND TECHNOLOGY
Client information sheet

Thank you for offering to be a client.

- Before you sign a contract with the student please check this information sheet to see if you feel you can commit yourself to the responsibility of being a client.

- Clients are not to spell out a solution to the design problem.

- Please do not present students with materials and instructions to make a particular product as this limits the student's understanding of design and problem solving.

- You can present some specifications and also set some considerations and constraints for example time of completion, cost, where the product is to be used, placed or worn.

- Consider the fact that you are working with a student and professional results cannot be guaranteed.

- The student has been asked to consider times most suitable for consultation with the client.

- You will need to also consider the student's commitments and workload when planning consultations, fittings and so on. Some interviews may be time consuming.

- You must be available for at least five consultations.

- The student will show you four to eight trial solutions and you can select your preferred option.

- Students have time restraints and completion dates must be adhered to for assessment purposes.

- The student needs to consult with his/her teacher on various aspects of design, materials, methods and equipment used to ensure that all criteria are met.

- You will be asked to evaluate the product after completion, according to the criteria that has been planned between you and the student.

- The student and client must make their own arrangements about cost and purchasing of all requirements.

I understand the client responsibility as outlined above.

<table>
<thead>
<tr>
<th>Client’s signature</th>
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<tbody>
<tr>
<td>Student’s signature</td>
<td>Date</td>
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<tr>
<td>Class Teacher’s signature</td>
<td>Date</td>
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</tbody>
</table>

This page must be included in the student's folio
Design Brief

Client –
Address –
Phone –

My clients (Gary and Jan Zame) require a nest of 3 wooden tables for their family room so they have more flexibility in where and how their tables are used. My clients would like the tables to have a contemporary design and feel. The colours of the tables must blend in with the colours of the rest of the furniture.

The space provided has an area of 1600mm x 1700mm, the tables must fit in this space with enough room for people to walk around them. They must have enough space for visitors to put drinks and food on. The tables must be finished by the 29th of September and must not exceed a budget of $100.

Constraints - The largest table must not exceed 1000mm x 800mm.
- The tables must have adequate space for food and drinks.
- Must be finished by the 29th of September.
- Must not exceed a budget of $100.
- There must be one large table and two smaller tables.
- The smaller tables must fit underneath the large table.
- The colour must blend in with the rest of the furniture.
- The tables must look contemporary
- The material used must be wood.
- The tables must be stained and varnished.

Considerations - The smaller tables can be the same size or one bigger than the other to fit into the largest table.
- The wood can be Victorian ash, Jarrah or Teak.
DESIGN BRIEF

My client (Mr Mark Naturelli) wishes me to design and manufacture a contemporary coffee table. The coffee table is to have a sturdy wooden top, which can be used to place coffee mugs, magazines, remotes and other items, which are put upon a coffee table. The table is to be of a mahogany stain. The coffee table will be placed in the rumpus room in the middle of the couches and the television. The surrounding furniture in the room such as the TV cabinet, pool table, floorboards, and the soccer table are of a mahogany stain. The Coffee table must be the same colour to suit the room. The actual coffee table required is to be no larger than these measurements: height of 400mm, a length of 1500mm and a depth of 1000mm.

Completion date: 14th September
Stain: Mahogany

Design Priorities

Priority #1- One of the main priorities is that the table is sturdy and supportive. The shelf and the tabletop must be able to support a lot of magazines and coffee mugs and other items such as vases. It is also important that the table looks in proportion with the room and its surroundings.

Priority #2- Its type of wood and stain is important as it must match the rest of the room. The table must be made with care and the joints are to be perfect. It is to be an effective coffee table and a display feature.

Constraints

Function

- It is to be portable and to be moved from room to room.
- The shelf must be able to hold many items.
- It must be a stable and sturdy coffee table.
- Must function safely and effectively

Appearance

- It must blend in with the surroundings.
- It must have a wooden table top
- Must be finished in a Mahogany stain.
- Must not exceed measurements given.
- Must look contemporary but not overdone.
- It needs produced from a durable and fairly hard wood.
- It is to be simple and well made with perfect joints.
- A shiny, glossy finish is to be applied when finished.
- It must be completed by the 15th of September.

Considerations

- Using other materials and stains.
- Introducing a draw to the product.
- Elegant legs on the table.
# TIME LINE 2012

**Product Design and Technology**

## Unit 1: Design modification and production.

<table>
<thead>
<tr>
<th>Outcome Number</th>
<th>Outcome Name</th>
<th>Date Week ending</th>
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</thead>
<tbody>
<tr>
<td>Outcome 1</td>
<td><em>Folio</em></td>
<td>26&lt;sup&gt;th&lt;/sup&gt; March</td>
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<tr>
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<td>Redesigning an existing product.</td>
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<tr>
<td>Outcome 2</td>
<td><em>Report/Product</em></td>
<td>28&lt;sup&gt;th&lt;/sup&gt; May</td>
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<td></td>
<td>Producing and evaluating a redesigned product</td>
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## Unit 2: Collaborative design.

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<tr>
<td>Outcome 1</td>
<td><em>Folio</em></td>
<td>6&lt;sup&gt;th&lt;/sup&gt; August</td>
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<tr>
<td></td>
<td>Designing as a team.</td>
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<tr>
<td>Outcome 2</td>
<td><em>Report/Product</em></td>
<td>15&lt;sup&gt;th&lt;/sup&gt; October</td>
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<tr>
<td></td>
<td>Producing and evaluating a collaboratively designed product</td>
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## Unit 3: Design, technological innovation and manufacture.

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<td><em>SAC</em></td>
<td>12&lt;sup&gt;th&lt;/sup&gt; March</td>
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<td>Written report: (The designer, client and end user in product development)</td>
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<td><em>SAC</em></td>
<td>30&lt;sup&gt;th&lt;/sup&gt; April</td>
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<td>Written report: (Product development in industry)</td>
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<td>Outcome 3</td>
<td><em>SAT</em></td>
<td>11&lt;sup&gt;th&lt;/sup&gt; June</td>
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<td>Design folio. (Designing for others)</td>
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## Unit 4: Product development, evaluation and promotion.

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<td>13&lt;sup&gt;th&lt;/sup&gt; August</td>
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<tr>
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<td>Written report: (Product analysis and comparison)</td>
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<td>17&lt;sup&gt;th&lt;/sup&gt; September</td>
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