

# **Designing & Constructing a Kitchen Teachers' Notes**

## **Introduction:**

This DVD provides an engaging overview of the steps undertaken and the people involved in the design and construction of a domestic kitchen. The program has been divided into chapters that reflect steps of the design process and provide information relating to outcomes from the Stage 6 Industrial Technology, Stage 5 and 6 Design and Technology and Technology Mandatory syllabus.

Using a modern real-life situation, students can gain an understanding of the problems and issues facing designers and manufacturers and the technologies, techniques (common practices) and materials used to address them.

An important part of any design process is establishing the criteria for success. This is clearly put forward and allows the viewer to critically analyse whether the criteria have been addressed successfully.

The program features modern technologies, innovative and creative practices and necessities for the construction of a quality product.

The program also demonstrates the importance of collaboration throughout design and the correct sequencing of events that lead to a successful solution.

Chapter format allows the teacher to utilise sections of the program relevant to the content that they are teaching and relate these to the outcomes of the syllabus.

*Examples:*

### ***Design and Technology Stage 6***

*In the chapter "designing principles" the teacher may utilise the building designer's outline of the important criteria to assist in highlighting P1.1 "examines design theory and practice, and considers the factors affecting designing and producing in design projects" or cover aspects of P5.2 "communicates ideas and solutions using a range of techniques" by watching the building designer's description of CAD or by observing the sketching carried out in the chapter "designing a kitchen"*

### ***Industrial Technology Stage 6***

*The description of the properties, the justification and selection of the materials such as HMR and ceaserstone can assist in highlighting the subject content of the Focus Area: Timber Products and Furniture Industries – **Materials** - Timber and timber products and Fittings and allied materials*

### ***Technology Mandatory***

*Throughout the design and construction of the kitchen questions are asked, and solutions presented by the client, designer and manufacturer, allowing students studying the Technology Mandatory course to gain an insight into the benefits of evaluation in the design process (4.6.1).*

## Teaching resources

### Related outcomes

	<i>Eg. Industrial Technology Stage 6</i>	<i>Eg. Design and Technology Stage 6</i>	<i>Eg. Technology Mandatory</i>
<i>Design principles</i>			
<i>Designing the kitchen</i>			
<i>Construction</i>			
<i>Build and install Carcasses</i>			
<i>Benchtops</i>			
<i>Drawers and cupboards</i>			
<i>Re-design</i>			
<i>The servery and window</i>			
<i>The finishing touches</i>			



5. Continuous evaluation is always applied to achieve success in any design process. Outline 3 situations throughout the design and construction of the kitchen where an evaluation and action were carried out.

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6. Explain what impact the design and construction that a modern kitchen may have on the  
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- b. society.....

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- c. environment .....

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7. Briefly outline communication techniques were used throughout the design and construction of the kitchen?

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8. Outline an appropriate communication technique that may be used between the following people. Explain why.

Designer – Client .....

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Designer – Tradesperson .....

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9. What are the advantages of using computer aided drawing in industry today?

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10. Identify 4 different types of materials used in the construction of the kitchen and justify their use.

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11. Which new technologies have been employed to achieve a quality-manufactured product?

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12. The success of any construction relies on the working relationship between the people involved. Give 2 examples where successful collaboration was achieved.

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13. What are the advantages of getting the correct order of events when doing any design and construction work.

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14. Innovation is where things are used in a new or different way to solve an existing problem. Give an example from the program where this has occurred.

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15. Identify the OH&S issues that had to be addressed throughout the design and construction of the kitchen

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16. Templates can play an important part in a manufacturing process. Outline where and why a template was used.

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Worksheet 1:

Q1: From the following lists match the roles with people

Client	Organises and oversees the construction work
Designer	Works in a specific trade
Subcontractor	Expertise in fitting kitchen cupboards
Builder	Finalises the position of components and provides options on materials for clients
Cabinet Maker	Provides design situation and brief

Q2: For the following design process, outline an activity that was carried out in the design and construction of the kitchen program.

Design Situation	
Design Brief	
Research and investigation	
Idea Generation	
Production	
Evaluation	

Q3: Identify how the client researched and generated ideas for the design of the kitchen.

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Q4: List 5 criteria that have been used to obtain success in the design and construction of the kitchen.

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Q5: Who did Geoff the builder have to successfully collaborate with?

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Q6: What are the advantages of using a CAD program as a communicating tool in the design and construction of the kitchen?

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Q7: Outline the structure of the following materials and why they were selected in the production of the kitchen components.

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2. Ceaserstone

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3. Polyurethane paint.

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Q8: Experience is an invaluable tool. Give an example of where experience came into play and what affect it had on the production process.

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Q9: Briefly outline why a handsaw was used rather than an electrical portable power tool during the construction of the window.

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Q10: Critically analyse the two techniques that may be used to levelling cabinets.

Technique1: .....  
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Technique 2: .....  
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Advantages	Disadvantages

Conclusion.....  
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Q11: What was the importance of using a template when cutting the ceaserstone benchtop?

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