

## Teaching Notes for Renovating a Home

### Introduction:

This DVD provides an engaging overview of the steps undertaken and the people involved in the renovating an existing home. The program has addressed Stage 5 and 6 Design and Technology, Technology Mandatory and the VET Building Construction 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 identifying a need and this is clearly put forward, allowing the viewer to critically analyse whether the criteria have been addressed successfully.

The program also demonstrates the importance of collaboration throughout design and construction, and highlights a number of factors that affect design which 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 "Design" the teacher may utilise the parking problem to address 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 analysing the communication techniques used throughout the program*

### **Technology Mandatory**

*Throughout the renovations 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).*

### **Building Construction**

*In the "Garage" chapter the teacher may use it to demonstrate some of the tools and techniques employed in this construction activity and aid the students understanding of a range of units, such as, BCGCA3002B (Carry out setting out), BCGCM2002B (Carry out excavation) or BCGCO2001B\* ( Handle concreting materials)*

## Teaching resource

### Relevant outcomes

	<b><i>Design and Technology Stage 6</i></b>	<b><i>Technology Mandatory</i></b>	<b><i>Building Construction</i></b>
<i>Renovating a Home</i>			
<i>Design- Form and Function</i>			
<i>Exterior Design</i>			
<i>Interior Design</i>			
<i>The Garage- Functional Design</i>			
<i>Interior Preparation</i>			
<i>Exterior Renovation</i>			
<i>Interior Renovation</i>			
<i>Finishing Off</i>			

# Renovating a Home

## Question Sheet 1:

1. *List all the major people involved in the design and construction of the renovation. Briefly, detail their role.*

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

2. *What is the aim of the project?*

.....  
.....  
.....  
.....  
.....

3. *How did the selection of the site satisfy the customer's needs. What other factors influenced the need for the renovation?*

.....  
.....  
.....  
.....  
.....  
.....  
.....

4. *What was the original architectural style of the house? Briefly, describe features of the design period.*

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

5. For the following problems briefly describe the issue and how they have been addressed in the renovation

a. Poor access and parking

.....  
.....  
.....  
.....

b. Old appearance

.....  
.....  
.....  
.....

c. Rubbish removal

.....  
.....  
.....  
.....

d. Exterior water flow.

.....  
.....  
.....  
.....

6. List the ways a schedule can be affected throughout the production process.

.....  
.....  
.....  
.....  
.....  
.....

7. What are the advantages of developing a time/action plan when doing any design and construction work.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

8. Explain what impact the renovating a modern home may have on the  
a. individual.....

.....  
.....  
.....

b. society .....

.....  
.....  
.....

c. environment.....

.....  
.....  
.....  
.....

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

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

10. Briefly, outline the communication techniques that were used throughout the renovation of the home.

.....  
.....  
.....  
.....  
.....  
.....

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

.....  
.....  
.....  
.....  
.....  
.....  
.....

12. Identify 4 ways the house appearance was modernised.

- a.....  
.....  
.....
- b.....  
.....  
.....
- c.....  
.....  
.....
- d.....  
.....  
.....

13. Good designers/manufacturers need a strong understanding of tools, techniques and materials. Briefly, explain the situation relating to the removal of the existing garage floor.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

14. Identify the OH&S issues that had to be addressed throughout the renovation

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

15. Describe the painting technique employed in the finishing off and explain why it was used.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

Worksheet 1:

Q1: For the two areas below list all the people involved throughout the renovation

Design	Production

Q2: For the following design process, outline an activity that was carried out in the renovating of a house.

Design Situation	
Design Brief	
Research and investigation	
Idea Generation	
Production	
Evaluation	

Q3: Identify how the client researched ideas for the design of the house.

.....  
.....  
.....  
.....  
.....

Q4: List 4 criteria that have been used to obtain success in the design and renovation of the home.

1. ....
2. ....
3. ....
4. ....

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

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

Q6: What are the advantages of using a CAD program as a communicating tool in the renovation of a home?

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

Q7. What was the purpose of replacing the windows with doors in the front room of the house?

.....  
.....  
.....  
.....  
.....  
.....  
.....

Q8: Identify the change in appearance of the following components and why they were selected in the renovation.

1. Windows

.....  
.....  
.....  
.....  
.....  
.....  
.....

2. Exterior Walls

.....  
.....  
.....  
.....  
.....  
.....

3. Roof

.....  
.....  
.....  
.....  
.....  
.....

Q9: What is the purpose of constructing interior brick walls rather than timber framing with gyprock lining in the renovation?

.....  
.....  
.....  
.....  
.....  
.....

Q10: Experience is an invaluable tool. Give an example of where experience came into play and what affect it had on the production process.

.....  
.....  
.....  
.....  
.....  
.....  
.....

Q11: List the advantages of using the following tools in the construction of the renovation

a. Diamond Tip Water Cooled Masonry Saw .....

.....  
.....  
.....

b. Laser Level .....

.....  
.....  
.....

c. Concrete Vibrator .....

.....  
.....  
.....

Q12. List 10 modern tools or technologies that are used throughout the renovation

.....  
.....  
.....  
.....  
.....  
.....

