Food technology & Home Economics education in the 21st century: teaching towards a design brief

Kay Stubbs
East Doncaster Secondary College

stubbs.kay.k@edumail.vic.gov.au
tel- 9842 2244
- INTRODUCTION
- LINKING LEARNING
- TECHNOLOGY PROCESS NOTES
- YR 8 FOOD TECHNOLOGY COURSE OVERVIEW
- YR 8 EXAMPLES OF UNITS OF WORK
- YR 9 SAMPLES OF WORK-MEAL PLANNING & NOVELTY CAKE TASKS
- YR 10 EXAMPLES OF UNITS OF WORK
- CONCERNS RE- DELIVERY OF DESIGN TECHNOLOGY UNITS
- RESOURCE IDEAS
- DECONSTRUCTING A DESIGN BRIEF ACTIVITY
Engaging in ‘real life’ learning enables learning that is authentic and meaningful. Teenagers are curious about the world they live in and if we are to engage them and motivate them in our classrooms we must offer them inquiry and problem based learning. Look at the impact tv chefs and shows like Masterchef and My Kitchen Rules have on the public and the renewed interest in cooking. By giving students the opportunity to develop creativity and imagination through doing we are imparting important thinking tools. Inquiry learning places students at the centre of the curriculum and provides a rich range of learning opportunities that are reflective of their interests and relevant. Through inquiry in Food Technology students are encouraged to explore, investigate, experience and discover that learning is fun, productive and achievable for all.

I get tired of hearing students refer to our subject as ‘cooking’. In Food Technology we do so much more than that and we need to involve students in meaningful activities that demonstrate this.

Students should be given opportunities to develop valuable skills, such as higher order thinking, collaborating, negotiating, information seeking, forming opinions, decision making and problem solving and communicating solutions. These are skills and attributes that I am sure we all agree are essential for young people to be life long learners.

Through delivery of the design & technology process in Food Technology & Home Economics we can give students many opportunities to practice and develop these skills through a variety of practical and theory based activities.
DESIGN BRIEFS

A **design brief** is like a plan or a map where you have to fill in the details. There are two parts to a design brief.
1. The information about the product from the client and
2. The constraints or the rules for making the product as well as any considerations you may have to take into account. These are the *specifications*.

The rest is up to you!

**DO IT YOURSELF DESIGN BRIEF:**

To make your own design brief, you need to ask some really important or essential questions about the product/ meal/ recipe you have made or will make.

1. **WHO?** Who is it for?
2. **WHY?** Why is it needed?
3. **WHERE?** Where is it happening?
4. **WHAT?** What is its function or the reason for making it?
5. **WHEN?** When is it required?

Answer these questions below.

1. ___________________________________________________________________
2. ___________________________________________________________________
3. ___________________________________________________________________
4. ___________________________________________________________________
5. ___________________________________________________________________

Using this information write a **design brief** for the food product you have just made/ will make starting with (Remember to include Who? Why? Where? What? When? In your plan. Write it like you would a story!):

The school canteen has asked me to design and create......
THE DESIGN PROCESS!

➔ INVESTIGATION:

- research the options, techniques, materials, processes etc
- find out reasons for..
- list specifications- constraints/ considerations.
- establish criteria for evaluation drawn from the design brief as identified above. These should be listed as questions and can include constraints/ consideration (do not answer the questions, as these will form part of your final evaluation).

➔ DESIGN:

- draw or plan out- use mind maps or concept map
  eg.

  ![Concept Map](image)

- select final option or solution to meet the design brief.

➔ PRODUCE:

- complete a production plan. Include within this- major steps/ processes (incl. time) involved in completion of the product, safety and/or hygiene considerations, modifications, tools and equipment.

➔ EVALUATE:

- assess to previously established criteria (see INVESTIGATION for evaluation criteria). These will determine whether the design brief has been met.
- other points which are not already covered by your evaluation criteria eg.
  - modifications.
  - safety/ hygiene procedures which were followed or not followed
  - any improvements that could be made.
  - other comments you have to make about the design process.
THE PLANNING PROCESS IN FOOD TECHNOLOGY

The Planning Process in Food Technology & Home Economics Education

- Is a series of steps designed to create the best opportunity for the efficient use of resources to meet a defined need or solve a design problem.

- TERMS:
  - Design process: when it is applied to ideas.
  - Technological process: when it is used to make something useful.
  - Includes: 4 main stages: investigating, designing, producing, evaluating.

The Design Brief

- Outlines the task in context.
- Forms basis of technological process.
- Has information that is relevant to meeting the need or solving the problem.
- Is used to provide prioritised specifications and to develop criteria for evaluation.
- Includes information such as:
  - WHY? Task or purpose.
  - WHAT? Type of product.
  - WHO? The person/s it is for.
  - WHERE? Situation or place.
  - WHEN? Time.
  - WHERE? Place.

EXAMPLES OF DESIGN BRIEFS - Elderly Xmas Luncheon

- When? The Greek Elderly Citizens Club of Doncaster is having their annual Christmas Party at the council function rooms on Dec 18th and I have offered to design a suitable menu for this event which will be sampled in advance by the 6 committee members.
- Why? The food should include sweet and savory dishes and should take into account the age of the club members. The food should be easy to serve and also be considered special and familiar to this ethnic group.
- Who? The person/s it is for.
- What? Type of product.
- Where? Situation or place.
Anniversary Dinner

- It is my parent’s 20th wedding anniversary and I have decided to prepare a special romantic dinner for them on Saturday night. The meal will need to be prepared in advance as I will be out on Saturday night and must be easy for them to re-heat or put together. It must be very tasty, appealing to the eye and have an enticing aroma. My parent’s love seafood and dad has a sweet tooth and loves chocolate. As I work part time I have ample money cost is not a serious consideration and I intend to make this a very special dinner for them.

NB Product specifications

Product Specifications - Considerations & Constraints

- A desired characteristic(s) need to be identified.
- Determined by analysing the design brief and identifying the requirements of the task.
- Description of type of food product to be developed - incl. list of requirements to be met. For example:
- Description of product or meal.
- Circumstances to be considered when planning, preparing, serving or delivering it.
- Form the basis of the criteria for evaluation.

ACTIVITY: Identify Product Specifications in the previous Design Brief examples.

PRIORITY

- The most important or desirable characteristic. The most significant quality of the food. (Eg easy for them to re-heat or put together)
- Your opinion needs to be justified as sometimes this may be difficult to determine from the design brief. The elements included in the specifications can be listed in priority order to determine the most important aspects in the design brief.
SAMPLE UNITS OF WORK-

In this package there are some useful documents to take back to your school: for discussion in your faculty meetings or when designing technology process based units of work.

- units of work at various levels that allow students to demonstrate the technology process such as investigating/designing, producing and analysing/evaluating.
- notes about teaching and using a design brief within the design technology process including deconstructing a design brief activity.
- various rubrics for assessment purposes.
EDSC YR 8 FOOD TECHNOLOGY COURSE

- Between 10 and 14 weeks. 100 minute session/ week.
- Approx 22 students. Working sometimes individually but usually in pairs.
- Program includes basic skill development using a range of food materials with an emphasis on design/ team work/ culture. Investigation and evaluation occurs mostly after the practical activity. Regular homework sheets and a major investigation based around analysis of personal eating habits.

TIMELINE TERM 1/2: 2008

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPIC/PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29/1</td>
<td>No students</td>
</tr>
<tr>
<td>2</td>
<td>5/2</td>
<td>INTRODUCTION- theory activities(safety &amp; hygiene/ nutrition/ reading recipes/ design &amp; technology process)</td>
</tr>
<tr>
<td>3</td>
<td>12/2</td>
<td>VEGIE FRITTATAS- (sensory properties o food)</td>
</tr>
<tr>
<td>4</td>
<td>19/2</td>
<td>DESIGN A COOKIE</td>
</tr>
<tr>
<td>5</td>
<td>26/2</td>
<td>DESIGN A HAMBURGER WITH WEDGES</td>
</tr>
<tr>
<td>6</td>
<td>4/3</td>
<td>DESIGN SWEET/ SAVOURY PINWHEEL SCONES</td>
</tr>
<tr>
<td>7</td>
<td>11/3</td>
<td>DESIGN A MULTICULTURAL BREAKFAST &amp; Breakfast theory lesson</td>
</tr>
<tr>
<td>8</td>
<td>18/3</td>
<td>GREEK EASTERN KOLOURAKIA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>End of Term 2:</td>
</tr>
<tr>
<td>term 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>8/4</td>
<td>DESIGN A FOCCACIA/TURKISH BREAD yeast activity</td>
</tr>
<tr>
<td>2</td>
<td>15/4</td>
<td>COLLABORATIVE WORK SKILLS ACTIVITY-SPAGHETTI BOLOGNESE &amp; GARLIC BREAD</td>
</tr>
<tr>
<td>3</td>
<td>22/4</td>
<td>DESIGN A JACKET POTATO &amp; FRUITY MARSHMALLOW KEBAB</td>
</tr>
<tr>
<td>4</td>
<td>29/4</td>
<td>DESIGN A NOODLEBOX ACTIVITY</td>
</tr>
<tr>
<td>5</td>
<td>5/5</td>
<td>AMERICAN PANCAKES</td>
</tr>
<tr>
<td>6</td>
<td>13/5</td>
<td>CELEBRATION COOKERY-CHOCOLATE CAKE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>End of Unit</td>
</tr>
</tbody>
</table>
ACTIVITY 1:
BAMI - SPECIAL STIR FRY NOODLES
DESIGN ACTIVITY - work in pairs

The Noodle Box take-away food chain has asked you to design and create a new menu item for the Chinese New Year Festival. It should be healthy, tasty, and colourful and include a range of vegetables. Select an appropriate sauce base which compliments your noodle dish. The noodles should be made safely & hygienically and completed within a 100 minute timeframe.

You are required to create a brand and name for your menu item and complete a description for a promotional brochure. The design for your label of the noodle box take-away container should contain relevant information.
ACTIVITY 2:

DESIGN A COOKIE

Arnotts want you to design a new cookie for their school playlunch range aimed at primary school children!

Write the Design Brief (include who? what for? why? when? where?)

_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

Makes: 24                                Oven temp: 180°C

Time: 20 min approx

Work in pairs!
You will need
• 2 greased baking trays
• large mixing bowl
• measuring cups and spoons
• electric beater

INGREDIENTS:
125 g butter
½ cup castor sugar
1 egg, lightly beaten
1 cup sifted SR Flour
2 cups lightly crushed cornflakes

YOU MAY CHOOSE UP TO 3 OF THE BELOW INGREDIENTS!
¼ cup sultanas (optional)
¼ cup choc chips (optional)
¼ cup coconut (optional)
¼ cup peanuts/ macadamia nuts/ walnuts (optional)
6 glace cherries, chopped (optional)
6 dried apricots, chopped (optional)

YOU MAY LIKE TO ADD-
¼ tsp Cinnamon
¼ tsp Mixed spice
1 tbsp cocoa

METHOD:

1. Cream butter and sugar with electric mixer until light, white and fluffy.
2. Add egg, beat well.
3. Fold in sifted flour with wooden spoon.
4. Mix in optional ingredients as selected.
5. Drop teaspoonfuls of mixture into crushed cornflakes and roll lightly or mix cornflakes into biscuit mixture and roll into balls. Press lightly with fork if you wish.
6. Place on greased tray. Allow room for spreading.
7. Bake in moderate oven (180°C) for about 20 min or until light golden brown around edges.
8. Cool on cake rack.
DESIGN A COOKIE EVALUATION HOMEWORK

Using your Design Brief make up 3 evaluation criteria or questions, these should evaluate the product or the process and information within the design brief should form the basis of these questions:

Question 1: ____________________________________________________________
RESPONSE-____________________________________________________________

Question 2: _____________________________________________________________
RESPONSE-________________________________________________________________

Question 3: _____________________________________________________________
RESPONSE-________________________________________________________________

ADDITIONAL HW QUESTIONS:
What ingredients did you select for your cookies?
________________________________________________________________________
________________________________________________________________________

Do you think your cookies were successful? Why? Why not? Consider taste, appearance and texture.
________________________________________________________________________
________________________________________________________________________

If you were to repeat this activity would you do any of the following: change the way you worked, use different equipment, a different method, different ingredients, work more safely, improve the recipe. You must comment on at least 3 of the above factors.
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

What are some other ingredients or combinations of ingredients you could use to flavour cookies?
________________________________________________________________________
________________________________________________________________________

Would you consider your cookies to be healthy? Why/ Why not? Where would you place them on the healthy diet pyramid? Explain.
________________________________________________________________________
________________________________________________________________________

The cookies you produced were made using the ‘creaming method’. What does it mean to ‘cream’ the butter and the sugar?
________________________________________________________________________
How should biscuits be stored?______________________________________________
## YR 8 FOOD TECHNOLOGY
### PRACTICAL PRODUCTION ASSESSMENT RUBRIC

**TOPIC/ RECIPE:** Design A Cookie  
**Teacher Name:** Ms. Stubbs

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design &amp; Creativity</strong></td>
<td>Response to the design brief shows uniqueness and a very creative approach.</td>
<td>Response to the design brief shows a very good creative approach and response to the design brief.</td>
<td>Response to the design brief shows a good creative approach and response to the design brief.</td>
<td>Response to the design brief shows an acceptable creative approach but is somewhat limited.</td>
</tr>
<tr>
<td><strong>Kitchen and Time-management</strong></td>
<td>Routinely uses time well throughout the practical tasks to ensure things get done on time. Work area is very orderly.</td>
<td>Usually uses time well throughout the practical task and completes task within set timeframe. Work area is orderly.</td>
<td>Tends to procrastinate, but always gets things done within the set timeframe. Work area is relatively orderly.</td>
<td>Rarely gets things done within the set time frame and has inadequate time management. Work area is not very orderly.</td>
</tr>
<tr>
<td><strong>Sensory Properties of food (appearance/taste/aroma/texture)</strong></td>
<td>Final product displays excellent sensory characteristics.</td>
<td>Final product displays very high sensory characteristics.</td>
<td>Final product displays good sensory characteristics.</td>
<td>Final product displays some acceptable sensory characteristics.</td>
</tr>
<tr>
<td><strong>Team Work</strong></td>
<td>Contributes cooperatively and always listens to, shares with, and supports the efforts of their partner.</td>
<td>Mostly contributes cooperatively and usually listens to, shares, with, and supports the efforts of their partner.</td>
<td>Usually contributes cooperatively and listens to, shares with, and supports the efforts of their partner, but sometimes is not a good team player.</td>
<td>Rarely listens to, shares with, and supports the efforts of their partner. Often is not a good team player.</td>
</tr>
</tbody>
</table>

### Student Self Evaluation:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________


**ASSESSMENT:** /20 marks
Complete the following sections of a design brief, in small groups of 3 or 4.

CONTRAINTS/ CONSIDERATIONS:

- Dietary guidelines - “Choose a nutritious diet from a variety of foods.”
  - Eat plenty of vegetables, legumes and fruit
  - Eat plenty of cereals (incl. breads, rice, pasta and noodles) preferably wholegrain
  - Include lean meat, fish, poultry and/or alternatives
  - Include milks, yogurts, cheeses and/or alternatives for young children under 2 years because of their high energy needs, but reduced fat varieties should be encouraged for older children and adolescents
  - Choose water as a drink. Alcohol is not recommended for children.

And take care to:
  - Limit saturated fat and moderate total fat intake. Low fat diets are not suitable for infants.
  - Choose foods low in salt
  - Consume only moderate amounts of sugars and foods containing added sugars.

- Time- 100 minutes
- Ingredients- a range of incl. cereals/ fruit/ vegetables/ meat/ dairy etc
- $5.00/person = $20.00/ group of 4
- Formal or informal occasion
- 2 course menu- including main course & dessert
- Appealing sensory properties- appearance, taste, texture, aroma etc
- Safety & hygiene rules considered and applied

1. DESIGN SITUATION:
   Give a brief outline of the design problem, situation, need or opportunity in two or three sentences.
   ____________________________________________________
   ____________________________________________________
   ____________________________________________________
   ____________________________________________________

Now, provide more detail about each aspect of the problem, situation, need or opportunity.

2. WHO?
   Describe the user/s or clients for this 2 course menu.
   ____________________________________________________
   ____________________________________________________

3. WHAT FOR?
   Explain the purpose of the product- What is its use? Or What is the function?
   ____________________________________________________
4. WHY?
Explain why the user/s or client should find the product useful or suitable?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

5. HOW?
Explain how the products are likely to be used.
__________________________________________________________________________
__________________________________________________________________________

6. WHEN?
Describe when the products are likely to be used.
__________________________________________________________________________
__________________________________________________________________________

7. WHERE?
Describe where the user or client is likely to need, want or access the products.
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

8. CONSIDERATIONS/ CONSTRAINTS?
Identify other considerations or constraints that relate to this practical activity.
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Now, use all the detail above to write a design brief. This can be in a story format.
DESIGN BRIEF:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
YEAR 9 FOOD TECHNOLOGY
FORMAL or INFORMAL MEAL ON A BUDGET
EVALUATION CRITERIA

Using your design brief as well as the constraints and considerations you have been presented with establish a set of evaluation criteria that assess your products and process for completing this activity. You will answer these later!!!

PRODUCT EVALUATION CRITERIA/ QUESTIONS:
1.____________________________________________________________________
2.____________________________________________________________________
3.____________________________________________________________________

PROCESS EVALUATION CRITERIA/ QUESTIONS:
1.____________________________________________________________________
2.____________________________________________________________________
3.____________________________________________________________________

FINAL EVALUATION:
# On completion of the meal planning activity answer the questions listed above.
# Identify safety and hygiene rules that were important during this activity.
# Make suggestions for modifications to the products or process.
# Discuss how well your team worked and who did what?

PRODUCT/s:_________________________________________________________
1.__________________________________________________________________
2.__________________________________________________________________
3.__________________________________________________________________

PROCESS:
1.__________________________________________________________________
2.__________________________________________________________________
3.__________________________________________________________________

SAFETY/ HYGIENE RULES APPLIED:
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

MODIFICATIONS FOR IMPROVEMENT:
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

HOW WELL DID YOUR TEAM WORK and WHO DID WHAT?:
____________________________________________________________________
____________________________________________________________________
YEAR 9 FOOD TECHNOLOGY
DESIGN BRIEF: MEAL ACTIVITY

SPECIFICATIONS- Considerations and Constraints:

- Client/s
- There must be 2 courses
- Nutritional qualities and balance of the meal must be considered
- The meal must include protein eg. meat, chicken, cheese, eggs, nuts/legumes etc
- The meal must include at least 3 vegetables and there should be some variety
- The meal could include sweet and savoury dishes
- The meal could be entrée and main course or main course and dessert but could also include refreshments and be buffet style.
- The task including service and clean up must be completed within the time frame of 100 minutes
- Teams must work in groups of 3-5
- Cost must be shared equally amongst team members and be approx. $5.00 each
- Preparation and service must be safe and hygienic
- Sensory properties of taste, appearance, texture, aroma is an important consideration
- Occasion or Theme must be included eg. farewell, xmas, birthday, Halloween, pool party, celebration, family gathering etc
- Meal could include convenience and home made but must be of an advanced level of cookery eg. year 10 standard

Create a Design Brief using all the above information-

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Construct Criteria for Evaluation based on the above specifications which you have included in your Design Brief.

These must be in the form of questions eg. Is the meal nutritious and does it include a protein food as well as a variety of vegetables? NB. More than 1 specification is included in this question which makes it more meaningful and allows for a more detailed response when completing your final evaluation.

CONCEPT MAP:

```
CONCEPT MAP -

main

2 course meal

entree

soup

desserts
```

FINAL OPTION/S & JUSTIFICATION:

_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
___________________________________________________________________________________
YEAR 9 FOOD TECHNOLOGY
MEAL ACTIVITY & REPORT

1. DESIGN BRIEF and CRITERIA FOR EVALUATION.
2. CONCEPT MAP- planning of ideas.
3. * RECIPE and MENU- modifications/alterations to ingredients/processes included.
5. WORK PLAN/ TIME PLAN-

### Example of workplan/ timeplan:

<table>
<thead>
<tr>
<th>TIME</th>
<th>STEPS</th>
<th>INGREDIENTS</th>
<th>TOOLS AND EQUIPMENT</th>
<th>HYGIENE/SAFETY</th>
<th>MODIFICATIONS TO INGREDIENTS OR PROCESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex. Collect ingred/s and prepare for prac. 5-10mins 1.40-1.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. THEME/TABLE SETTING- (optional- include a drawing), discuss presentation of the meal (eg. garnish, decoration and layout).
7. NUTRITION-Discuss nutritional value of the meal. Analyse the nutritional components of your meal referring to the following nutrients. eg Protein, Carbohydrates, Minerals Vitamins, Fats and Fibre compare to a relevant food model eg. Healthy Diet Pyramid or Australian Guide to Healthy Eating or Target for Healthy eating etc
8. TEAM WORK-Discuss your contribution as well as other members of your group. How successful did you work as a team? What improvements could be made if you repeated the activity?
9. OVERALL EVALUATION- use previously established criteria for evaluation from Q1. eg How did the food products prepared turn out- sensory properties (taste, aroma, appearance etc)? How could you improve the meal?
10. DIGITAL IMAGE-Pictures of your meal.

* NB. This work must be completed and submitted on:__________________________prior to the Safeway shopping day!

DUE DATE:_____________________________

*** Neat and effective presentation is important!
# Year 9 FOOD TECHNOLOGY
## Meal Activity-Collaborative Work Skills
### PRACTICAL ASSESSMENT RUBRIC

<table>
<thead>
<tr>
<th>Teacher Name: _____________________</th>
<th>Student Name: ________________________________________________</th>
<th>Total marks: /20 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CATEGORY</strong></td>
<td><strong>4</strong></td>
<td><strong>3</strong></td>
</tr>
<tr>
<td>Quality of Work-Final Product</td>
<td>Final product provides work of the highest quality which meets the design brief fully.</td>
<td>Final product provides high quality work which meets the design brief.</td>
</tr>
<tr>
<td>Time-management &amp; Hygiene and safety</td>
<td>Routinely uses time well throughout the activity to ensure things get done on time. Safe and hygienic work practices to the highest standard. Group does not have to adjust deadlines or work responsibilities because of this person’s procrastination.</td>
<td>Usually uses time well throughout the activity, but may have procrastinated on one thing. Safe and hygienic work practices to a more than adequate standard. Group does not have to adjust deadlines or work responsibilities because of this person’s procrastination.</td>
</tr>
<tr>
<td>Attitude</td>
<td>Always has a positive attitude about the task(s).</td>
<td>Often has a positive attitude about the task(s).</td>
</tr>
<tr>
<td>Focus on the task</td>
<td>Consistently stays focused on the task and what needs to be done. Very self-directed.</td>
<td>Focuses on the task and what needs to be done most of the time. Other group members can count on this person.</td>
</tr>
<tr>
<td>Working with Others</td>
<td>Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.</td>
<td>Usually listens to, shares, with, and supports the efforts of others. Does not cause &quot;waves&quot; in the group.</td>
</tr>
</tbody>
</table>
An alternative way of assessing? Outcomes assessed

A student:
*demonstrates hygienic handling of food to ensure a safe and appealing product.
*collects, evaluates and applies information from a variety of sources.
*plans, prepares, presents and evaluates food solutions for specific purposes.

Marking criteria

1. Plan a suitable 2 course menu based on the Dietary Guidelines for Australians.

<table>
<thead>
<tr>
<th>Level of Achievement</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| High achievement     | • Menu is appealing and meets the needs of the family.  
                       | • Menu is in correct proportions recommended by the Dietary Guidelines for Australians |
| Achieved             | • Menu is in correct proportions recommended by the Dietary Guidelines for Australians |
| Working towards      | • Little evidence of the use of the Dietary Guidelines for Australians |
| Limited achievement  | • Menu not attempted |

2. a. Develop a safety and hygiene checklist for the preparation of your meal.

<table>
<thead>
<tr>
<th>Level of Achievement</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High achievement</td>
<td>• Safety and hygiene checklist has been developed to address all issues relating to the meal.</td>
</tr>
<tr>
<td>Achieved</td>
<td>• Safety and hygiene checklist has been developed to address most issues relating to the meal.</td>
</tr>
<tr>
<td>Working towards</td>
<td>• Safety and hygiene checklist has been developed to address a few issues relating to the meal.</td>
</tr>
<tr>
<td>Limited achievement</td>
<td>• Safety and hygiene checklist not attempted</td>
</tr>
</tbody>
</table>

2. b. Complete the practical in class time.

<table>
<thead>
<tr>
<th>Level of Achievement</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| High achievement     | • Meal is quality product and is visually appealing.  
                       | • Practical completed in the timeframe. (2 periods)  
                       | • Correct techniques used to produce a quality product.  
                       | • All safety and hygiene issues have been addressed during preparation. |
| Achieved             | • Meal is a quality product.  
                       | • Practical completed in timeframe.  
                       | • Correct techniques were used most of the time to produce a quality product.  
                       | • Most safety issues have been addressed during preparation. |
| Working towards      | • Meal is not a quality product and is not visually appealing.  
                       | • Practical was not completed in the timeframe.  
                       | • Incorrect techniques were used during preparation.  
                       | • Few safety and hygiene issues have been addressed during preparation. |
| Limited achievement  | • Practical not attempted. |
YR 9 NOVELTY CAKE DESIGN TASK
YR 9 FOOD TECHNOLOGY
NOVELTY CAKE DESIGN ACTIVITY

Production dates: ______________________________
______________________________

Invitation and evaluation due in: ______________

Brief
A client has contacted you to work individually at Parties ‘R’ us a party catering company. They want you to make a novelty cake for a special celebration. The client will notify you of the date and the celebration. The novelty cake must demonstrate effective processing of a butter cake recipe, safe and hygienic kitchen practices and effective time management, there is 200 minutes available to produce and decorate the cake. Butter icing must be used to decorate the cake creatively. Lollies and cake decorating ingredients can be used to add appeal and interest. The sensory properties of the novelty cake must be visually appealing and executed to a high standard. The client wants you to design an invitation for the celebration.

Now, provide more detail about each aspect of the problem, situation, need or opportunity.

WHO?
__________________________________________________________________________________

WHAT?
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

WHY?
__________________________________________________________________________________

WHERE?
__________________________________________________________________________________

WHEN?
__________________________________________________________________________________
Investigate and brainstorm types of celebrations and 3 types of cake for the client celebration you have to produce a cake for:

- Use inspiration or flow chart below to help you
- Use the Internet or cookery books to choose a cake design
- Use drawing tools to annotate your design
- Use publisher to design an invitation (Ref, page 219 Food by design Text)
- Take a photo of the finished cake

<table>
<thead>
<tr>
<th>Constraints (Must be/have)</th>
<th>Considerations (Could be/might be)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creaming method</td>
<td>Shape?</td>
</tr>
<tr>
<td>Work individually</td>
<td>Type of celebration</td>
</tr>
<tr>
<td>Decorated with lollies and cake decorating ingredients &amp; techniques</td>
<td>Type of lollies and decorations</td>
</tr>
<tr>
<td>Safe and hygienic kitchen practices</td>
<td>Decorated with various ingredients &amp; techniques</td>
</tr>
<tr>
<td>Use butter cream to decorate and pipe</td>
<td>Colour of butter cream, how it is used, spread, piped</td>
</tr>
<tr>
<td>A novelty cake for a special celebration</td>
<td>200 minutes – 2 double lessons</td>
</tr>
<tr>
<td>A celebration</td>
<td></td>
</tr>
<tr>
<td>Time management</td>
<td></td>
</tr>
<tr>
<td>Visually appealing &amp; Creative</td>
<td></td>
</tr>
</tbody>
</table>

**CONSIDERATIONS/CONSTRAINTS**

**CHRISTMAS OR EASTER OR RELIGIOUS OCCASION**

**BIRTHDAY**

**VALENTINES DAY OR ANNIVERSARY**

**Halloween**

**Sporting Event**

**CHRISTENING OR NAME DAY**

**Novelty Cake**
JUSTIFY
Justify why the cake you have chosen meets the client’s needs.

PRODUCTION WORK PLAN/ ORDER OF WORK

<table>
<thead>
<tr>
<th>Task or Steps</th>
<th>Time allowance</th>
<th>Ingredients</th>
<th>Equipment/tools</th>
<th>Safety &amp; Hygiene rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 minutes = 2 double lessons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EVALUATION CRITERIA:
Using the information in your design brief make a list of 5 evaluation questions based on the following aspects:

Product Sensory characteristics -
1. ____________________________________________________________
2. ____________________________________________________________

Process - Time management/ safety & hygiene/ Use of tools & equipment -
3. ____________________________________________________________
4. ____________________________________________________________

Think of 1 other question related to decorating techniques
5. ____________________________________________________________

FOLLOWING THE PRODUCTION RESPOND TO YOUR EVALUATION QUESTIONS 1-5!
1. ____________________________________________________________
2. ____________________________________________________________
3. ____________________________________________________________
4. ____________________________________________________________
5. ____________________________________________________________
**TOPIC/ RECIPE: NOVELTY CAKE DESIGN**

**SPECIAL OCCASION:** _______________________

**Teacher Name:** Ms. Stubbs

**Student Name:** ___________________________ Form: _______

**Peer Assessor:** ___________________________________________

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design &amp; Creativity</td>
<td>Response to the design brief shows uniqueness and a very creative approach.</td>
<td>Response to the design brief shows a good creative approach and response to the design brief.</td>
<td>Response to the design brief shows an acceptable creative approach but is somewhat limited.</td>
<td>Response to the design brief shows a very limited creative approach to the design brief.</td>
</tr>
<tr>
<td>Planning and Implementation incl. annotated design and template.</td>
<td>Excellent design idea with detailed annotations including an accurate template. Design reflects the chosen occasion extremely well.</td>
<td>Good design idea with annotations including a template. Design reflects the chosen occasion very well.</td>
<td>Acceptable design idea with limited annotations. The template is lacking detail. Design reflects the chosen occasion.</td>
<td>Very limited evidence of design idea with limited or no annotations and a scrappy. Design does not reflect the chosen occasion very well.</td>
</tr>
<tr>
<td>Sensory Properties of food (appearance/ texture/ shape/ pattern/ colour)</td>
<td>Final product displays excellent sensory characteristics.</td>
<td>Final product displays very high sensory characteristics.</td>
<td>Final product displays mostly good sensory characteristics.</td>
<td>Final product displays some acceptable sensory characteristics.</td>
</tr>
<tr>
<td>Technical skill and understanding incl. Interpretation of recipe use of appropriate tools and equipment correctly and safely.</td>
<td>Excellent technical skill level and understanding shown incl. a very high level of understanding of cookery terms and instructions within the recipe. Correct and safe use of tools and equipment shown.</td>
<td>Good technical skill level and understanding shown incl. a good level of understanding of cookery terms and instructions within the recipe. A mostly correct and safe use of tools and equipment shown.</td>
<td>Acceptable technical skill level and understanding shown incl. adequate level of understanding of cookery terms and instructions within recipe. Acceptable use of tools and equipment shown.</td>
<td>Fair technical skill level and understanding shown incl. a basic level of understanding of cookery terms and instructions within the recipe. Use of tools and equipment shown is at a basic level.</td>
</tr>
</tbody>
</table>

**Teacher/ Student Comment:**

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

**ASSESSMENT:** /20 marks
WEEK 1-NOVELTY CAKE-BUTTERCAKE EVALUATION

1. What is the correct temperature and shelf position baking cakes?

_______________________________________________________________________________

2. List 4 ways to test a cake is cooked.

_______________________________________________________________________________

3. What is the basic cake method used to make today’s butter cake?
   The______________________________ method.

4. List the basic ingredients for making a buttercake.
   What additional ingredients could be added to modify the flavour of this cake?

5. List 3 pieces of equipment used and relevant safety/ hygiene rules applied.

<table>
<thead>
<tr>
<th>equipment</th>
<th>safety/ hygiene rules applied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EXAMPLE OF STUDENTS WORK

NOVELTY CAKE DESIGN TASK

I used blue coloured coconut to create cookie monster fur

Large white marshmallows for eyes

Round butteark coated in blue buttercream forms the base and face of cookie monster!

Whole cookie and crumbled cookies for effect

Black coloured buttercream for the mouth
ACTIVITY 1:

“Kids Healthy Eating and Obesity Design Activity”

**TASK**

Research Healthy Canteen Lunch and prepare some possible canteen lunch ideas based around the following Design Brief.

“The school council is concerned about the rise in childhood overweight and obesity and has requested that you and your team assist the canteen in addressing this issue. You or your team is required to present a range of healthy hot and cold lunch ideas to the next council meeting in three weeks time. The lunches must be healthy but also appealing in taste, aroma, texture, appearance. They should be low in fat and high in nutrients such as complex carbohydrates, protein, vitamins and minerals. Canteen lunches must also be affordable for youth and easy to handle. Packaging should be recyclable and carefully considered.”

**DESIGN BRIEF**

Specifications: (considerations and constraints) – provide four more specifications

- Completed within 100 minute time frame.
- Must be nutritious and low in fat.
- ________________________________
- ________________________________
- ________________________________
- ________________________________

**DESIGN TECHNOLOGY PROCESS**

(see appendix a-Technology process notes)

This involves the following four steps:-

1. Investigation- research, complete a concept map and collect pictures and make sketches
2. Design- explore a range of ideas and select and justify option/s
3. Production- the production of the item/s within the time frame, completion of a work log and record or production plan.
4. Evaluation- the finished product is evaluated using previously established criteria developed from the specifications within the design brief.
**1. INVESTIGATION - CONCEPT MAP**
Research possible lunch ideas that would meet the design brief specifications and place on the concept map below.

![Concept Map Diagram]

**2. PREFERRED DESIGN OPTION**

**a.** Draw and annotate (label) your preferred option/s in the box below. **Justify your choice!**

![Preferred Design Option Box]

**b.** Justification and attach recipe here

__________________________________________________________

__________________________________________________________

__________________________________________________________

__________________________________________________________

__________________________________________________________

__________________________________________________________

__________________________________________________________
### 3. Production

In class produce the item you have selected. You will be expected to briefly describe to the class what you have produced and justify why it fits the design brief.
4. Criteria for Evaluation

Write a set of evaluation criteria questions based on your design brief and the specifications you identified. Use these criteria (or questions) to evaluate the final product and your process.

a. eg. Is the product nutritious and low in fat content?

__________________________________________________________________________________
__________________________________________________________________________________

b.__________________________________________________________________________________
__________________________________________________________________________________
c.__________________________________________________________________________________
__________________________________________________________________________________
d.__________________________________________________________________________________
__________________________________________________________________________________
e.__________________________________________________________________________________
__________________________________________________________________________________
f.__________________________________________________________________________________
__________________________________________________________________________________

Discuss Modifications or Changes you made to the product or process.
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
“Kids Healthy Eating and Obesity Management Campaign”

Class and homework theory assignment supports practical design activity.

Developing a healthy eating campaign for adolescents is relevant to them and a current health issue in our society. It enables investigation and research, use of ICT, creativity, links 2 Domains – Health & PE (health knowledge and promotion) and Design Creativity & Technology

**AIM:**
To develop a campaign that promotes a greater awareness of childhood/teenage obesity and offers sound advice that is relevant and effective for young Australians.

**TASK:**
You are being asked to develop a campaign that will identify the:
- significance of childhood/teenage obesity in Australia
- causes of childhood/teenage obesity
- consequence of childhood/teenage obesity
- strategies to address the health issue of childhood/teenage obesity
- identify and evaluate at least three government and non-government services and/or products that could be used to help reduce obesity in children and teenagers.

To effectively spread the message of your campaign you are to select one method of communication from each of the categories below. Try to combine the importance of not only eating well but also exercising regularly in your message.

<table>
<thead>
<tr>
<th>Category 1 (select 1)</th>
<th>Media interview- radio or television recording or transcript Website or Blog PowerPoint presentation Pamphlet or Brochure or Newsletter Board or card game containing factual information eg. Trivial pursuit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2 (select 1)</td>
<td>Jingle Television advertisement Cartoon strip</td>
</tr>
<tr>
<td>Category 3 (select 1)</td>
<td>Billboard Sticker or car bumper bar sticker</td>
</tr>
</tbody>
</table>

Present the 3 selected strategies in a display folder that could be presented to your target audience.

To accompany your campaign include at least three government and non-government services that could be used to help reduce obesity in children and teenagers.
Give the address and/or websites of the government and non-government services and provide a brief evaluation of how these might help reduce obesity in children and teenagers.

On a separate sheet of paper evaluate your proposed campaign
- Why do you think it would be successful?
- Why would it appeal to young Australians?

Bibliography: List your references appropriately.
**“Kids Healthy Eating and Obesity”**

**ASSESSMENT**

**Name ___________________________**

<table>
<thead>
<tr>
<th>ACTIVITY/ CRITERION</th>
<th>Below Avg.</th>
<th>Satisfactory</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 – interview, pamphlet, game.</td>
<td>1, 2,</td>
<td>3, 4, 5,</td>
<td>6, 7, 8</td>
</tr>
<tr>
<td>Category 2 – jingle, cartoon, advertisement.</td>
<td>1, 2,</td>
<td>3, 4,</td>
<td>5, 6</td>
</tr>
<tr>
<td>Category 3 – billboard, sticker.</td>
<td>1,</td>
<td>2, 3,</td>
<td>4</td>
</tr>
<tr>
<td>Campaign evaluation</td>
<td>1, 2,</td>
<td>3, 4, 5,</td>
<td>6, 7, 8</td>
</tr>
<tr>
<td>Community resources</td>
<td>1, 2,</td>
<td>3, 4, 5,</td>
<td>6, 7, 8</td>
</tr>
<tr>
<td>Bibliography/ Use of ICT &amp; Effective presentation. Submitted on Time.</td>
<td>1, 2,</td>
<td>3, 4,</td>
<td>5, 6</td>
</tr>
</tbody>
</table>

**Total Score ____________/ 40**

**Teacher’s Comment.**

Teachers Signature _____________________________
Identifying elements of the standards in VELS and using assessment criteria to make more accurate judgements as to whether students are progressing towards the standard, at the standard or beyond the standard.

“Kids Healthy Eating and Obesity Management Campaign”

**ASSESSMENT TASK RUBRIC**

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Element of the Standard</th>
<th>Assessment criteria</th>
<th>Progressing towards the Standard</th>
<th>At the Standard</th>
<th>Progressing beyond the Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaign product eg pamphlet, media interview.</td>
<td>Identify and describe strategies that address current trends in nutritional status of Australians.</td>
<td>Ability to describe obesity as a health issue for young Australians. Ability to explain the causes and consequences of obesity. Ability to describe strategies to address obesity in young Australians.</td>
<td>Limited identification of obesity as a current health issue for young Australians. Some explanation of causes and consequences of obesity. Identification of strategies that address childhood/teenage obesity in Australia.</td>
<td>Clear identification of obesity as a current health issue for young Australians. Clear explanation of causes and consequences of obesity. Clear identification and description of a range of strategies that address childhood/teenage obesity in Australia.</td>
<td>Extensive use of statistical data to justify the importance of obesity as a major health concern for young Australians. Extensive explanation of causes and consequences of obesity including social and cultural factors that impact on obesity. Detailed knowledge of specific strategies that address childhood/teenage obesity in Australia.</td>
</tr>
<tr>
<td>Evaluation of community resources</td>
<td>Identify health services and products provided by government and non-government bodies and analyse how these can be used to support the health needs of young people.</td>
<td>Ability to identify health services and/or products provided by government and non-government bodies that can be used by young Australians to address obesity. Ability to analyse how these health services and/or products can be used by young Australians to address obesity.</td>
<td>Limited identification of health services and/or products that can be used by young Australians to address obesity. Some description of how health services and/or products can be used by young Australians to address obesity.</td>
<td>Clear identification of a range of health services and/or products provided by government and non-government bodies that can be used by young Australians to address obesity. Evaluation of how three health services and/or products can be used by young Australians to address obesity.</td>
<td>Detailed identification of a wide range of health services and/or products provided by government and non-government bodies that can be used by young Australians to address obesity. Detailed evaluation of a range of health services and/or products that can be used by young Australians to address obesity.</td>
</tr>
</tbody>
</table>
**TOPIC/ RECIPE:** “Kids Healthy Eating Campaign” - Canteen Lunch

**Teacher Name:** Ms. Stubbs

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design &amp; Creativity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to the design brief shows uniqueness and a very creative approach.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to the design brief shows a good creative approach and response to the design brief.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to the design brief shows an acceptable creative approach but is somewhat limited.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to the design brief shows a very limited creative approach to the design brief.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Healthy Design Approach</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to the design brief shows a very healthy product/s that is very low in fat and very high in nutrients such as complex carbohydrates, protein, vitamins and minerals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to the design brief shows a healthy product/s that is mostly low in fat and high in nutrients such as complex carbohydrates, protein, vitamins and minerals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to the design brief shows an acceptable approach and the product/s is somewhat healthy but limited.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Response to the design brief shows a very limited and unhealthy approach to the design brief. Product/s is high in fat and low in nutrients such as complex carbohydrates, protein, vitamins and minerals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kitchen and Time-management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always uses time well throughout the practical tasks to ensure things get done on time. Work area is very orderly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usually uses time well throughout the practical tasks and completes task within set timeframe. Work area is orderly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tends to procrastinate, but usually gets things done within the set timeframe. Work area is relatively orderly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rarely gets things done within the set timeframe and has inadequate time management. Work area is not very orderly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Safety and Hygiene</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent safety and hygiene rules consistently applied.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good safety and hygiene rules mostly applied.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acceptable safety and hygiene rules usually applied.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety and hygiene rules not consistently applied.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sensory Properties of food (appearance/taste/aroma/texture)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final product displays excellent sensory characteristics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final product displays very high sensory characteristics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final product displays mostly good sensory characteristics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final product displays some acceptable sensory characteristics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Teacher/ Student Comment:**

_______________________________________________________________________________

_______________________________________________________________________________

_______________________________________________________________________________

_______________________________________________________________________________

_______________________________________________________________________________

ASSESSMENT: /20 marks
ACTIVITY 2: PIE DESIGN ACTIVITY
Covers key knowledge and skills incl. product development/ marketing/ food labelling/ design & creativity/ evaluation etc.

CONVENIENCE FOODS VS HOME MADE -

PIE PRODUCTION ACTIVITY

SCENARIO:
A Pie Company wants to extend their range of pies. You will be required to survey a wide sample of people to determine the size, flavour and the price that will attract most customers. However the company wishes to maintain their general standard of excellence and possibly increase their share of the market. Consequently the pie will need to be appetising in terms of its filling and the crispness and flakiness of its pastry. It should also look appealing to encourage shoppers to purchase the pie. Potential customers will also expect that the pie will be easy to serve and hold together on the plate. You will also be asked to provide the packaging and promotional material that accompanies the actual product.

1. Use the Design Brief Proforma to develop your own design brief based on the scenario above.

2. Establish evaluation criteria for assessing the pie produced based on your design brief. Also include criteria that assesses your processes (incl. safety & hygiene) and use of equipment and resources.

3. Following classroom brainstorm session develop a survey to determine the preferences of purchasers in relation to the type of filling, size and cost. Conduct at least 4 surveys and draw conclusions based on your findings of potential consumers’ preferences.


5. Complete a concept map developing ideas for your pie. Refer to your design brief to make certain you are on track! Select your preferred option and justify why you have chosen this recipe. Refer back to your design brief and investigation research. Include a copy of recipe noting its source. Annotate recipe if making changes eg. quantity/ ingredients/ process.

6. Complete a production work plan as set out below. Include modifications made as you make changes to ingredients/ equipment/ process/ order of tasks etc.

<table>
<thead>
<tr>
<th>Time</th>
<th>Steps/Tasks</th>
<th>Ingredients</th>
<th>Tools/Equipment</th>
<th>Safety/Hygiene</th>
<th>Modifications &amp; why?</th>
</tr>
</thead>
</table>
7. Using your production work plan make your pie taking into consideration safety and hygiene requirements. Note any modifications to your plan in the right column.


10. Produce a package with appropriate labels or design and print off the labels. The labels or package should contain:
    - an appealing product name,
    - a description of the product,
    - ingredients,
    - storage
    - heating,
    - nutritional profile (use NIP- Nutrition Information Panel step 9)
    - presentation/visual appearance (accurate picture/view of product)

11. Produce a promotional brochure for advertising. This should encourage shoppers to buy and should contain illustrations to add to the interest and appeal. Use a digital camera to photograph your pie and use this image on both package and brochure.

12. Conduct a sensory sample test of 2 potential customers. Gather feedback on the appeal of your product (eg. taste/ texture/ appearance/ aroma)

13. Evaluate the pie you produced in class using the evaluation criteria developed in step 2 and refer to customer feedback in step 12.

14. Present work neatly and effectively in a display folder clearly labelled with name and form. Attach packaging.
SAMPLE PIE DESIGN/ RECIPE MAP & JUSTIFICATION

Toppings
- Flaky Pastry
- Decoration
  (draw/describe)

Style
- European
- Australian
- American
- Asian

Shape
- Round
- Oval
- Square
- Family
- Individual

Your Pie Design

Pastries
1. Shortcrust
2. Flaky
3. Filo
4. Commercial
5. Combination Sheets

Fillings
1. Savoury (list ingredient)
2. Sweet (list ingredients)

Justification (Why did you choose this design? Explain how it meets the needs of the customer.):

_______________________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________

Pie Production Workplan

<table>
<thead>
<tr>
<th>Time</th>
<th>Steps/Tasks</th>
<th>Ingredients</th>
<th>Tools/Equipment</th>
<th>Modifications &amp; why?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### PIE PRODUCTION TEACHER OBSERVATION SHEET

**Name/s:** ___________________________

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>VH</th>
<th>H</th>
<th>M</th>
<th>L</th>
<th>VL</th>
<th>N</th>
</tr>
</thead>
</table>
| 1. Kitchen Management-  
  ◆ Orderly workbench.  
  ◆ Complete task/s on time. | | | | | | |
| 2. Safety & Hygiene:  
  ◆ Personal appearance.  
  ◆ Safe food handling.  
  ◆ Workplace hygiene.  
  ◆ Safe use of equipment. | | | | | | |
| 3. Implementing work plan:  
  (evidence of adequate preparation) | | | | | | |
| 4. Degree of Complexity of processes. | | | | | | |
| 5. Technical Skill level:  
  ◆ Appropriate and safe use of tools and equipment. | | | | | | |

**Additional Teacher Comment:**

____________________________________________________________________________________________

____________________________________________________________________________________________

____________________________________________________________________________________________

____________________________________________________________________________________________
EXAMPLES OF STUDENT WORK
<table>
<thead>
<tr>
<th>Evidence</th>
<th>Element of the Standard</th>
<th>Assessment criteria</th>
<th>Progressing towards the Standard</th>
<th>At the Standard</th>
<th>Progressing beyond the Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Brief Proforma.</td>
<td>…students identify considerations and constraints within a design brief.</td>
<td>Ability to develop a design brief (including considerations and constraints) from a given scenario.</td>
<td>Limited identification of considerations/ constraints related to the given scenario.</td>
<td>Clear identification of considerations/ constraints related to the given scenario.</td>
<td>Extensive identification of considerations/ constraints related to the given scenario.</td>
</tr>
<tr>
<td>Survey. Internet research on pie recipes.</td>
<td>… undertake research relevant to the design brief. They locate and use relevant information to help their design thinking and identify the needs of a variety of client/user groups.</td>
<td>Ability to conduct relevant research and use it to inform design thinking.</td>
<td>Limited ability to conduct relevant research and use it to inform design thinking.</td>
<td>Conducts relevant research and use it to inform design thinking.</td>
<td>Conducts extensive relevant research and use it to inform design thinking.</td>
</tr>
<tr>
<td>Conclusions drawn from Survey. Concept map and Justification</td>
<td>… justify their preferred option, explaining how it provides a solution to the problem, need or opportunity.</td>
<td>Ability to justify their preferred option and explain how it provides a solution to the scenario.</td>
<td>Limited ability to justify the preferred option and explain how it provides a solution to the scenario.</td>
<td>Justifies the preferred option and explain how it provides a solution to the scenario.</td>
<td>Detailed justification of the preferred option and explanation of how it provides a solution to the scenario.</td>
</tr>
<tr>
<td>Evaluation criteria.</td>
<td>They identify a range of criteria for evaluating their products…</td>
<td>Ability to identify a range of criteria for evaluating the product.</td>
<td>Some criteria for evaluating the product listed.</td>
<td>Range of relevant criteria for evaluating the product relating to the design brief.</td>
<td>Highly relevant and probing criteria for evaluating the product relating to the design brief.</td>
</tr>
<tr>
<td>Production work plan.</td>
<td>Students plan a realistic and logical sequence of the production stages, incorporating time, cost and resources needed for production.</td>
<td>Ability to plan a realistic and logical sequence of the production stages, incorporating time, cost and resources needed for production.</td>
<td>A sequence of the production stages that incorporates most aspects of time, cost and resources needed for production.</td>
<td>A realistic and logical sequence of the production stages, incorporating time, cost and resources needed for production.</td>
<td>A highly detailed, realistic and logical sequence of the production stages, incorporating time, cost and resources needed for production.</td>
</tr>
<tr>
<td>Teacher observation sheet.</td>
<td>Ability to implement a range of production processes accurately, consistently, safely/hygienically and responsibly, and select and use personal protective clothing and equipment when necessary. They produce products… using complex tools, equipment, … materials/ingredients … with precision.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modifications in production work plan and responses to Evaluation criteria.</td>
<td>Ability to adapt methods of production when necessary and provide a sound explanation for deviation from the design proposal.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responses to Evaluation criteria.</td>
<td>Limited ability to adapt methods of production when necessary and provide a sound explanation for deviation from the design proposal.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responses to Evaluation criteria.</td>
<td>Students use evaluation criteria they have previously developed, and critically analyse processes, materials/ingredients, … and equipment used, and make appropriate suggestions for changes to these that would lead to an improved outcome.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to use previously developed evaluation criteria and critically analyse processes, materials/ingredients, … and equipment used, and make appropriate suggestions for changes to these that would lead to an improved outcome.</td>
<td>Limited ability to use previously developed evaluation criteria and make some judgements about processes, materials/ingredients, … and equipment used, and may make some appropriate suggestions for changes to these that would lead to an improved outcome.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>They relate their findings to the purpose for which the product … was designed ...</td>
<td>Limited ability to relate findings to the purpose for which the product … was designed ...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to relate findings to the purpose for which the product … was designed ...</td>
<td>Ability to relate findings to the purpose for which the product … was designed ...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well informed ability to relate findings to the purpose for which the product … was designed ...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Sometimes implements production processes accurately, consistently, safely/hygienically and responsibly, and selects and uses personal protective clothing and equipment when necessary but may need teacher guidance. Products produced…using standard tools, equipment, … materials/ingredients … with precision. |
| Usualy implements production processes accurately, consistently, safely/hygienically and responsibly, and selects and uses personal protective clothing and equipment when necessary with little or no teacher guidance. Products produced…using some complex tools, equipment, … materials/ingredients … |
| Always implements production processes accurately, consistently, safely/hygienically and responsibly, and selects and uses personal protective clothing and equipment when necessary without teacher guidance. Products produced…using complex tools, equipment, … materials/ingredients … |
TEACHER ASSESSMENT: CONVENIENCE FOODS - PIE PRODUCTION ACTIVITY

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Below Avg.</th>
<th>Satisfactory</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Effort, originality and sensory quality of the finished pie.</td>
<td>2, 3, 4</td>
<td>5, 6, 7</td>
<td>8, 9, 10</td>
</tr>
<tr>
<td>2. Relevance and effectiveness of work plan, recipe map and modifications.</td>
<td>2, 3, 4</td>
<td>5, 6, 7</td>
<td>8, 9, 10</td>
</tr>
<tr>
<td>3. Detail of final evaluation in relation to established criteria.</td>
<td>2, 3, 4</td>
<td>5, 6, 7</td>
<td>8, 9, 10</td>
</tr>
<tr>
<td>4. Creativity and detail in presentation of promotional brochure and package.</td>
<td>2, 3, 4</td>
<td>5, 6, 7</td>
<td>8, 9, 10</td>
</tr>
<tr>
<td>5. Submitted on time.</td>
<td>yes</td>
<td>no</td>
<td></td>
</tr>
</tbody>
</table>

Total Score: \( \frac{\text{Total Points}}{2} \)

Teacher's Comment:

_______________________________________________________________________________________________________________

_______________________________________________________________________________________________________________

Teacher's Signature:

_______________________________________________________________________________________________________________

Name: _____________________________

STUDENT SELF EVALUATION

CONVENIENCE FOODS – PIE PRODUCTION ACTIVITY (use ✓)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Below Avg.</th>
<th>Satisfactory</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Effort, originality and sensory quality of the finished pie.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Relevance and effectiveness of work plan, recipe map and modifications.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Detail of final evaluation in relation to established criteria.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Creativity and detail in presentation of promotional brochure and package.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Submitted on time.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Student's Comment:

_______________________________________________________________________________________________________________

_______________________________________________________________________________________________________________

Name: _____________________________
**Year 10 FOOD TECHNOLOGY**

**JAPANESE SUSHI SUSHI**

**DESIGN ACTIVITY**

**TASK**

- To design and create a Japanese Sushi or Sushi Roll that meets the clients’ specifications listed below.
- To create a design brief that encompasses the considerations/ constraints listed below.

**DESIGN BRIEF**


Specifications: (considerations and constraints)

- Completed within 100 minute time frame
- Must use cooked khoshikari sushi rice- microwave or absorption method
- Should use a range of filling ingredients such as- carrot/ cucumber/ avocado
- Must have a complimentary dipping sauce
- Must work in a team of two to design and produce
- Could be either Californian rolls- inside out/ hand rolls/ cones/ slice etc
- Must be attractively presented and garnished for service
- Client requires food that is high in sensory properties of taste, appearance, texture and aroma
- Must be healthy and low in fat and salt
- Affordable
- Must be prepared in a safe and hygienic environment with food safety considered
- Suitable as hand held finger food
- Package suitably for retail sale
- Provide nutrition information panel

Using the specifications above write a detailed **DESIGN BRIEF** that includes the information above and details about the client and the occasion.

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

**DESIGN TECHNOLOGY PROCESS**

- Investigate- research sushi recipes, complete a concept map to brainstorm ideas and collect pictures of sushi and make sketches of Japanese sushi ideas. Research recent media articles relating to adolescent/ childhood obesity.
- Design- 3 options and annotate clearly
- Produce- the product within the time frame, complete an order of work record.
- Evaluate- the finished product using previously established criteria developed from the design brief.
- Also- Create a set of evaluation questions for your client. Use your peers or parents to represent the client/s to evaluate your new Japanese sushi product. You may use a ranking system to evaluate sensory properties such as; stars/ smiley faces/ numbers 0-10 etc
**PREFERRED DESIGN OPTIONS**

(Draw and annotate 3 options, circle your preferred choice/s include a recipe and production time plan)

<table>
<thead>
<tr>
<th></th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CONCERNS RE- DELIVERY OF DESIGN TECHNOLOGY UNITS

- Organisational issues- teacher & students ideally must plan design activities in advance.
- Resource requirements/ costing- need to work within your budget, students bring in specialty ingredients and place food orders in advance. The kitchen assistant is often needed to ‘fetch’ ingredients.
- Hectic practical lessons full of surprises and sometimes mistakes! Can be stressful for teacher but very rewarding for students.
- Assessment more detailed but is relevant and meaningful, requires greater observation.
- Some teachers resistant to change and prefer students to follow the same recipe with no modifications.
- Students make the wrong choices eg. re recipe and thing don’t always work out to plan but this is “learning by doing” and the technology process in action.

Recommend these sites:

- www.recipezaar.com.au
- www.taste.com.au
- www.cuisine.com.au
- www.sanitarium.com.au
- www.sbs/food
RESOURCES/IDEAS

- Food festivals/ Hospitality & Fine Food Festivals etc at Exhibition buildings. (great ideas and freebies)

- Television- Masterchef (great website), My Kitchen Rules, Surprise chef/ Iron Chef/ Heston’s feasts/ Food Safari (excellent video series).

- Internet/ Food Magazines such as Good Taste and Nutrition Panel Calculator (just google this)

- Local EHO (free food safety talks)

- Local Supermarket (shopping exercise for meal planning activities) and local businesses eg Sushi Sushi (Japanese sushi design activity).
MORE ON ASSESSMENT RUBRICS?

Include students in the creation of rubrics that you and they can use to assess their work!

www.rubistar.com

Create a rubric with your partner to assess your product and process!

**PRACTICAL PRODUCTION ASSESSMENT RUBRIC**

**TOPIC/ RECIPE:** ________________________________

Teacher Name: **Ms. Stubbs**

Student Name: ________________________________ Form:________

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>eg. Design &amp; Creativity</td>
<td>Response to the design brief shows uniqueness and a very creative approach.</td>
<td>Response to the design brief shows a very good creative approach and response to the design brief.</td>
<td>Response to the design brief shows a good creative approach and response to the design brief.</td>
<td>Response to the design brief shows an acceptable creative approach but is somewhat limited.</td>
</tr>
<tr>
<td>Kitchen and Time-management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety and Hygiene</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensory Properties of food (appearance/taste/aroma/texture)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Getting your head around Design briefs and evaluation criteria? Get your students to try deconstructing!

**DECONSTRUCTING A DESIGN BRIEF TASK**

**EXTENSION ACTIVITY**

“A friend is launching their new café which is opening in 6 weeks in Warrandyte. It will attract many tourists daily for breakfast and lunches and be particularly busy on weekends. You have offered to help out and have been asked to design and create a menu item suitable for either breakfast or lunch. It must include local and seasonal produce from the Yarra Valley region and be visually appealing and offer a variety of flavours and textures. The menu item should be affordable for clients and able to be prepared safely & hygienically in the kitchen available using the equipment provided.”

<table>
<thead>
<tr>
<th>DESIGN SITUATION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give a brief outline of the design problem, situation, need or opportunity in two or three sentences.</td>
</tr>
<tr>
<td>____________________________________________________________________________________________</td>
</tr>
</tbody>
</table>

Now, provide more detail about each aspect of the problem, situation, need or opportunity.

<table>
<thead>
<tr>
<th>WHO?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the user/s or clients for this design brief.</td>
</tr>
<tr>
<td>____________________________________________________________________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHAT FOR?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain the purpose of the product- What is its use? Or What is the function?</td>
</tr>
<tr>
<td>____________________________________________________________________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WHY?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain why the user/s or client should find the product useful or suitable?</td>
</tr>
<tr>
<td>____________________________________________________________________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOW?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain how the products are likely to be used.</td>
</tr>
<tr>
<td>____________________________________________________________________________________________</td>
</tr>
</tbody>
</table>
WHEN?
Describe when the products are likely to be used.
____________________________________________________

WHERE?
Describe where the user or client is likely to need, want or access the products.
____________________________________________________

CONSIDERATIONS/ CONSTRAINTS?
Identify the considerations or constraints that relate to this design brief and consider any other important information that will be needed to complete the task.
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

EVALUATION CRITERIA:

Having extracted the specifications (considerations & constraints) as well as identifying other important factors within the design brief above, create a list of criteria for evaluation that can be used to assess the product/s to be completed and processes followed.
Eg. How does the menu created use local and seasonal ingredients in a creative manner to appeal to the restaurant customers?
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________