Technology and Living School-based Assessment Food Science and Technology strand

Guidelines on project for Food Culture

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Food Science and Technology

(Updated on October 2024)

Project	Suggested maximum no. of	Suggested lesson time (based on 40 mins /	Mark	Total Mark
	pages (A4 size)	lesson)		
- Proposal				
(i) Scope of Study	0.5	1 double lesson	10	
(ii) Project Outline	0.5	1 single lesson		
(iii) Research	4	1 double lesson		
(iv) Specification for study items	1	1 single lesson		
(v) Ideas for study items (5 - 7)	4	1 double lesson	10	40
(vi) Developing Own Ideas (2 - 3)	6	1 - 2 double lessons +		
(vi) Developing Own Ideas (2 - 3)	O	1 single lesson		
- Realisation and Evaluation				
(vii) Production of study item (1)	3	1 double lesson	15	
(viii) Overall evaluation	1	1 single lesson		
Communication and presentation		<u></u>	5	
	Total: < 20 nages	Total: about 14 - 16		

Total: ≤ 20 pages single lessons

(i) Scope of Study (max.: 0.5 page)

The Scope of Study may be given to a student by the teacher or a student may decide his/her own Scope of Study. The Scope of Study must involve study / investigation in the area of either Food Culture or Food Science and Technology.

(ii) Project Outline (max.: 0.5 page)

Once the Scope of Study is decided, a student is expected to write a clear and concise Project Outline to guide his/her research in addressing the following information:

- is your research in the area of Food Culture or Food Science and Technology?
- what are you researching in the said area?
- what are you hoping / expecting to find out or discover?
- why are you researching it?
- how are you going to research this?

(iii) Research (max.: 4 pages)

To gather information from a wide range of appropriate sources that helps you explore the area of study e.g.

- internet search
- books, newspaper, magazines, leaflets
- survey (shop survey or consumer questionnaire)
- analysis on study item / recipe / dish
- visits to manufacturers (e.g. internet, videos or CD-ROM), restaurants, supermarkets, snack bars, street stalls, canteen etc...

(iv) Specification for study items (max.: 1 page)

Specification for study items should include criteria / aspects of consideration that guide thoughts on developing study items regarding the scope of the study

(v) Ideas for study items (max.: 4 pages)

Brainstorming of ideas for study items, illustrated by idea sketches or photos

(vi) Developing Ideas (max.: 6 pages)

- Developing ideas that illustrate the specification of the study items
- Sensory evaluation / Sensory analysis (tasting)
- Evaluation

(vii) Production of study items (max.: 3 pages)

- Making ONE best / most suitable solution
- Production flowchart (including HACCP) / time schedule / equipment / ingredients
- Sensory evaluation / Sensory analysis (tasting)
- Testing of the study item against the specification
- Evaluation

(viii) Overall evaluation (max.: 1 page)

- Product evaluation
- Process evaluation
- Suggestions for modifications

Sample scope of study provided by teacher and Sample project outline developed by student, with guidance from teacher

Sample 1

Scope of Study (Food Culture)

In-depth study of a particular food culture / cuisine

Project Outline

Investigate the wedding feast menus that showcase the essence of a particular food culture / cuisine and how they can be innovatively modified

Sample 2

Scope of Study (Food Science and Technology)

The study of how a food preparation / cooking method affect the eventual flavour and texture of food ingredients

Project Outline

Investigate how to bring Molecular Gastronomy into home cooking and how it affects the eventual flavour and texture of food ingredients

a . 1	
Suggested	template/layout

Research: Information Search

Information 1
Source: e.g. Internet, books, magazinesetc.
Information 2

Research: Analysis on study item / recipe / dish

Name of Item	Item A	Item B	Item C
	Photo of Item	Photo of Item	Photo of Item
Cost / Retail	L		
price			
Appearance			
Texture			
Flavour/aroma			
Nutritional			
information			
Packaging			
How does the item suit the project outline?			

Specification for study items

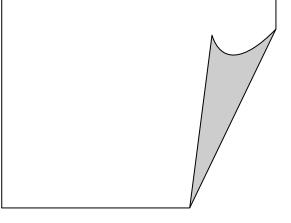
Example 1:

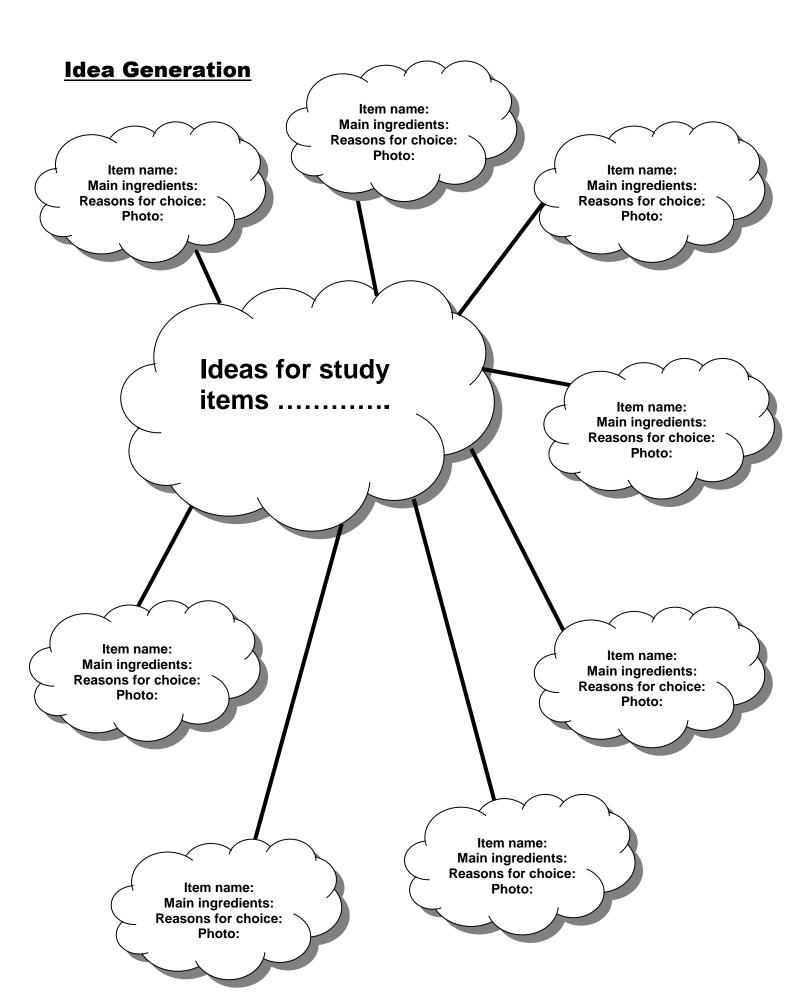


- the feast menu should showcase the essence Chinese culture / cuisine
- the feast menu should promote a celebration atmosphere
- the feast menu should be modified innovatively in at least one of the following areas:
 - o meal presentation
 - o choice of ingredients
 - food garnishes
 - decoration
- the chosen ingredients should carry symbolic meaning for the occasion (e.g. ingredients that symbolizes vow of love for a wedding banquet)
- the chosen (main) ingredients should be inexpensive yet environmentally friendly / of sustainable supply

Example 2:

- the making of the home party dessert must involve the technique of molecular gastronomy
- the eventual flavour and/or texture of at least one food ingredient is altered using the technique of molecular gastronomy
- the choice of technology of molecular gastronomy should aim at using common household cooking equipment for its application, with the least need of installing costly cooking equipment





Developing Idea (1)

Item / Dish Name:	
Ingredients / quantities / equipment / method / time plan	
	Photo of the item / dish
	Sensory evaluation results

Nutritional Information Costing (per item / dish / portion)		Evaluation of the item / problems encountered / suggestions for modifications
Specification point	Idea 1 [√/ ベ/ ×]	

uggested	template	/lavout

Developing Idea (2)

Item / Dish Name: _____ Ingredients / quantities / equipment / method / time plan Photo of the item / dish Sensory evaluation results

Nutritional Information Costing (per item / dish / portion)		Evaluation of the item / problems encountered / suggestions for modifications
Specification point	Idea 2 [√/ ×/ ×]	

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Developing Idea (3)

Item / Dish Name:	
Ingredients / quantities / equipment / method / time plan	
	Photo of the item / dish
	Songery evaluation regults
	Sensory evaluation results

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Suggested	template/layout	

Production of the study item (ONE best / most suitable solution)

Item / Dish Name:
Photo of the item / dish
Photos showing the production of the item / dish

Ingredients / quantities / equipment / production flowchart (including HACCP)	Nutritional Information	
	Costing (pe	r item / dish / portion)
	Cooming (po	ntonin dionin portioni
	Specification point	Does the study item meet the specification? [\(\formall' \times / \times \)]

Sensory evaluation results				
Solicoly Staladion results				
Evaluation of the item or dish / problems encountered / suggestions for modifications				
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SENSORY DESCRIPTORS (Tasting words)

We use our senses to evaluate what we eat, so sensory descriptors are words for describing the appearance, taste and texture of food.

The following word bank gives examples of words used for food tastings. The list is not exhaustive, add your own words to the list. Some words fit under more than one heading.

SENSORY DESCRIPTORS					
Appearance (Looks) – colour, aesthetics	Texture (Mouthfeel) – how food and drink feels in your mouth		Taste, flavour and smell		
Appetising	Airy	Lumpy	Acid		
Attractive	Brittle	Mushy	Bitter		
Boring	Chewy	Powdery	Bland		
Bright	Cold	Rubbery	Burnt		
Clear	Crispy	Slimy	Creamy		
Cold	Crumbly	Smooth	Dry		
Colourful	Crunchy	Soft	Fatty		
Crumbly	Dry	Soggy	Fishy		
Dry	Fine	Springy	Fruity		
Dull	Firm	Sticky	Herby		
Fattening	Fizzy	Stiff	Old		
Fresh	Flaky	Stringy	Peppery		
Fruity	Foamy	Tender	Salty		
Glowing	Greasy	Thick	Sharp		
Greasy	Gritty	Thin	Sickly		
Healthy	Hard	Tough	Smoky		
Hot	Hot	Watery	Soggy		
Moist	Juicy	Warm	Sour		
Mouth-watering			Spicy		
Smooth			Stale		
Soggy			Sweet		
Tasty			Watery		
			Wet		
			Tasteless		
			Tasty		
			Undercooked		