East Hills Girls Technology High: Unit of work Technology (Mandatory) Year 8

Title: Food on the Net	Unit Length: 20 weeks	Cohort: Year 8
Area of study	**Design specification**	**Technologies**
Information and communications	Promotional Design	Media Technologies Food Technologies

Unit description	
Using Media Technologies, students design, create and publish a recipe web site on the school intranet to promote healthy eating to teenagers. As part of the research for the design project, students will undertake a series of food technology tasks to generate images and recipes for their recipe web site. Media technologies will be used to capture images of the completed healthy foods and these will be downloaded into the designed web page. Students will create the web site using *Microsoft FrontPage* or *Publisher*. The web pages will be published onto the schools intranet site for viewing by other students. Additionally, the recipe web site will be transferred to CD-ROM for the students to take home. Students will record design processes in a design folio which will be used to monitor and record progress throughout the design project.	

Design project: Design, produce and evaluate a web site that promotes healthy eating for teenagers and features healthy recipes. Publish the recipe book on the schools intranet site for other students to view.	Assessment will be based on aspects of the following syllabus outcomes:4.1.1; 4.2.2; 4.3.1; 4.4.1; and 4.6.1
Book resources	**Multimedia and web sites**
Rochford, J. *Technology for Years 7 and 8: A Student's Workbook.* Hawker Brownlow Education, *Computer Activities Through the Year.* Wizard Books, *The Computer Classroom: The Internet. A Handbook for Students.* Carrucan, Crewe, Matthews, Matthews *The Internet Manual for students: Building a Website.* Worsley, T. *Word for PC.* Heinemann Step by Step Powers, G.W. *Computing Studies* Wilson, C. *Exploring computing Studies* Fawcett, L. *Food Technology Issues*, Waddell. *Lets Look at Food.* Hledik, S. *Home Economics: A Workbook.* Ridgwell, *Skills in Home Economics: Food.* Heath, MacKenzie, Tully. *Food by Design Book One.* Australian meat and Live Stock Corporation *Food for Life*	Videos 1. *Australian Guide to Healthy Eating* 2. *A stylist Approach* Web sites Australia's leading job search and career web site www.seek.com.au Mycareer: For jobs, careers and employment within Australia- find the job you're made for. www.mycareer.com.au Food stock photography at FoodPix: The all- food stock picture agency www.foodpix.com Food styling by Jacqueline Buckner www.food4film.com Jamie Oliver www.jamieoliver.com BBC Food www.bbc.co.uk/food Backyard>>Recipes www.abc.net.au/backyard/recipes/ Woolworths: List of recipe types www.woolworths.com.au/recipes

Teaching and Learning Sequence

Week	Design process sequence for design project Reflects the design process stages students work through in design project	Explicit teaching to support the design project Strategies used by the teacher to ensure students are capable of being assessed on the outcome	Outcomes	Evidence of learning (As per outcomes and content section)
1–2	Review design process sequence Analysing needs, problems and opportunities	• Cut and paste revision activity on the stages of the design process. Class: • discuss overhead transparency of the design brief. Students: • record the design brief into work folder. • analyse the design brief. The class divide into small groups and generate 6 questions to help analyse the design brief. The group joins with another small group to share responses and make a new super 6 list of questions which are shared and discussed with the class. Record analysis questions in design folio. • find answers for the Super 6 questions determined by the group for homework. • in groups of two or three create a mind map on an overhead transparency outlining media materials, tools and techniques needed to achieve a quality solution for *Food on the Net*. Students to share findings with the class. Students: • revise school log-in procedures. Students then create a folder for storage of information *Food on the Net* in their own directory. The folder will have the following subfolders created: 1) photos 2) recipes 3) research 4) folio and 5) web design. • review word processing skills. Copy the design brief and analysis from work folder into a Word document. The document must include borders, font changes, inserted clipart, spell check and Word Art. Refer to *Word* help menu and manuals for assistance. • save document in personal folio folders. • print document for inclusion in design folio.	4.1.1	Oral presentation of mind maps identifying tools, materials and techniques used to publish food on the net. Hard copy placed in the research section of the design folio. Folders created in the individual student's directory on the school computer system demonstrating competent use of computer technology.

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2	Establishing criteria for success	Class: • discuss factors influencing design projects. Students: • research using dictionaries and library resources to create a glossary of factors affecting design. Students discuss definitions and their influence on design solutions with the class. • in small groups identify three criteria that can be used to measure the success of our design project. Each group shares ideas with the class to determine a more comprehensive list.	4.1.2	Group established criteria is included in design folio and will be used to evaluate final quality solution

3	Research media technologies tools, materials and techniques.	Students:
		 • divided into four groups. Each group is provided with stimulus material and a set of focus questions. The group must research allocated questions and present findings to the class. A written summary of group findings will be provided to the teacher for reproduction and distribution to the other class members. Place a copy in the design folio.
		    – group 1 research terms used in Media technologies using *Exploring Computing Studies*, p. 120–123.
		    – group 2 storage devices and drives.
		    – group 3 input and output devices including digital cameras, videos and scanners.
		    – group 4 range of media used (video, animation and audio).
		    – group 5 types of software suitable for producing a quality design solution. Software may include: *Paint, Word, PowerPoint, Draw, FrontPage* and *Publisher.*
			4.1.1
			 4.2.2
			 4.3.1
			 4.3.2	

4–5	Research food technologies, tools, materials and techniques.	Students: • prepare a diagram of the food lab, identifying where equipment and utensils are stored. Class: • discuss safety in the food labs. Students: • identify food lab hazards in a variety of scenarios. • in groups create a poster outlining safety rules for the food lab. An oral presentation of group poster is to be given to the class. Posters will be displayed in the classroom. A copy is to be placed in the design folio.	4.3.1 4.3.2	Students are able to locate and use appropriate tools, materials and techniques during practical experiences.

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		Teacher demonstrates: • the safe use of food lab tools and equipment including stove, cook top, knives etc. • measuring tools (scales, measuring spoons, cups and jugs). Students: • complete barrier game matching equipment with its purpose. • undertake safety test to demonstrate the safe use of stove, cook top and knives. Competency test results recorded. • complete a series of measurement activities.		Competently completes safety test. Students correctly measure ingredients and use equipment safely during practical experiences.
		Class: • discuss hygiene in the food lab (personal and environmental). Students: • identify hygiene risks in a number of scenarios. • identify facilities and processes available in the food lab to reduce the risk of food contamination (wash basins, cleaning routines, bins etc.)		Identifies personal and environmental hygiene risks in the food lab.
6–7	Research good nutrition and healthy lifestyles for teenagers	Students: • brainstorm, "What is healthy food?" and write answers on the whiteboard. Class: • discuss the concepts of good nutrition and healthy lifestyles. Students: • compare three models for healthy eating and determine the major nutrients, food properties and message promoted (models could include 12345+, diet pyramid, five food groups, target on healthy eating) • determine a healthy eating model for teenage girls at this school. Place in design folio. • watch video *Australian Guide to Healthy Eating* and generate a video report. Students: • in small groups investigate a range of recipes and comment on the ease of understanding in each style. • brainstorm a list of features common to easy to read recipes. Link to procedural style texts. • rewrite a difficult recipe into a procedural text format. • modify a recipe so that it is *healthier* for teenagers and written in an easy to read style.	4.1.1 4.2.2 4.3.1 4.3.2 4.5.2	Develops a healthy eating plan for teenage girls at EHGTH included in design folio.

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		• examine the chapters of recipe books and decide with partner which chapters they will have for their web site. Students: • prepare *Cheese and chive damper* using food technology tools, materials and techniques safely. • to photograph food task with teacher guidance using a digital camera.		
8–9	Research career opportunities using both food and media technologies	Students: • brainstorm the type of work opportunities that exist for people involved in both food and media technologies. • search the Internet and newspapers on career opportunities for food stylists, food photographers, web designers for food sites etc and place in design folio. Students: • analyse food photography pictures on the web. • prepare notes on food photography skills and techniques (background items, lighting, angles used, and food stylist *tricks*). • analyse a set of images in a display folder to comment on the features of the captured images. Complete analysis work page. • draw a food stylist sketch for homework of the food task to be undertaken this week, demonstrating how you would like your food task to be photographed. Place in design folio. • complete a worksheet on the manipulation/ storage and retrieval of photos. Refer *Food and Technology issues,* p. 242 – 248. • download *Cheese and chive damper* photos taken last cycle into photos folder. Teacher • demonstrates the use of the digital camera for food photography. Students: • prepare *San choy bow* using food technology tools, materials and techniques safely (skills: shallow frying, measuring and cutting). • photograph food task using a digital camera. • complete worksheet on shallow and dry frying.	4.1.1 4.1.3 4.2.2 4.3.1 4.3.2 4.5.2	Research outlining the career opportunities in the area of Information and Communications is included in design folio. Appropriate photo plan sketches for food photography included in design folio. Competently photographs food for publication to the web site.
10–11	Research food styling	Students: • review video *A Stylist Approach* (video is about skills of food styling). • download images from food task last cycle (*San choy bow*) into student directory.	4.1.1 4.1.3 4.2.2 4.3.1 4.3.2	

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		• create a mind map of the variety of ways of combining dry ingredients to make baked products such as cakes, muffins, scones, slices, biscuits etc. Answers would include creaming, melt and mix and rub in techniques. • prepare notes on muffins and techniques used for muffin making. • complete recipe manipulation activity using *Food by Design*, p. 34–35. • design a variety of muffins using other ingredients. • draw a food stylist sketch of the food task to be undertaken this week demonstrating how you would like your food task to be photographed. (Homework activity). Place in design folio. • prepare Ham and corn muffins using tools, materials and techniques safely (skills: use of oven, dry ingredient handling and measuring skills) • photograph food task with digital camera and download into student directory.	4.5.2	
		Students: • use *The computer classroom: The Internet: Handbook for students* and complete activities 1–4, 6, 8, 9, 17, 18, 21, 24. Content covered in these tasks includes: what is the Internet? applications, emails, web browsers, ISPs, web addresses and URLs, using search engines, using favourites and bookmarks etc.		
12–13	Research innovative and emerging technologies	Class: • discuss the effect of innovative and emerging media and food technologies on society and the environment. • compile a list of recent technologies for each area of study. Students: • review case studies and articles collected from newspapers and answer questions related to the articles. These case studies will assist students to analyse the impact of ICT, food and media technologies on the society and environment. • draw a food stylist sketch of the food task to be undertaken this week demonstrating how you would like your food task to be photographed.(homework activity) • prepare *Healthy hamburgers and potato wedges* using tools, materials and techniques safely (skills- oven use, grill use, cutting	4.1.1 4.1.3 4.2.2 4.3.1 4.3.2 4.4.1 4.5.2	Results of case study analysis which outlines the impact of ICT, food and media technologies on the society and its environment included in design folio.

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		and measuring). • photograph food task with digital camera and download into student directory. • analyse selected Internet web sites. The sites are to be evaluated using a set criteria including: use of colour, graphics, text styles, page organisation, web links, ease of use. Findings are to be recorded in design folio. Class: • brainstorm, "what is a good web site?" and develop a list of features that should be included on their web site, e.g. no. of recipes, photo requirements, demonstrated word processing skills, links, word art and graphics).		Results of web site analysis applied to the development of the web site for the healthy eating recipe, shown in the storyboard and final design solution.
14–15	Create and develop ideas 1. Generating creative ideas 2. Communicating ideas 3. Experimenting and testing ideas	Class: • discuss the use of *story boarding* as a planning tool for design. Students: • complete a worksheet on how to plan and construct a simple web design. Reference book: *Building a web site*. • in design teams create a storyboard sketch to represent their web site. Teams swap storyboards and generate a peer evaluation feedback in the form of a Plus, Minus and Interesting (PMI). Discuss feedback with class and record resulting decisions. • Refine storyboard to incorporate the results of group discussion. Teacher: • Demonstrates how to use *FrontPage.* Students: • progress through a series of activities in *FrontPage* from the Microsoft web site. http://www.microsoft.com/education/default.asp?id=frontpage2ktutorial • visit specific web sites to observe special graphics manipulation techniques such as cropping, tweening and morphing. • are given basic recipe for *Microwaved stuffed potato* and need to plan a variation to the basic recipe for homework. The plan must include a list of ingredients and equipment, and a food stylist sketch.	4.1.1 4.1.3 4.2.1 4.2.2 4.3.1 4.5.2 4.6.1	PMI peer evaluation of web sites included in design folio.

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16–17		Students: • word process recipe variation and save in student directory. • in design team generate a trial recipe page for the web site (including word processing techniques, layout ideas, downloaded picture and recipe), save and print ideas. • compare ideas with class and record evaluation comments. Place in design folio.	4.1.1 4.1.3 4.2.1 4.2.2 4.3.1 4.3.2	Evaluation comments recorded in design folio with the trial recipe pages.

	Project management
	  1. Risk management
	  2. Managing resources
		• prepare their variation for *Microwaved stuffed potato* using tools, materials and techniques safely (skills: cutting, use of microwave oven and measuring). Additional ingredients needed are to be organised by each group.
		• photograph food task with digital camera and download into student directory.
		Class:
		• discuss remaining project time lines and design team set targets for project progress.
		• brainstorm resources available for the design project.
		Students:
		• complete reflection page of the ethical issues to be considered when producing published works, e.g. plagiarism, ICT passwords, file security, network access, sharing of resources.
		• create a mind map of the design projects social, ethical, environmental and sustainability considerations. Place in design folio.
			4.5.1
			4.5.2
			4.6.1
			4.6.2
				Project time line produced and included in design folio.

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18-20	Producing design solutions	Students: • in design teams generate we site using *FrontPage*. The group must: – create a home page – create recipe pages – download captured food images into recipe pages – manipulate images with cropping etc to suit recipe page – use graphics and word art – link the pages – save the recipe web site into relevant student directories and load onto the school intranet site.	4.1.1 4.1.3 4.2.1 4.2.2 4.3.1 4.3.2 4.5.1 4.5.2 4.6.1	Web site completed, saved and loaded onto the school intranet site.
	Evaluating ideas and solutions	Students: • compare their design solution with the criteria developed in the design brief. Record their observations. • complete a variety of evaluation activities. • provide verbal feedback to other design teams in the form of peer assessment when recipe web sites are viewed on the school intranet. • folio work is submitted to the teacher for assessment.		Evaluation activities are to be included in design folio. Design folio shows application of a design process to produce a quality solution.