

Home Economics Education

(Part 4 of 4)

Level 4 to Beyond Level 6

Note: The PDF version of this document has been split into sections for easier download. This file is Part 4 of 4.

Elaborations

Elaborations are designed to help teachers understand the intent of the central learning outcomes. They provide examples of possible content and contexts for developing and demonstrating the learning outcomes.

Home Economics Practice		
<p>HP 4.1 Students use empowerment practice to take action on matters of personal and societal significance in home economics contexts.*</p>	<p>HP 5.1 Students analyse the relationships between home economics concepts when using empowerment practice to take action on matters of personal and societal significance in home economics contexts.*</p>	<p>HP 6.1 Students explore the interplay of home economics concepts and competing influences when using empowerment practice to take action on matters of personal and societal significance in home economics contexts.*</p>
<p>Students know:</p> <ul style="list-style-type: none"> • empowerment practice <ul style="list-style-type: none"> – potential outcomes e.g. create positive change, improve wellbeing • actions of personal and societal significance e.g. improve their diet, marketing strategies aimed at children, child obesity <p>Students:</p> <ul style="list-style-type: none"> • use empowerment practice <ul style="list-style-type: none"> – set goals – identify barriers and enablers – plan to achieve goals – take action to achieve goals – reflect on actions – work collaboratively – collect, analyse and evaluate information • take action e.g. improve their diet or the variety and quality of food available in the tuckshop 	<p>Students know:</p> <ul style="list-style-type: none"> • home economics concepts <ul style="list-style-type: none"> – sources of information related to home economics concepts e.g. personal beliefs and values, survey data, statistics, texts, internet <p>Students:</p> <ul style="list-style-type: none"> • analyse relationships between concepts when using empowerment practice <ul style="list-style-type: none"> – identify the range of concepts relevant to the issues – use the concepts identified to inform actions in empowerment practice 	<p>Students know:</p> <ul style="list-style-type: none"> • competing influences <ul style="list-style-type: none"> – peer influences conflicting with traditional cultural values – personal and community values impacting on the importance given to different concepts – media-constructed images and scientific data <p>Students:</p> <ul style="list-style-type: none"> • explore the interplay of concepts and competing influences when using empowerment practice <ul style="list-style-type: none"> – analyse how one factor impacts on the choices and actions e.g. impact of media images on consumer choice – analyse how some factors exert greater influence than others e.g. desire to meet peer group approval overrides personal goals to consume healthy food – apply empowerment practice to facilitate change to personal and societal issues e.g. child obesity, unsafe sports uniforms, changes to marketing practices targeting ‘tweens’

* Home economics contexts — food and nutrition, human development and relationships, living environments and textiles.

Home Economics Practice		
<p>HP 4.2 Students explain how some actions and behaviours in home economics contexts* impact on different groups.</p>	<p>HP 5.2 Students use social inquiry practice to investigate societal issues in home economics contexts.*</p>	<p>HP 6.2 Students explore a range of influencing factors and positions when using social inquiry practice in home economics contexts.*</p>
<p>Students know:</p> <ul style="list-style-type: none"> • actions and behaviours that have an impact e.g. marketing companies offering free toys or collector's cards can encourage children to eat unhealthy foods and have a negative impact <p>Students:</p> <ul style="list-style-type: none"> • explain how actions and behaviours impact – identify actions and behaviours that impact on different groups – describe how these actions impact on the wellbeing of individuals and groups 	<p>Students know:</p> <ul style="list-style-type: none"> • social inquiry practice <ul style="list-style-type: none"> – a set of actions used to redress inequality and injustice • societal issues in home economics contexts <ul style="list-style-type: none"> – issues resulting from the actions and behaviours of individuals, groups, businesses, governments e.g. marketing practices by media, production of disposable clothing – issues identified by individuals and groups who then advocate for change – actions and behaviours with intended and unintended outcomes, impacts and consequences <p>Students:</p> <ul style="list-style-type: none"> • use social inquiry practice <ul style="list-style-type: none"> – discuss initial reactions to the practice e.g. 'tween' marketing – investigate the practice e.g. What is advertised? Who is the target group? What marketing strategies are being used? – consider ethical and justice perspectives related to the practice e.g. Are some people disadvantaged by the practice? How does the practice impact on manufacturer's profits? – determine if there is a valid concern about the practice – identify a range of people's or group's value positions on the practice e.g. manufacturer, advertising company, children, parents/carers – adopt and defend a value position e.g. marketing to children as if they are adolescents is unethical – develop and implement an action plan to redress an aspect of the issue or practice e.g. develop a report of findings for the school newsletter, identify alternative products that match children's developmental stage 	<p>Students know:</p> <ul style="list-style-type: none"> • influencing factors and positions <ul style="list-style-type: none"> – a range of factors influence the actions and behaviours of individuals, groups, businesses, governments e.g. profit motive, ethics and valuing wellbeing in the case of a clothing company using images of underweight models to market fashion lines in magazines <p>Students:</p> <ul style="list-style-type: none"> • explore a range of influencing factors and positions when using social inquiry practice <ul style="list-style-type: none"> – analyse data to identify key ideas related to a practice e.g. analyse teen magazine consumption, analyse the impact of images and advertising messages – use key ideas to inform the actions of social inquiry practice e.g. analyse representations of body images included in magazine images, analyse magazines that promote wellbeing

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Home Economics Practice		
HP 4.3 Students use technology practice (as described in the Level 4 core learning outcomes of the <i>Years 1 to 10 Technology Syllabus</i>) in home economics contexts.*	HP 5.3 Students use technology practice (as described in the Level 5 core learning outcomes of the <i>Years 1 to 10 Technology Syllabus</i>) in home economics contexts.*	HP 6.3 Students use technology practice (as described in the Level 6 core learning outcomes of the <i>Years 1 to 10 Technology Syllabus</i>) in home economics contexts.*
The learning outcomes from the Technology Practice strand of the <i>Years 1 to 10 Technology Syllabus</i> are reproduced below. These are to be used as a set.		
Students use consultative methods to gather knowledge, ideas and data when researching alternatives within design challenges. (Tech TP 4.1)	Students analyse links between the knowledge, ideas and data gathered to meet design challenges and the design and development of new and improved products. (Tech TP 5.1)	Students formulate detailed plans for gathering knowledge, ideas and data and validate choices of information, sources and methods. (Tech TP 6.1)
<p>Students know:</p> <ul style="list-style-type: none"> • consultative methods e.g. interviews, surveys, discussions, focus groups, questionnaires, online community discussions, teleconferences, meetings, professional advice • alternatives within design challenges <ul style="list-style-type: none"> – ideas, options – advantages and disadvantages of particular ideas and options <p>Students:</p> <ul style="list-style-type: none"> • use consultative methods <ul style="list-style-type: none"> – gather information using various methods e.g. interview people who design similar products; survey people who will use the products; question people who can provide professional advice; discuss design options with others – use resources that specialists have developed to gather information e.g. internet, email or online communities, brochures, journals • research alternatives within design challenges <ul style="list-style-type: none"> – analyse and compare ideas and information gathered through consultation 	<p>Students know:</p> <ul style="list-style-type: none"> • links between information gathered and the design and development of products <ul style="list-style-type: none"> – knowledge, ideas and data inform development of products e.g. data about potential users – new materials, products, techniques e.g. Velcro instead of buttons or zips – ways of developing products to meet new or emerging needs • ways to analyse links between information gathered and the development of products <ul style="list-style-type: none"> – identify the knowledge, ideas and data that are reflected in the design and development of products, and those that are not reflected – consider how well the product design and development match the knowledge, ideas and data gathered e.g. conduct SWOT and PMI analyses <p>Students:</p> <ul style="list-style-type: none"> • analyse the links between information and the development of products <ul style="list-style-type: none"> – analyse how information about the users' needs influences the development of new products e.g. tuckshop food, recycled fashion, quick and easy meals – survey groups of people in a particular community to determine their needs and wants e.g. define a range of products that could be provided by the school's home economics section – consult with people who design products to discover how their knowledge of the needs of the community affects their design work 	<p>Students know:</p> <ul style="list-style-type: none"> • detailed plans for gathering knowledge, ideas and data <ul style="list-style-type: none"> – information from a range of sources enhances accuracy and reliability – detailed plans may identify possible sources of information, methods of collecting data and timelines for gathering information • ways to validate choices of information, sources and methods used to gather information <ul style="list-style-type: none"> – consult experts about the validity of information gathered and the methods used – investigate the reliability of the source e.g. Who has produced the data? What qualifications does the group hold? – cross-reference with information gathered from other sources <p>Students:</p> <ul style="list-style-type: none"> • formulate detailed plans for gathering knowledge, ideas and data <ul style="list-style-type: none"> – develop an action plan by identifying sources, collection methods, timelines e.g. a plan to source information from a visiting dietician when designing food packs for athletes • validate choices, sources and methods <ul style="list-style-type: none"> – evaluate the sources of data and the relevance to the design challenge – identify constraints that impact on the choice of sources and methods e.g. time, cost – provide evidence that the information is accurate, current and from a respected source

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Home Economics Practice		
<p>Students generate design ideas through consultation and communicate these in detailed design proposals. (Tech TP 4.2)</p>	<p>Students generate design ideas and communicate these in design proposals that indicate an understanding of factors influencing production of the option(s) they have selected. (Tech TP 5.2)</p>	<p>Students generate design ideas and communicate these in design proposals that indicate various options and incorporate management strategies. (Tech TP 6.2)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • strategies that lead to the generation of design ideas e.g. brainstorming, negotiations, discussions, gathering opinions about design proposals • detailed design proposals <ul style="list-style-type: none"> – communicate design ideas – provide background information about the design challenge, product purpose, intended users – show considerations of resources, timelines, product specifications, production procedures • ways to communicate design ideas e.g. annotated diagrams, written descriptions, models, prototypes, sketches, scale drawings <p>Students:</p> <ul style="list-style-type: none"> • generate design ideas through consultation <ul style="list-style-type: none"> – consult with others to develop and refine ideas e.g. with a student team, end-users or other experts – consult with the teacher or other students to discuss alternative design proposals – visit experts to discuss how they plan and design their projects • communicate design ideas in detailed design proposals <ul style="list-style-type: none"> – select and use appropriate ways to communicate the details of design proposals – use annotated sketches to communicate ideas for a product 	<p>Students know:</p> <ul style="list-style-type: none"> • factors influencing the production of selected options <ul style="list-style-type: none"> – human and physical resources e.g. knowledge, time, skills, equipment, technical expertise, availability of materials – considerations of appropriateness e.g. aesthetics, culture, environment, function, social impact – economic factors e.g. cost, sustainability <p>Students:</p> <ul style="list-style-type: none"> • generate and select design ideas <ul style="list-style-type: none"> – devise a range of options – analyse ideas and select the preferred options using strategies e.g. SWOT and PMI analyses – record consultations with clients/users to confirm that design ideas reflect needs and wants – identify impacts and consequences of different ideas – keep anecdotal records and notes of discussions – explain why a design idea was accepted or rejected • communicate design proposals <ul style="list-style-type: none"> – develop written proposals, oral presentations, diagrams, visual presentations, folios – develop sketches, flow charts, drawings, plans, procedures – describe the materials required, methods of production or implementation, sequence of action – use correct and suitable symbols, graphics and language for the intended audience 	<p>Students know:</p> <ul style="list-style-type: none"> • options within design proposals <ul style="list-style-type: none"> – resources – production techniques • management strategies <ul style="list-style-type: none"> – strategies to manage resources e.g. people, time, materials, equipment <p>Students:</p> <ul style="list-style-type: none"> • incorporate management strategies <ul style="list-style-type: none"> – plan to minimise waste – prepare budgets – develop workable timelines by consulting team members – observe and refine workplace procedures – minimise negative impacts of particular practices e.g. negative impacts on the environment – formulate checklists to ensure that the processes used are appropriate e.g. workplace health and safety

Home Economics Practice		
<p>Students identify and make use of the practical expertise of others when following production procedures to make products for specific users. (Tech TP 4.3)</p>	<p>Students meet predetermined standards as they follow production procedures to make quality products. (Tech TP 5.3)</p>	<p>Students negotiate and refine production procedures in making quality products that meet detailed specifications. (Tech TP 6.3)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • practical expertise of others <ul style="list-style-type: none"> – people with specialised knowledge or equipment – research techniques – documentation of the designs and processes of others • specific users <ul style="list-style-type: none"> – identified individuals or groups for whom the product will meet a need/desire – demographic description of a target group by features such as age, gender, occupation e.g. baby boomers, generation X/Y, housewives, professionals <p>Students:</p> <ul style="list-style-type: none"> • identify and make use of practical expertise of others <ul style="list-style-type: none"> – identify individuals and groups in the community with expertise – consult people with practical expertise – seek assistance from experts about procedures – observe experts at work – engage mentors for skill development – request feedback and advice • follow production procedures to make products for specific users <ul style="list-style-type: none"> – follow production procedures as detailed in the design proposals – integrate points for feedback from users – organise market research/test groups – meet product specifications as detailed in the design proposals 	<p>Students know:</p> <ul style="list-style-type: none"> • predetermined standards <ul style="list-style-type: none"> – design briefs or proposals – client specifications – government standards – industrial and commercial standards of quality and performance – desired effects e.g. aesthetic appeal, authenticity, features of trends/fashions <p>Students:</p> <ul style="list-style-type: none"> • follow production procedures <ul style="list-style-type: none"> – implement design and production steps – manage resources within constraints e.g. finances, equipment, time • make quality products that meet predetermined standards <ul style="list-style-type: none"> – identify the predetermined standards or client specifications e.g. functionality, authenticity – monitor procedures to reflect standards and modify procedures if required – create aesthetic appeal e.g. embellishments 	<p>Students know:</p> <ul style="list-style-type: none"> • reasons to negotiate and refine production procedures <ul style="list-style-type: none"> – minimise waste – enhance product quality – meet timelines and budget requirements – accommodate unforeseen circumstances • ways to negotiate and refine production procedures <ul style="list-style-type: none"> – team consultation and feedback – trials of production procedures – timelines for production – processes that streamline the production – production can be systematised by breaking it into stages – products may be modified to allow different or more simple methods of manufacture <p>Students:</p> <ul style="list-style-type: none"> • negotiate and refine production procedures <ul style="list-style-type: none"> – consult and negotiate with others to refine production procedures in progress – identify and implement alternative production procedures to solve problems as the plan is implemented e.g. cutting all materials before assembly or cutting as assembly proceeds • make quality products that meet detailed specifications <ul style="list-style-type: none"> – identify the specifications required in design proposals – implement production procedures to meet these specifications – achieve accuracy, quality

Home Economics Practice		
<p>Students gather feedback to gauge how well their design ideas and processes meet design challenges and how effectively products meet the needs of specific users. (Tech TP 4.4)</p>	<p>Students use predetermined criteria to judge how well processes and products meet the needs of specific users, and recommend modifications or improvements. (Tech TP 5.4)</p>	<p>Students identify methods for evaluating commercial or industrial products and processes and use these to judge the appropriateness of their own processes and products. (Tech TP 6.4)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • how to gather feedback e.g. simple surveys, interviews, product comparisons, people's reactions to a product, team members' critiques, self-reflection, observations • how to develop tools for gathering and interpreting feedback <ul style="list-style-type: none"> – open or closed questions – compilation and interpretation of data – collate data and identify key messages e.g. record data in tables, calculate percentages, graph data <p>Students:</p> <ul style="list-style-type: none"> • gather feedback about design ideas, processes or products <ul style="list-style-type: none"> – develop a list of criteria to measure the effectiveness of their design e.g. cost of production, quality of the product or enterprise, conditions of production, profitability, management of resources – gauge how well design ideas, processes and products meet design challenges – gauge how effectively products meet the needs of specific users – analyse if resources could have been better invested in a different enterprise – survey the rest of the class, or another class, about the success or otherwise of the enterprise or product – write a brief report comparing the final product or the outcome of the enterprise with the plan 	<p>Students know:</p> <ul style="list-style-type: none"> • how to use predetermined criteria to modify or improve processes and products <ul style="list-style-type: none"> – strengths and weaknesses of a process or product in relation to the criteria – recommendations for change on the basis of the criteria – similarities and differences between the design ideas and the final processes and products – determining how well users' needs are met <p>Students:</p> <ul style="list-style-type: none"> • use predetermined criteria <ul style="list-style-type: none"> – identify the criteria – use criteria established by the teacher or others – generate criteria to test their processes, products or services – devise criteria for the purpose of judging and improving documentation – devise criteria for improving production methods and product performance • judge how well the products or processes match the criteria <ul style="list-style-type: none"> – rate the product – describe strengths and weaknesses of processes – carry out product tests – conduct market research – consider a range of ways to evaluate their designs and recognise that the most appropriate design depends on the criteria used to develop the design • use judgments to make recommendations for changes <ul style="list-style-type: none"> – modify a part of a process that could be strengthened 	<p>Students know:</p> <ul style="list-style-type: none"> • methods for evaluating commercial or industrial products and processes <ul style="list-style-type: none"> – product tests and trials – interviews with users – market research e.g. telemarketing, surveys, focus groups – consultations with experts – independent evaluations <p>Students:</p> <ul style="list-style-type: none"> • identify methods for evaluating <ul style="list-style-type: none"> – select and use methods e.g. for reliability, feasibility – validate methods for evaluating their own products and processes • make judgments about the appropriateness of their own processes and products using data gathered <ul style="list-style-type: none"> – decide if the processes for conceptualising and making the products have achieved the goals – analyse the data collected during evaluations and draw conclusions about the success of the products – make judgments in devising evaluation criteria in relation to aesthetics, culture, economics, environment, ethics, function, society – ask advice from experts, parents/carers, teachers about documentation, production methods and product performance – compare their documentation, production methods or product performances to those of commercial companies – use their own criteria to evaluate commercial companies' documentation, production methods and product performance

Becoming Independent		
<p>BI 4.1 Students explain how factors, including challenges and inherited characteristics, influence physical, social and emotional growth and development. (HPE PD 4.3)</p>	<p>BI 5.1 Students predict how changes associated with significant transitions in their lives, including pubertal changes, may influence physical, social and emotional growth and development. (HPE PD 5.3)</p>	<p>BI 6.1 Students evaluate the influence of personal behaviours and social and physical environments on growth and development, and propose actions to enhance their own and others' growth and development. (HPE PD 6.3)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • physical, social and emotional growth and development <ul style="list-style-type: none"> – growth occurs throughout the lifespan in physical, social and emotional ways e.g. body shape and size, maturity, emotional control – growth occurs erratically • factors that influence growth and development <ul style="list-style-type: none"> – physical growth and development e.g. challenges in physical activity, exercise, nutrition, sleep, inherited characteristics – social growth and development e.g. social challenges, culture, family, friendships, school experiences, peer relationships – emotional growth and development e.g. intellectual and creative challenges, feelings of security, support networks, experiences of success, loss or grief <p>Students:</p> <ul style="list-style-type: none"> • explain how factors, including inherited characteristics, influence physical growth and development e.g. inherited genes, diet and physical activity influence height and body shape • explain how factors influence social growth and development e.g. prior experiences in social situations influence confidence in peer relations • explain how factors influence emotional growth and development e.g. early childhood experiences of sharing with others may affect a child's ability to work collaboratively with others 	<p>Students know:</p> <ul style="list-style-type: none"> • significant transitions in their lives e.g. puberty, changes in family structure, loss of a person close to them, changing schools • changes associated with significant transitions e.g. changes in responsibilities, expectations, social networks • influence of changes associated with significant transitions in physical, social and emotional growth and development e.g. physical changes in young adolescents owing to puberty may result in a lack of self-esteem <p>Students:</p> <ul style="list-style-type: none"> • predict the influence of changes associated with significant transitions on physical, social and emotional growth and development <ul style="list-style-type: none"> – identify how pubertal changes might influence growth and development e.g. the effect of hormonal changes on physical growth, social relationships with others and personal independence – identify how other transitions may influence the dimensions of growth and development e.g. change in family structure may cause a change in roles of children, moving to a new school may present emotional challenges including loss of friendships and establishing new peer relationships 	<p>Students know:</p> <ul style="list-style-type: none"> • personal behaviours e.g. risk taking, interpersonal, cooperative, competitive • influences on growth and development e.g. cooperative behaviours can build rapport with others and promote positive relationships, safe and supportive home environments promote social and emotional development • social and physical environments e.g. home, school, recreational, work, natural • actions that enhance growth and development of self and others e.g. emotional support to peers, seeking help from experts when required, involvement in clubs and sports, taking on new challenges <p>Students:</p> <ul style="list-style-type: none"> • evaluate the influence of personal behaviours and social and physical environments on all aspects of growth and development e.g. consider the impact of risk-taking behaviours at parties • propose actions to enhance their own and others' growth and development <ul style="list-style-type: none"> – learn communicative and assertive behaviours – set and articulate goals and plans to achieve goals – promote and encourage others to live a healthy lifestyle – start a club or interest group – volunteer for a local action group

Becoming Independent		
<p>BI 4.2 Students develop and implement strategies for optimising personal diet based on identified nutritional needs for growth, energy and health. (HPE PH 4.2)</p>	<p>BI 5.2 Students devise and implement for themselves and others health-promoting strategies which recognise the influence of a range of factors on personal dietary behaviours, now and in the future. (HPE PH 5.2)</p>	<p>BI 6.2 Students propose and implement strategies that support healthy eating behaviours in response to the impact of current trends in eating behaviours and planned diets. (HPE PH 6.2)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • strategies for personal diets <ul style="list-style-type: none"> – information from <i>Dietary Guidelines for Children and Adolescents in Australia</i> (see website of National Health and Medical Research Council) – information from <i>Australian Guide to Healthy Eating</i> (see website of Australian Department of Health and Aged Care) – requirements of each food group for growth, energy and health <p>Students:</p> <ul style="list-style-type: none"> • develop and implement strategies to improve their own diet e.g. identify what improvements are needed, prepare foods that match needs • strategies for optimising personal diet e.g. reduce intake of fat, sugar and salt; increase fibre; reduce proportion of take-away foods 	<p>Students know:</p> <ul style="list-style-type: none"> • factors that influence dietary behaviours <ul style="list-style-type: none"> – importance of food for the different dimensions of health e.g. physical, social, emotional – personal factors e.g. lifestyle, physical activity levels, specific health conditions – societal factors e.g. cultural background, media, availability of, and access to, a range of foods <p>Students:</p> <ul style="list-style-type: none"> • devise and implement for themselves and others health-promoting strategies <ul style="list-style-type: none"> – identify improvements needed – identify the factors that influence their own and others' food intake – develop and implement strategies for personal behaviour change e.g. asking a friend for assistance, preparing healthy foods – develop and implement strategies for creating a supportive environment for self and others e.g. advocating for change in foods available, teaching others to prepare foods to support their goals, promoting wise consumer decisions 	<p>Students know:</p> <ul style="list-style-type: none"> • current trends in eating behaviours e.g. take-away foods, ready-to-heat meals, cultural foods, meals in a minute, meals prepared in 20 minutes or less • current trends in planned diets e.g. weight-loss diets, vegetarian diets, celebrity diets, niche nutrition, organic foods, glycemic index, carbohydrate loading <p>Students:</p> <ul style="list-style-type: none"> • propose and implement strategies that support healthy eating behaviours <ul style="list-style-type: none"> – evaluate the impacts of current trends in eating behaviours and planned diets – suggest and implement strategies that prevent or minimise negative impacts e.g. prepare health-promoting foods that reflect current eating trends, advocate for improved food choices within current trends, such as healthy take-away or fast foods

Becoming Independent		
<p>BI 4.3 Students select and manage resources to prepare foods that meet physical, social or emotional needs.</p>	<p>BI 5.3 Students design a range of health-promoting foods and use a variety of techniques to prepare quality food products.</p>	<p>BI 6.3 Students select and use specialised techniques to prepare and present health-promoting foods that reflect current food trends.</p>
<p>Students know:</p> <ul style="list-style-type: none"> • foods that meet physical, social or emotional needs <ul style="list-style-type: none"> – foods that meet the dietary guidelines – foods that meet growth and energy needs e.g. protein foods for muscle development, carbohydrate foods for energy – foods that meet social or emotional needs e.g. foods served when entertaining friends <p>Students:</p> <ul style="list-style-type: none"> • select and manage resources to prepare foods <ul style="list-style-type: none"> – use terminology associated with food-preparation techniques e.g. combine, blend – select recipes – select ingredients and equipment e.g. ingredients low in fat, sugar and salt; woks rather than frypans for stir frying; grills rather than frypans to reduce the fat – use appropriate food-preparation techniques e.g. trim fat from meat – manage time – work safely in kitchen 	<p>Students know:</p> <ul style="list-style-type: none"> • quality health-promoting foods <ul style="list-style-type: none"> – characteristics of quality food products e.g. taste, visual appeal including texture and colour – foods that promote health • food-preparation techniques <ul style="list-style-type: none"> – methods and procedures to ensure quality food products – equipment that matches the food-preparation technique – principles of techniques to complete food preparation e.g. stir frying, low-fat cookery <p>Students:</p> <ul style="list-style-type: none"> • design and prepare health-promoting and quality foods <ul style="list-style-type: none"> – modify recipes – create new meals or recipes – identify the criteria that characterise quality in relation to the food being prepared e.g. vegetables should retain colour, texture and nutrients – select food-preparation techniques that meet the criteria e.g. steaming vegetables for a short time 	<p>Students know:</p> <ul style="list-style-type: none"> • specialised techniques <ul style="list-style-type: none"> – techniques that require accuracy to produce quality products – food-presentation techniques e.g. garnishing techniques • current food trends <ul style="list-style-type: none"> – food styles e.g. modern Australian, Japanese, Thai, Greek, Italian, Indian – fashionable foods e.g. Asian greens – preparation techniques e.g. slow foods, fast foods – presentation styles e.g. plating, garnishing <p>Students:</p> <ul style="list-style-type: none"> • identify health-promoting options within current food trends e.g. low-fat curries, sushi, rice-paper rolls • select and use specialised techniques <ul style="list-style-type: none"> – select and prepare ingredients e.g. use pestle and mortar to prepare spices for a curry paste – use techniques e.g. prepare fresh pasta – garnishing techniques e.g. grooving, channelling, twisting, segmenting

Becoming Independent		
<p>BI 4.4 Students explain how characteristics of materials affect ways they can be manipulated. (Tech MAT 4.1)</p>	<p>BI 5.4 Students compare and contrast materials according to their characteristics to determine how effectively the materials meet predetermined standards. (Tech MAT 5.1)</p>	<p>BI 6.4 Students incorporate in their design proposals ideas about the impacts of particular materials used in products. (Tech MAT 6.1)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • characteristics of materials <ul style="list-style-type: none"> – textiles e.g. elasticity, absorbency – food e.g. texture, composition • manipulation of materials <ul style="list-style-type: none"> – characteristics of materials determine the ways they can be manipulated – techniques used to manipulate materials e.g. foods can be cut, cooked, combined or foamed; textiles can be cut, sewn, joined <p>Students:</p> <ul style="list-style-type: none"> • explain how characteristics of materials affect ways they can be manipulated <ul style="list-style-type: none"> – describe the properties of materials – describe how the characteristics of a material will allow it to be manipulated e.g. stretch and woven fabrics require different stitch techniques, tougher meat cuts can be marinated to increase tenderness – test the suitability of tools on a range of materials – compare equipment that is made with different materials 	<p>Students know:</p> <ul style="list-style-type: none"> • how materials meet predetermined standards <ul style="list-style-type: none"> – materials can be compared and contrasted according to their characteristics – how the characteristics of materials affect their performance e.g. a fabric with UPF 15 is less sun-protective than a fabric with UPF 50 – materials can be selected to meet standards e.g. low fat, high fibre and low salt ingredients are health promoting <p>Students:</p> <ul style="list-style-type: none"> • compare and contrast materials in relation to the standards <ul style="list-style-type: none"> – identify the characteristics of materials that would meet the standards e.g. colour, absorbency, UPF and fibre content of fabrics are characteristics that influence sun-protective quality – compare the strengths and weaknesses of two or more materials in relation to the standards e.g. analyse the information on textile labels and compare the sun-protective qualities of two fabrics – compare the finished items to the required specifications and criteria 	<p>Students know:</p> <ul style="list-style-type: none"> • impacts of particular materials <ul style="list-style-type: none"> – impact on the environment e.g. pollution, depletion of resources – aesthetic qualities – final product <p>Students:</p> <ul style="list-style-type: none"> • incorporate in their design proposals ideas about the impacts of materials <ul style="list-style-type: none"> – describe how consideration of the impacts have influenced their design proposals e.g. use of recycled denim to create retro clothing designs may be economically viable, environmentally friendly and reflect fashion trends aesthetically – develop strategies to handle material waste effectively

Becoming Independent		
<p>BI 4.5 Students employ their own and others' practical knowledge about equipment and techniques for manipulating and processing materials in order to enhance their products. (Tech MAT 4.2)</p>	<p>BI 5.5 Students operate equipment and apply techniques for manipulating and processing materials to meet predetermined standards. (Tech MAT 5.2)</p>	<p>BI 6.5 Students use specialised equipment and refined techniques to make quality products to detailed specifications. (Tech MAT 6.2)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • equipment to manipulate materials <ul style="list-style-type: none"> – considerations when selecting equipment e.g. knowledge of equipment, access to equipment, ease of use, appropriate equipment for the technique • techniques to manipulate materials <ul style="list-style-type: none"> – considerations when selecting techniques to manipulate materials e.g. technique matches the purpose, time available, personal skill level, characteristics of materials <p>Students:</p> <ul style="list-style-type: none"> • employ their own and others' practical knowledge e.g. consult with industry personnel or teachers • enhance their products by manipulating and processing materials e.g. use embroidery to embellish a fabric and sew to create a bag 	<p>Students know:</p> <ul style="list-style-type: none"> • equipment to manipulate materials <ul style="list-style-type: none"> – suitability of different equipment to meet predetermined standards – safe work practices when operating equipment • techniques to manipulate materials <ul style="list-style-type: none"> – suitability of different techniques to meet predetermined standards e.g. using a stretch stitch or a straight stitch on a stretch fabric – safe work practices when applying techniques <p>Students:</p> <ul style="list-style-type: none"> • operate equipment and apply techniques to meet standards <ul style="list-style-type: none"> – work safely, accurately, efficiently – incorporate predetermined standards when manipulating materials with precision 	<p>Students know:</p> <ul style="list-style-type: none"> • specialised equipment <ul style="list-style-type: none"> – a range of specialised equipment e.g. sushi mats, pasta maker – effects that can be achieved using specialised equipment e.g. cutting tools for creating garnishes • refined techniques <ul style="list-style-type: none"> – effects that can be achieved by refined techniques e.g. piping for a cake, beading, embroidery, appliqué <p>Students:</p> <ul style="list-style-type: none"> • use specialised equipment and refined techniques <ul style="list-style-type: none"> – select the techniques and equipment that match detailed specifications

Becoming Independent		
<p>BI 4.6 Students investigate consumer behaviours that impact on wellbeing in home economics contexts.*</p>	<p>BI 5.6 Students analyse influences on and impacts of consumer decision making in home economics contexts* and propose strategies to promote responsible decisions.</p>	<p>BI 6.6 Students explain consumer behaviour trends in response to national and global marketing strategies and suggest ways to prevent and overcome negative impacts.</p>
<p>Students know:</p> <ul style="list-style-type: none"> • consumer behaviours <ul style="list-style-type: none"> – decisions and actions that determine how financial resources will be used – informed decisions and actions that meet needs and wants • wellbeing <ul style="list-style-type: none"> – different dimensions of wellbeing e.g. physical, social, emotional, financial, environmental – relationship of consumer decisions to wellbeing e.g. purchasing an expensive fashion item can impact negatively on financial wellbeing but enhance self-confidence <p>Students:</p> <ul style="list-style-type: none"> • investigate the impacts of consumer decisions <ul style="list-style-type: none"> – describe the impact on personal wellbeing – evaluate decisions in relation to personal responsibilities e.g. money available and financial commitments 	<p>Students know:</p> <ul style="list-style-type: none"> • influences on consumer decision making <ul style="list-style-type: none"> – personal influences on decision making e.g. needs and wants, budget – societal influences on decision making e.g. fashion trends, marketing strategies • impacts of consumer decision making <ul style="list-style-type: none"> – impacts on wellbeing of individuals, families, communities – impacts on suppliers, environment • responsible decisions <ul style="list-style-type: none"> – characteristics of responsible decisions e.g. informed decisions, decisions that enhance wellbeing <p>Students:</p> <ul style="list-style-type: none"> • analyse influences on decision making e.g. purchase more expensive goods when discounts offered, purchase garments to match fashion trends • analyse the impacts of decisions <ul style="list-style-type: none"> – consider implications e.g. Who is affected by the decisions? Am I disadvantaged by the decision? • propose strategies to promote responsible decisions e.g. establish priorities and set goals, prepare a budget, investigate and evaluate product options 	<p>Students know:</p> <ul style="list-style-type: none"> • consumer behaviour trends e.g. purchase on credit with interest-free periods, high rates of credit card use, purchase goods manufactured overseas • national and global marketing strategies e.g. online shopping, reward schemes, price cuts, cheap imports, advertising campaigns, telemarketing • negative impacts of consumer behaviour trends <ul style="list-style-type: none"> – impacts on individuals, families, communities, economy e.g. credit card debt, unnecessary purchases, funds unavailable for needs, poor credit ratings – impacts on business, society, environment e.g. increase of multinational companies and monopolies may lead to a lack of competition and demise of local businesses <p>Students:</p> <ul style="list-style-type: none"> • explain how national and global marketing strategies influence consumer behaviour trends e.g. increased online air travel bookings due to offers of discounts if purchased online • suggest ways to prevent and overcome negative impacts of consumer trends <ul style="list-style-type: none"> – investigate alternative consumer behaviour e.g. avoid accumulating credit card debt, impose limits on personal spending, support local businesses – investigate role of regulatory bodies/advisory bodies in relation to consumer rights e.g. Australian Competition and Consumer Commission (ACCC), Australian Consumers' Association

* Home economics contexts — food and nutrition, human development and relationships, living environments and textiles.

Becoming Independent		
<p>BI 4.7 Students propose ways of responding to situations and behaviours that are unsafe, harmful or risky, after assessing options and consequences. (HPE PH 4.3)</p>	<p>BI 5.7 Students demonstrate behaviours and actions to provide care or manage risk in responding to unsafe or risky situations and behaviours. (HPE PH 5.3)</p>	<p>BI 6.7 Students devise personal and community strategies to respond to potentially unsafe situations and behaviours. (HPE PH 6.3)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • unsafe, harmful or risky situations and behaviours <ul style="list-style-type: none"> – physical e.g. using equipment, sun exposure, handling food – social e.g. relationships, drug abuse – emotional e.g. emotional abuse • consequences of situations and behaviours of unsafe, harmful or risky situations e.g. physical harm or emotional torment to self and others <p>Students:</p> <ul style="list-style-type: none"> • propose ways of responding <ul style="list-style-type: none"> – identify options for responding to unsafe, risky or harmful situations – identify consequences of different situations and behaviours – develop strategies to respond 	<p>Students know:</p> <ul style="list-style-type: none"> • behaviours and actions that provide care e.g. first aid, sun-protective behaviours, emotional support • behaviours and actions that manage risk <ul style="list-style-type: none"> – identify and assess risks or hazards – devise and implement action plans to minimise risk and promote safety e.g. develop a checklist of actions to promote safe handling of food <p>Students:</p> <ul style="list-style-type: none"> • identify unsafe or risky situations and behaviours e.g. identify potential conflict situations • demonstrate behaviours and actions to provide care e.g. communication and cooperation rather than competition; assertiveness rather than aggression • demonstrate behaviours and actions to manage risk e.g. conflict resolution strategies 	<p>Students know:</p> <ul style="list-style-type: none"> • personal strategies to respond to potentially unsafe situations and behaviours e.g. learn appropriate skills, make personal decisions and take action to avoid risk; seek assistance and advice of others • community strategies to respond to potentially unsafe situations and behaviours e.g. education campaigns, advocacy to community groups, governments <p>Students:</p> <ul style="list-style-type: none"> • devise personal strategies to respond to potentially unsafe situations and behaviours e.g. maintain supportive friendships, select sun-protective clothing to prevent skin cancer • devise community strategies to respond to potentially unsafe situations and behaviours e.g. develop a campaign to promote the use of sun-protective clothing

Living in the Wider Society		
<p>LW 4.1 Students evaluate the influence on self-concept and self-esteem of their own and others' behaviours, including recognition of achievement and changes in responsibilities. (HPE PD 4.1)</p>	<p>LW 5.1 Students evaluate the influence of different beliefs and values, including those related to sex, sexuality and gender, on their own and others' self-concept and self-esteem. (HPE PD 5.1).</p>	<p>LW 6.1 Students evaluate the influence of sociocultural factors on their own and others' self-concept and self-esteem. (HPE PD 6.1).</p>
<p>Students know:</p> <ul style="list-style-type: none"> • self-concept <ul style="list-style-type: none"> – construction of self-concept • self-esteem <ul style="list-style-type: none"> – development of self-esteem • influence of own behaviours on self-concept and self-esteem <ul style="list-style-type: none"> – personal behaviours e.g. commitment to activities, satisfaction with outcomes, interactions with others, clothing styles • influence of others' behaviours on self-concept and self-esteem <ul style="list-style-type: none"> – behaviours of others e.g. expressing support and love, recognising and celebrating achievement, inviting peers to join a group – behaviours of others have positive or negative impacts e.g. providing positive feedback builds self-esteem, rejecting a peer from the group can sabotage self-concept <p>Students:</p> <ul style="list-style-type: none"> • evaluate how behaviours of self and others affect self-concept and self-esteem <ul style="list-style-type: none"> – identify behaviours that impact on self-concept and self-esteem – explain the impact of behaviours (including recognition of achievement and changes in responsibilities) on self-concept and self-esteem – make judgments about how the impacts of their own and others' behaviours contribute to the construction of self-concept and the development of self-esteem 	<p>Students know:</p> <ul style="list-style-type: none"> • beliefs <ul style="list-style-type: none"> – different beliefs held by individuals and groups – beliefs related to sex, sexuality and gender • values <ul style="list-style-type: none"> – different values held by individuals and groups e.g. importance of family – values related to sex, sexuality and gender • influence of personal and others' beliefs and values on own and others' self-concept and self-esteem e.g. the inability to meet high aspirations of academic success as perceived by self or others may lead to low self-esteem <p>Students:</p> <ul style="list-style-type: none"> • evaluate how values and beliefs affect self-concept and self-esteem <ul style="list-style-type: none"> – identify beliefs and values that impact on self-concept and self-esteem – explain ways the beliefs and values impact on self-concept and self-esteem – make judgments about the extent to which the beliefs and values impact on self-concept or self-esteem – make judgments about how the impacts of their own and others' beliefs and values contribute to the construction of self-concept and the development of self-esteem 	<p>Students know:</p> <ul style="list-style-type: none"> • sociocultural factors e.g. economic status, stereotypes associated with gender and sexuality, disability, expectations of relationships, media images, discrimination, power relationships, group affiliations, reward for achievement • influence of sociocultural factors on own and others' self-concept and self-esteem e.g. influence of economic status on one's ability to purchase goods may lead to perceptions by others that are different to perceptions of self <p>Students:</p> <ul style="list-style-type: none"> • evaluate how sociocultural factors affect self-concept and self-esteem <ul style="list-style-type: none"> – identify sociocultural factors that impact on self-concept and self-esteem – explain ways sociocultural factors impact on self-concept and self-esteem – make judgments about the extent to which sociocultural factors impact on self-concept and self-esteem

Living in the Wider Society		
<p>LW 4.2 Students explore different types of relationships and evaluate standards of behaviour considered appropriate for these relationships. (HPE PD 4.2)</p>	<p>LW 5.2 Students develop strategies to manage the influence of individuals and groups on attitudes towards, behaviours in, and expectations of, relationships. (HPE PD 5.2)</p>	<p>LW 6.2 Students evaluate the influence of sociocultural factors, including community expectations of behaviours, on relationships between individuals and between individuals and the family at different stages of life. (HPE PD 6.2)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • types of relationships e.g. child–parent, siblings, acquaintances, student–teacher, extended family, friendships (same sex, opposite sex), intimate, sexual, casual • standards of behaviour <ul style="list-style-type: none"> – why standards are established – who establishes standards – influences on standards of behaviour exhibited in relationships e.g. social context, closeness of relationship • behaviours appropriate for different relationships <ul style="list-style-type: none"> – aspects of behaviour e.g. verbal and nonverbal communication, physical contact, cultural norms – behaviours that match relationships e.g. relationship with acquaintances may be formal and polite <p>Students:</p> <ul style="list-style-type: none"> • explore different types of relationships <ul style="list-style-type: none"> – identify different types of relationships between people – investigate typical characteristics of these relationships • evaluate standards of behaviour appropriate for relationships <ul style="list-style-type: none"> – develop criteria to evaluate standards of behaviour e.g. impact of a behaviour on others and on the relationship – make judgments about the standard of behaviour in relation to the criteria 	<p>Students know:</p> <ul style="list-style-type: none"> • attitudes towards relationships <ul style="list-style-type: none"> – different attitudes e.g. approval, disapproval – influence of individuals and groups on attitudes • behaviours in relationships <ul style="list-style-type: none"> – reasons for behaviours – influence of individuals and groups on behaviours e.g. parental role models for marital relationships • expectations of relationships <ul style="list-style-type: none"> – different expectations e.g. long-lasting versus short-term relationship, sharing versus secrecy – personal influences on expectations e.g. prior experiences, new experiences, beliefs, values – influence of individuals and groups on expectations of relationships • strategies to manage the influence of individuals and groups e.g. establish open communication, negotiation, compromise, respect for the attitudes of others, exercise rights, make own decisions <p>Students:</p> <ul style="list-style-type: none"> • develop strategies to manage the influence of individuals and groups <ul style="list-style-type: none"> – identify the influences – identify a range of strategies to manage influences – select the most appropriate strategies 	<p>Students know:</p> <ul style="list-style-type: none"> • sociocultural factors influencing relationships e.g. community expectations of behaviours, stereotypes associated with gender and sexuality, media images, power relationships, discrimination • relationships <ul style="list-style-type: none"> – between individuals e.g. friendships, siblings – between individuals and families e.g. close, estranged • stages of life <ul style="list-style-type: none"> – stages of the life cycle e.g. infancy, childhood, adulthood – stages of the family life cycle e.g. establishing, nesting, contracting <p>Students:</p> <ul style="list-style-type: none"> • evaluate the influence of sociocultural factors on relationships <ul style="list-style-type: none"> – identify how sociocultural factors impact on individuals, families, relationships e.g. positive and negative impacts of gendered expectations on behaviour

Living in the Wider Society		
<p>LW 4.3 Students demonstrate skills and actions that support the rights and feelings of others, while adopting different roles and responsibilities in social, team or group activities. (HPE PD 4.4)</p>	<p>LW 5.3 Students demonstrate skills to deal effectively with challenge and conflict in social, team or group situations. (HPE PD 5.4)</p>	<p>LW 6.3 Students demonstrate communication and cooperation skills required to implement decisions of personal choice and to resolve conflict in relationships. (HPE PD 6.4)</p>
<p>Students know:</p> <ul style="list-style-type: none"> • social, team and group activities <ul style="list-style-type: none"> – rights of individuals e.g. right to feel safe, express thoughts – roles of individuals e.g. leader, team member – responsibilities of individuals e.g. to respect team members • ways of supporting the rights and feelings of others <ul style="list-style-type: none"> – skills and actions e.g. listening to others, demonstrating respect for others' ideas, acknowledging the input and strengths of others, assisting others, welcoming others to the group <p>Students:</p> <ul style="list-style-type: none"> • demonstrate skills and actions that support rights and feelings of others <ul style="list-style-type: none"> – identify roles and responsibilities of different people in an activity – select skills and actions to demonstrate support – implement the skills and actions e.g. demonstrate actions to support others while undertaking a class project 	<p>Students know:</p> <ul style="list-style-type: none"> • skills to deal effectively with challenge and conflict <ul style="list-style-type: none"> – nature of challenge – nature of conflict – factors contributing to challenge and conflict e.g. lack of open communication, testing boundaries – skills to deal with challenge e.g. assessing personal abilities, setting goals, problem solving – skills to deal with conflict e.g. discussion, active listening, negotiation, compromise, mediation, assertiveness <p>Students:</p> <ul style="list-style-type: none"> • demonstrate skills to deal effectively with challenge and conflict <ul style="list-style-type: none"> – analyse the nature of the challenge or conflict – select skills to deal with the challenge or conflict – implement the skills e.g. analyse a scenario about conflict between peers working collaboratively on a group task and roleplay resolution of conflict 	<p>Students know:</p> <ul style="list-style-type: none"> • communication skills e.g. clarifying understandings, acknowledging ideas and thoughts of others, expressing feelings assertively, empathising with the perspectives of others • cooperation skills e.g. acknowledging that a problem exists, developing shared goals and a plan of action, developing a supportive environment • decisions of personal choice e.g. decisions that require personal commitment <p>Students:</p> <ul style="list-style-type: none"> • demonstrate skills to implement decisions of personal choice and to resolve conflict <ul style="list-style-type: none"> – analyse the situation – identify personal choices – select the communication and cooperation skills required to resolve conflict – roleplay resolution of conflict while maintaining personal choices

Living in the Wider Society		
<p>LW 4.4 Students describe the possible short- and long-term consequences for individuals, families and communities of pursuing actions in home economics contexts.*</p>	<p>LW 5.4 Students describe current trends in home economics contexts* and predict the future impacts of these on individuals, families and communities.</p>	<p>LW 6.4 Students develop preferred futures scenarios that promote individual, family and community wellbeing and are socially and ethically responsible.</p>
<p>Students know:</p> <ul style="list-style-type: none"> • actions in home economics contexts* <ul style="list-style-type: none"> – actions by self, others, organisations e.g. dietary habits adopted by individuals and societies and those promoted by food organisations • consequences of actions in home economics contexts <ul style="list-style-type: none"> – short-term and long-term consequences for self, others, society <p>Students:</p> <ul style="list-style-type: none"> • describe consequences of pursuing actions <ul style="list-style-type: none"> – identify possible actions e.g. eating a diet high in fat – examine the potential consequences of each action e.g. increased risk of obesity, heart disease and diabetes; overconsumption of goods and services may lead to increased debt and consumption of resources 	<p>Students know:</p> <ul style="list-style-type: none"> • trends in home economics contexts* <ul style="list-style-type: none"> – food e.g. diets, eating out frequently, homes without kitchens, organic foods – clothing e.g. fashion styles, disposable clothing, recycled clothing, antique fashions – relationships e.g. communicating via SMS, delayed marriage or choosing not to marry, forming relationships via internet – living environments e.g. small families living in large houses, single-person households • impacts of trends <ul style="list-style-type: none"> – strategies for predicting impacts e.g. forecasting, futures scenarios, statistics analyses, research findings – impacts on individuals, families, society <p>Students:</p> <ul style="list-style-type: none"> • describe trends in home economics contexts* <ul style="list-style-type: none"> – identify and describe trends e.g. adolescents communicating frequently via SMS and the internet, making decisions for sustainability • predict the impacts of trends <ul style="list-style-type: none"> – identify the nature of impacts e.g. Who does the trend impact on? How does it make an impact? – select and use prediction strategies to determine probable impacts e.g. use statistics and research findings to determine the impact of frequent use of digital communications (telephone, SMS, internet) on the financial, physical, social and emotional wellbeing of adolescents 	<p>Students know:</p> <ul style="list-style-type: none"> • preferred futures scenarios <ul style="list-style-type: none"> – preferred futures can be envisioned – probable futures can be identified by analysing current trends, new ideas, research – events of the past, choices and actions contribute to preferred futures • criteria for assessing preferred futures <ul style="list-style-type: none"> – impacts on individuals and families, and local, national and global communities – socially and ethically responsible e.g. promote social justice and equity, and economic and environmental sustainability <p>Students:</p> <ul style="list-style-type: none"> • develop scenarios in home economics contexts* <ul style="list-style-type: none"> – imagine possible and probable futures and use criteria to assess these e.g. generate possible future scenarios for clothing production; develop a futures wheel to consider impacts of producing clothing in sweat shops on workers, clothing manufacturers, consumers; develop a futures case study to illustrate the impact of long-term, single-person housing

* Home economics contexts — food and nutrition, human development and relationships, living environments and textiles.

Appendix I

Technology Practice: Learning outcomes

Technology Practice: Learning outcomes

(Excerpt from the *Years 1 to 10 Technology Syllabus*)

Learning outcomes	
Technology Practice	
<p>Investigation is carried out to gather knowledge, ideas and data for use in meeting design challenges.</p> <p>Ideation is undertaken to generate and communicate ideas that meet design challenges, and to justify the selection of these ideas.</p> <p>Production procedures can be identified, described and managed when making products that meet design challenges.</p> <p>Evaluation is undertaken to make judgments about the appropriateness of design ideas, processes and products when meeting design challenges.</p>	
Level 4	Level 5
<p>Level statement</p> <p><i>Students consult others when gathering information, generating design ideas and developing detailed design proposals. They make use of the practical expertise of others when following production procedures to make products. Students gather feedback to evaluate their ideas, processes and products.</i></p> <p>Core learning outcomes</p> <p>TP 4.1 Students use consultative methods to gather knowledge, ideas and data when researching alternatives within design challenges.</p> <p>TP 4.2 Students generate design ideas through consultation and communicate these in detailed design proposals.</p> <p>TP 4.3 Students identify and make use of the practical expertise of others when following production procedures to make products for specific users.</p> <p>TP 4.4 Students gather feedback to gauge how well their design ideas and processes meet design challenges and how effectively products meet the needs of specific users.</p>	<p>Level statement</p> <p><i>Students analyse the links that exist between information gathered and the design and development of products. They develop design proposals that show an understanding of factors influencing the production of their products. Students use predetermined criteria to evaluate their processes and products.</i></p> <p>Core learning outcomes</p> <p>TP 5.1 Students analyse links between the knowledge, ideas and data gathered to meet design challenges and the design and development of new and improved products.</p> <p>TP 5.2 Students generate ideas and communicate these in design proposals that indicate an understanding of factors influencing production of the option(s) they have selected.</p> <p>TP 5.3 Students meet predetermined standards as they follow production procedures to make quality products.</p> <p>TP 5.4 Students use predetermined criteria to judge how well processes and products meet the needs of specific users, and recommend modifications or improvements.</p>

Learning outcomes	
Technology Practice	
<p>Investigation is carried out to gather knowledge, ideas and data for use in meeting design challenges.</p> <p>Ideation is undertaken to generate and communicate ideas that meet design challenges, and to justify the selection of these ideas.</p> <p>Production procedures can be identified, described and managed when making products that meet design challenges.</p> <p>Evaluation is undertaken to make judgments about the appropriateness of design ideas, processes and products when meeting design challenges.</p>	
Level 6	Beyond Level 6
<p>Level statement</p> <p><i>Students prepare detailed plans for gathering information and validate their sources and methods. They develop various design proposals that incorporate strategies for managing resources and make quality products that meet detailed specifications. Students use methods that reflect commercial and industrial standards to evaluate their processes and products.</i></p> <p>Core learning outcomes</p> <p>TP 6.1 Students formulate detailed plans for gathering knowledge, ideas and data and validate choices of information, sources and methods.</p> <p>TP 6.2 Students generate design ideas and communicate these in design proposals that indicate various options and incorporate management strategies.</p> <p>TP 6.3 Students negotiate and refine production procedures in making quality products that meet detailed specifications.</p> <p>TP 6.4 Students identify methods for evaluating commercial or industrial products and processes and use these to judge the appropriateness of their own processes and products.</p>	<p>Level statement</p> <p><i>Students analyse information in detail and develop understandings and ideas that can lead to innovative and enterprising ways of meeting design challenges. They develop detailed proposals, manage production procedures that reflect industrial and commercial standards and make innovative products. Students use a range of methods to make judgments about the feasibility and community acceptance of their processes and products.</i></p> <p>Discretionary learning outcomes</p> <p>TP B6.1 Students develop formal analyses of knowledge, ideas and data to meet design challenges in innovative and enterprising ways.</p> <p>TP B6.2 Students generate design ideas and communicate these in detailed design proposals that show evidence of innovation and include in-depth analysis of appropriateness.</p> <p>TP B6.3 Students manage production procedures that reflect commercial or industrial standards in order to make innovative products.</p> <p>TP B6.4 Students use a range of methods to judge whether their design ideas, production procedures and products are commercially or industrially feasible, and acceptable to the community.</p>

Appendix 2

Technology Practice: Core content

Technology Practice: Core content

(Excerpt from the *Years 1 to 10 Technology Syllabus*)

Core content	
Technology Practice	
Investigation — gathering knowledge, ideas and data to meet design challenges	
<ul style="list-style-type: none"> • analysis of design challenges <ul style="list-style-type: none"> – identifying needs, wants and opportunities (observing, consulting, conducting needs analyses or environmental scans) – identifying design requirements (user requirements, safety requirements, requirements under relevant legislation, regulations or conventions) – identifying design constraints • sources of knowledge, ideas and data (familiar and unfamiliar) <ul style="list-style-type: none"> – environments – products of technology – internet (websites and online communities) – people (potential users, clients, specialists and experts) – libraries 	<ul style="list-style-type: none"> • methods of gathering knowledge, ideas and data <ul style="list-style-type: none"> – consulting (questioning, questionnaires, surveys, interviews) – exploring, examining – researching – observing, scanning – experimenting, testing • methods of organising and analysing knowledge, ideas and data <ul style="list-style-type: none"> – recording – selecting, sorting and comparing – interpreting, inferring and concluding – identifying alternatives – validating choices – challenging ideas – verifying accuracy – establishing relevance
Ideation — generating and communicating ideas that meet design challenges	
<ul style="list-style-type: none"> • generation of ideas to meet design challenges <ul style="list-style-type: none"> – generating new ideas – modifying and refining designs – selecting and justifying design options – identifying materials, information and systems to meet design requirements – identifying equipment and techniques • communication of ideas that meet design challenges <ul style="list-style-type: none"> – pictures, sketches, annotated drawings 	<ul style="list-style-type: none"> – play, roleplay – drawings of different views – scale drawings – computer-aided design (CAD) – models – technical terms – design proposals and specifications – detailed plans – oral, written and multimedia presentations
Production — making products to meet design challenges	
<ul style="list-style-type: none"> • production procedures <ul style="list-style-type: none"> – developed (independently and cooperatively) – informed by practical experience – described, negotiated, refined – standards specified – identified, sequenced, followed – managed 	<ul style="list-style-type: none"> • products (artefacts, processes, systems, services and environments) <ul style="list-style-type: none"> – meet human needs or wants – capitalise on opportunities – extend human capabilities – make models and prototypes – meet standards (predetermined criteria, commercial or industrial standards)
Evaluation — judging the appropriateness of design ideas, processes and products when meeting design challenges	
<ul style="list-style-type: none"> • evaluation of design ideas, processes and products <ul style="list-style-type: none"> – expressing thoughts and opinions – gaining feedback from others (clients, specific users) – testing and judging effectiveness in real-life or lifelike contexts 	<ul style="list-style-type: none"> – comparing initial design ideas and final products – applying standards (predetermined criteria, commercial or industrial standards) – evaluating management decisions
Impacts and consequences	
<ul style="list-style-type: none"> • historical, current and future developments • impacts and consequences related to aesthetic, cultural, economic, environmental, ethical, functional and social appropriateness • effects of management decisions 	

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Guidance in connection with the Copyright Amendment (Digital Agenda) Act

Libraries, educational institutions, and institutions helping people with a disability may have the right to:

- supply another library with digital copies of a work, or parts of a work that they hold, if the other library cannot get the work in a reasonable time at an ordinary price
- display digital works within their premises (e.g. on an intranet)
- make a digital copy for research or study
- for administrative purposes, make a digital copy of a work held in printed format
- make a copy of an artistic work to display on their premises if the original is lost or in danger.

To comply with subsection 49(5A) of the *Copyright Amendment (Digital Agenda) Act 2000*, anything that a library makes available on their computer system must be so arranged that it can be accessed only through a computer that cannot itself make a copy, or print out the copy displayed.

Direct quotation of subsection 49(5A), Copyright Amendment (Digital Agenda) Act

If an article contained in a periodical publication, or a published work (other than an article contained in a periodical publication) is acquired, in electronic form, as part of a library or archives collection, the officer in charge of the library or archives may make it available online within the premises of the library or archives in such a manner that users cannot, by using any equipment supplied by the library or archives:

- (a) make an electronic reproduction of the article or work; or
- (b) communicate the article or work.

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