

Food and Textile Technology

Years 9-12

Samoa Secondary School Curriculum

Food and Textile Technology. Years 9-12
Samoa Secondary School Curriculum

Curriculum Design and Materials Division
Ministry of Education, Sports and Culture

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Introduction

Today in our society, the labour market promotes life skill learning in order for local citizens to be more creative and productive. In schools, vocational subjects are the pathways where students learn these life skills for them to be successful in the future. One of the subjects introduced in the Samoa National Curriculum for Secondary Levels is Food and Textiles Technology (FTT). Students studying FTT are given the opportunity to learn about where their food comes from, how it is produced and how they can prepare it. Similarly for textiles, students learn where the materials they use are from, how they are produced and how they can design them.

Classes focus on allowing students to acquire a wide range of knowledge and skills within a diverse range of optional topics. The major focus of classes is on developing students' practical skills and learning new techniques. Sub-strands or unit topics include food, health and nutrition, hygiene, safety, developing skills and techniques in food preparation using appropriate equipment.

In textiles students are allowed to develop their capacity to make decisions, solve problems and develop critical thinking skills. Lessons focus on developing student knowledge of the techniques required to build various textile items such as school bags, pillow cases, and clothing items. Students are given the flexibility to add their own creative 'twist' to items as they sew. Sustainability is a key focus where students can discover the importance of recycling, reusing and reproducing textile items.

FTT gives students opportunities to discover and further develop their critical and creative competences that in turn improve individual and family wellbeing. The FTT curriculum includes clothing, consumerism, community services, design, families, fashion, food, food science, health, human development, living environments, management, nutrition, textiles and much more.

Structure of the Curriculum Statement

The Samoa Secondary Curriculum Overview Document, which outlines the framework of underpinning principles and required learning areas; and a set of subject curriculum statements which define the learning principles and achievement aims and objectives which all Samoan schools are required to follow.

This curriculum statement sets out the progressions of skills and knowledge for students in secondary schools in Samoa. It applies to:

- all secondary schools in Samoa;
- all students irrespective of gender, ethnicity, belief, ability, social or cultural background;
- Years 9-12 of secondary schooling.

Each school provides programmes of learning which may be part, or all of the national curriculum in response to local needs, priorities and resources. The FTT Curriculum Statement provides a basis for teachers to plan programmes for teaching FTT in secondary schools. The learning programmes developed by schools must provide the experiences and opportunities for students to achieve the standards that are included in the national curriculum.

The way this curriculum statement is organised provides information for teachers, students, parents, family and the wider community, on what students are expected to be able to do in each year of secondary schooling.

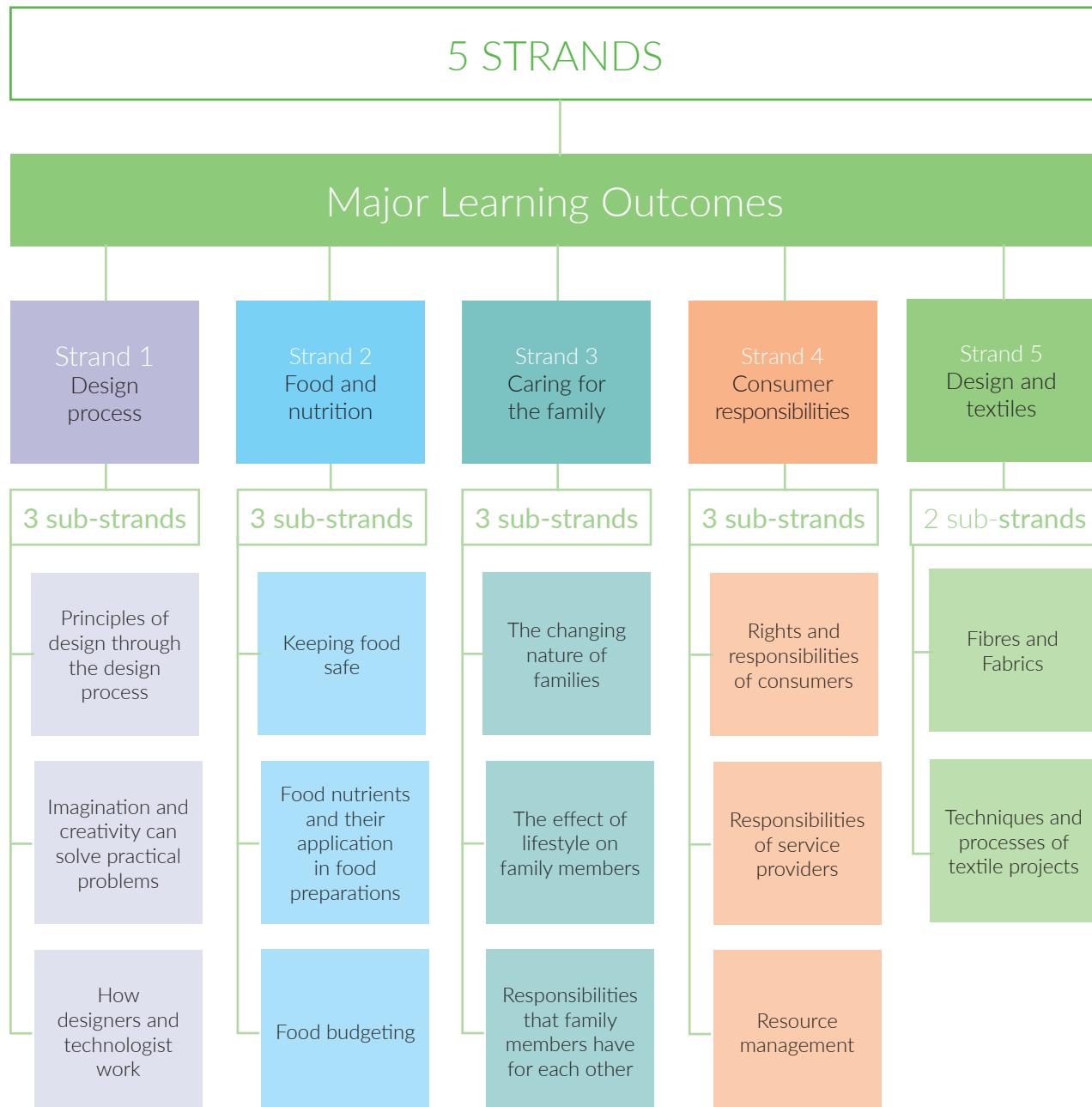


FIGURE 1

The structure of the Food and Textile Technology Curriculum.

All national subject curriculum statements are organised to show the:

1. General Aims of the subject curriculum
2. Organising Strands of the curriculum
3. Sub-Strands that organise the learning within the strands
4. Major Learning Outcomes (MLO) to be achieved at each year level.

The structure of the FTT Curriculum is illustrated in the diagram on the next page.

Strand 2

Food and nutrition

Major Learning Outcomes

At the end of the strand, students are able to demonstrate understanding of keeping Food Safe, Food Nutrients and their Application in Food Preparation and Food Budgeting

Sub-strand 1
Keeping food safe

Sub-strand 2
Nutrients and their application in food preparation

Sub-strand 3
Food Budgeting

Year 12
The impact of technological development on the consumers's food choice

Year 11
The effect technology has on production and preservation of food

Year 10
Principles underlying the preservation of food domestically and commercially

Year 9
Personal hygiene, safe food practices and methods of keeping seasonal food safe

Year 12
Macronutrients

Year 11
Macronutrients

Year 10
Nutrients working together in the body

Year 9
The dietary guidelines for good health, food groups and health promoting model

Year 12
Food budgeting when catering food

Year 11
Food budgeting for a family

Year 10
Ways to reduce food costs

Year 9
Food budgeting and budgeting skills for expensive food items for the individual

FIGURE 2

The structure of the strand 2 of the Food and Textile Technology Curriculum.

Key Principles

The National Curriculum Framework lists key five principles which underpin all aspects of the Samoan education including the development of the curriculum. They are:

Equity

Equity requires that the system will treat all individuals fairly and justly in the provision of educational opportunities. Policies and practices which advantage some social groups and disadvantage others will be avoided, while those which address existing inequalities in access, treatment and outcome will be promoted.

Quality

Educational quality is exemplified by high standards of academic achievement, cultural understanding and social behavior, and results from the complex interplay of professional and technical factors, and social cultural practices. Policies promoting these will focus on the learning institutions and specifically on day to day classroom practices including monitoring, assessment and reporting of students outcomes and teaching effective.

Relevance

Relevance in education implies a system which is meaningful, recognised, applicable and useful

Curriculum Principles

This Food and Textiles Technology (FTT) curriculum is based on the Principles of the Samoa Secondary School Curriculum as stated in the Samoan Secondary School Curriculum Overview Document. The Principles are that the curriculum:

- provides a challenge for all students, reflects the need to be inclusive and allows for individual differences;
- fosters and enhances the self-concept of all

to one's life. It should enhance individual and community well-being and ultimately national development, including cultural, humanistic, and spiritual aspects. Policy decisions will address what is relevant to the individual learner, to the community and nation.

Efficiency

Efficiency in education is demonstrated by leadership and management practices which ensure optimum use of resources (human, financial and material) at all levels, efficient service delivery, effective communication and coordinated and transparent decision making. Policies will reflect the need to be both efficient and effective.

Sustainability

Sustainability requires the wise utilisation of human, financial and material resources, to ensure balanced and continual development in the system. Transparency and accountability are necessary at all levels. The collective values, trust, integrity, and a sense of responsibility for the common good in community and national development will be promoted.

learners, and encourages them to be self-directed in their learning;

- provides all learners with a broad and balanced general education;
- will be based on what is best in Samoan tradition: fa'a Samoa;
- will be responsive to change so that it is relevant to the needs of the individual learner, the

- well-being of the community, and ultimately to national development;
- provides for flexibility taking into account the context in which schools operate and the resources available to them;
 - establishes a direction for learning and ensures that each learner's school experience

- progresses in a systematic and coherent way;
- promotes the presentation of essential knowledge by means of a systematic bilingual methodology;
 - promotes language learning in all areas of the curriculum;
 - encourages the use of good assessment practice.

General Aims

The general aims of the FTT curriculum are to provide opportunities for students to :

- Develop their knowledge, skills, creativity and understanding in Food and Textiles within the family and cultural settings.
- Provide experiences using technological practice to solve every day problems and enhance the Soifua Maloloina (health and wellbeing) of self and others.

- Give students the knowledge and skills to make informed decisions as consumers, thereby maximising the resources available to the individual and families.
- Increase the awareness of career opportunities in the areas of Food and Textiles.

Strands, Sub-strands and MLO

Strands

The curriculum statement is divided into six strands. The strands are:

- The Design Process;
- Food and Nutrition;
- Caring for the Family;
- Consumer Responsibilities;
- Design and Textiles;
- Communication in Food and Textiles Technology.
- The use of technological practice to meet everyday situations is an essential part of the curriculum. Teachers are encouraged to consider the application of technological practice when delivering units of work.

Sub-strands

Each strand has a sub-strand which drives the major learning outcomes of Food and Textile Technology. The Major Learning Outcomes establish a clear and structured progression of Key Learning Outcomes that span the years 9-12. They provide an overview of the expected learning in each strand. Many Food and Textiles situations are a mix of activities and therefore, a range of Learning Outcomes from some or all of the strands may be woven together into learning situations. This integration enables teachers to develop units of work which best meet students' needs and enriches their experiences. It also enables students to see connections between the different aspects of the subject and enable them to apply technological practices in solving and meeting life's challenges.

From their study of the **Design Process** students will understand:

- The principles of the design process;
- The design decisions in products developed by themselves and others;
- How to apply imagination and creativity to solve practical problems.

From their study of **Food and Nutrition** students will develop their knowledge, skills and understanding of:

- Keeping food safe;
- Food nutrients and their application in food preparation;
- Food budgeting.

From their study of **Caring for the Family** students will develop their knowledge, skills and understanding of:

- The changing nature of families;
- The effect of lifestyle on family members;
- The responsibilities that family members have to each other.

From their study of **Consumer Responsibilities** students will develop their knowledge, skills and understanding of:

- The rights and responsibilities of consumers;
- The responsibilities of service providers;
- Resource management

From their study of **Design and Textiles** students will understand:

- Fibres and fabrics;
- Techniques and processes of textile projects.

From their study of **Communication in Food and Textile Technology** students will participate effectively through developing:

- Oral communication skills;
- Written communication skills;
- Skills to apply, investigate, research and report technological practices.

Major Learning Outcomes

The learning outcomes relating to each of the key learning outcomes outline the knowledge and essential skills which students develop as they learn FTT. Most learning outcomes relate to a specific content area.

In the strand Food and Nutrition, there are two key learning outcomes which are not linked to a specific content area. These are "Personal Hygiene and Safe Food Practices" and "Techniques and Processes with Food". They are listed at the end of the specific aims "Keeping Food Safe" and "Food Nutrients and their Application in Food Preparation". These two key learning outcomes relate to skills that are essential in all activities involving food preparation.

In Years 9 and 10 students develop basic skills in these two areas. In Years 11 & 12, as the practical activities relating to food become more complex, the skill level of students is extended.

Approaches to Teaching and Learning

The national curriculum is aimed at enabling students to learn. Learning is a process by which new understandings are constructed. Students learn best when they take action themselves to generate and create meaning and to apply the new knowledge in meaningful situations.

Teaching practices must aim for effective learning to take place in the classroom. Students are more likely to be engaged in effective learning if teachers use interactive activities such as discussion, investigation and reflection, problem solving, and peer work. These types of activities help students to think deeply about the content they are learning and demonstrate they are learning through interaction.

There are also general approaches that are part and partial of everyday teaching and learning. These approaches include, but not limited to the following:

- Discussing with students the achievement objectives and learning outcomes and success criteria to achieve them.
- Recognizing that learning is demonstrated and communicated through oral and written academic language that should be explicit and articulate.
- Adopt the three R's – Read, Research and React as a proactive strategy for studying ahead of schedule. Read the material before the teaching is delivered, research by finding out more about what has been read and then react by self-testing one's own understanding, and noting down what is not understood to discuss with teachers.
- Allowing ample time to provide feedback and formulate responses and actions to eliminate obstacles to students' progress and/or enhance successful learning.

Assessment and Evaluation

Assessment is the process of gathering meaningful information that is used to make judgements. Judgements can be made on aspects such as learners' performance against the achievement objectives and the quality and effectiveness of learning programmes. Assessment and evaluation of Food and Textile Technology teaching and learning must reflect the principles in the Samoa Secondary Curriculum:

The National Curriculum framework recognises the relationship between all aspects of a curriculum and methods of assessment because assessment is the cornerstone of outcomes-based learning in all subjects and it is an integral part of teaching and learning in every classroom. It is the process of collecting and evaluating evidences of students' learning in order to determine the progress of students, and to inform judgements and interventions to improve students' performances.

An outcomes-focused approach to assessment should involve, but not limited to the following:

- Constructing a range of assessment practices to provide useful information on students' progress against the achievement objectives stated in the curriculum.
- Encouraging the use of local resources and improvising by using what is available for projects, experiments and research.
- Promoting and encouraging skills and knowledge internal assessments such as independent or individualized research/projects, oral presentations to test students' knowledge and understanding of the curriculum, practical experimenting with oral and written communication of findings etc.,
- Keeping assessment and evaluation as an ongoing process where feedback comments are provided to the students on a timely basis and interventions and other support are provided wherever and whenever needed.
- Timely reporting to parents or guardians

of students' performances so that parental support is involved in the push to improve where needed.

- Providing opportunities for students to be involved in the planning of the assessment of their own work.
- Construction of written assignments, tests and examinations to include questions that tests individual interpretations of a situation i.e. where there is no set right answer. Such assessments encourage the students to think beyond just rote recalling of formulars, calculations and concepts.
- Add a relevant scenario for FTT e.g., providing opportunities for students to explore and experience related to FTT, methodologies that consider global impacts of climate change etc.

Assessment, learning and teaching as an ongoing process is illustrated by the following diagram:

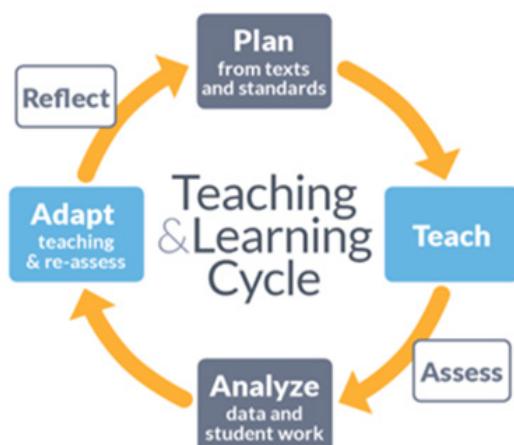


FIGURE 3.
Assessment, learning and teaching as an ongoing process.

There are three purposes of assessment:

Assessment for learning

These assessments should be diagnostic and feedback assessments (classroom activities/homeworks/assignments) so the teacher can improve the teaching and learning by diagnosing the learning strengths and weaknesses of students before the teaching and learning continues. The results of diagnosis should enable the teachers to give constructive feedback and formulate activities and responses to improve the learning where needed and ensuring the learning proceeds satisfactorily.

Assessment as learning

These assessments are learning outcomes based. Activities are constructed to test the students' understanding of the learning outcome expected of them. Constant and timely feedback must be provided so that students are aware of their responsibilities as learners.

Assessment of learning

These assessments are summative tests and examinations that take place at the end of a unit or strand or end of a term. It is equally important as the other assessments above, that the feedback for students to be constant and timely so that ample opportunities and time for students to react and contribute to correcting or improving their own learning are provided.

Good assessment practices should be fair, valid, open, reliable and manageable.

Essential Skills

Essential skills are the broad skills that are developed throughout the years of schooling. The essential skills are developed as a result of the quality of the experiences provided in all classroom and school activities. They are used by students in all school activities as well as in their social and cultural world outside the school. Samoa's National Curriculum Policy Framework specifies seven essential skills.

The Food and Textile Technology Curriculum involves students in using technological practice to help:

- Overcome a person's everyday food, textile, family or consumer problems;
- Solve bigger issues that affect the family and community.

Technology integrates knowledge and skills from other curriculum areas apart from the specific skills related to Food and Textiles. This provides the opportunity for all the essential skills to be covered. The essential skills most consistently applied in Food and Textile Technology are communication, information, problem solving, social, self-management, physical and work and study skills.

The term 'Design Brief' is often used to describe the process of presenting to students a problem or issue that needs to be solved. The Design Brief states the requirements of an individual or group of people wanting a particular human need or want satisfied. The individual or group of people whose need is attempting to be met is sometimes referred to as the client or customer.

Communicating effectively

Communication underpins all learning and includes reading, writing, speaking and listening, visual and graphic representation, non-verbal communication and the use of number and data to convey meaning. In FTT, this means that students are required to read, write, discuss and develop the skills of discrimination and critical analysis when they interpret oral, written and visual texts. It also requires students to be competent in using information and communication technologies essential for participation in society.

Solving problems

This involves the use of enquiry and reasoning, gathering data and processing information, posing creative solutions and evaluating outcomes. Mathematical concepts and skills are often used when solving problems. In FTT, this means that the students will develop the ability to gather, interpret and use information, determine its relevance, and present it constructively and appropriately, as a basis for solving problems and making decisions. The interpretation and writing up of information presented in recipes, instructions, designs, and presenting information, is an integral part of both visual and written strands of FTT.

Utilising aesthetic judgment

This involves the use of visual and performing arts as a means of expression and requires an appreciation of the aesthetic value of objects and experiences. In FTT, this means that students will be able to develop artistic and creative skills through visual language, journal writing,

story-telling, dramatisation and other opportunities presented which require individual innovation and creativity.

Developing social and cultural skills and attributes

The capacity to operate socially and to work effectively with others is an essential skill. It requires an understanding of context, cultural norms and expectations and the ability to negotiate and reach consensus. It also involves individuals developing ethical behavior and values including an informed understanding of the issues associated with gender. In FTT this means recognising the importance of social and cooperative skills for learning and language development. Many of the approaches to learning and teaching FTT include group and cooperative activities that are designed to help students develop their ability to use language and communicate with others. This statement also recognises the need for students to develop respect for individual differences, and to participate in a range of social and cultural settings.

Managing oneself and developing work and study skills

Students need to be able to manage their time effectively to allow them to pursue personal, spiritual, sporting and academic interests. They need to know how to resolve conflict in constructive ways that allow all involved to feel that they have been treated with fairness and respect. They need to take personal responsibility for their choices and actions and learn from both their mistakes and successes. This includes responsibility for personal health and fitness. These are an integral part of any language programme. Students should take responsibility for their own learning and for working independently and in groups. Learning and teaching programmes must provide opportunities for self-monitoring and self-evaluation and enable students to set goals for themselves.

Integrating knowledge

While learning areas are used as the organisers of knowledge, the prime purpose of education is for students to understand the world around them and see the links between the various areas. This requires a deep and thorough understanding of subjects so the knowledge gained can be linked to experience and complex interrelated understandings developed.

In FTT this means language learning and teaching programmes should incorporate integrated, holistic approaches, and use a combination of approaches. Sharing productions, expressing students' own experiences orally and in writing, using guided reading texts, and writing

in different genres are examples which involve the integration of design brief. Importantly, when making sense of what they hear, read and view, students need to bring together their experience and knowledge of how texts work in order to develop a project.

Effectively Using Technology

Technology involves the development of the skills and knowledge used to make and construct objects and products used in day-to-day living and in the pursuit of special interests. It involves modifying the environment. In Food and Textiles, technology is the application of knowledge, skills and physical resources to practical situations. It involves process and design technology. Students will apply the knowledge and skills to design, make and improve objects, systems and

resources found in their environment in order to solve problems encountered in this subject area.

Technology also involves the use of information technology used to access information stored electronically. Over time, information technology will become more widely available and be increasingly used in all areas of the curriculum to create, locate and store information.

Language and Learning

The language associated with learning in subject areas is often abstract and demanding for any learner. Learning is even more complex for students who must learn through the medium of their second language, English. Second language learners of English are required to develop their English language for school learning at the same time as learning the subject content. They are expected to use English to reason through to conclusions, read and understand expository texts, develop arguments, analyse, synthesise and evaluate ideas. Furthermore they are assessed in English on how well they express themselves either orally or in writing. Students who learn English as their second language may take at least 5 to 7

years to develop English language skills for academic learning compared to their peers for whom English is the first language.

All students must develop the language associated with learning in Food and Textile Technology. Teachers in all subject areas are teachers of language. In practice it requires Food and Textile Technology classroom programmes to have specific language objectives. The language that students will need in order to understand and talk about Food and Textile Technology content and to participate effectively in learning activities should be identified and taught together with the appropriate content. In this way language is developed in relevant and meaningful contexts.

Language Functions Across Subject Areas

Language functions refer to the purposes for which language is being used. For example, language can be used to express and respond to greetings, give reasons, give instructions, ask for help and so on. There are a number of language functions necessary for understanding content across the curriculum. A lot of language functions are common to all subjects. For example, whether students are learning about soil erosion in Agricultural Science or food spoilage in Food

and Textile Technology, central to both topics is the concept of cause and effect and the language function involved is Expressing Cause and Effect. The words and sentence structures used to express the same language function in different subjects will be the same.

The table on the next page lists language functions as required in the achievement objectives within and across the applied subject areas.

Language Functions	Agricultural Science	Food and Textiles	Business Studies	Health and Physical Education
Defining	✓	✓	✓	✓
Expressing cause and effect	✓	✓	✓	✓
Classifying	✓	✓	✓	✓
Describing: features, behaviours, properties, functions, roles	✓	✓	✓	✓
Comparing and contrasting	✓	✓	✓	✓
Giving reasons	✓	✓	✓	✓
Giving instructions	✓	✓	✓	✓
Asking questions as in interviews	✓	✓	✓	✓
Describing change	✓	✓	✓	✓
Explain how: a natural process, a mechanical process etc.	✓	✓	✓	✓
Stating principles	✓	✓	✓	✓
Expressing relative importance	✓	✓	✓	✓
Making a judgment	✓	✓	✓	✓
Explain why e.g., a phenomenon	✓	✓	✓	✓
Giving examples	✓	✓	✓	✓
Expressing conclusions	✓	✓	✓	✓
Expressing requirements	✓	✓	✓	✓
Predicting	✓	✓	✓	✓
Hypothesising e.g., a design brief	✓	✓	✓	✓

TABLE 1
Language functions as required in the achievement objectives within and across the applied subject areas.

Communication Skills

Communication skills are essential for all students to develop. Students need to be able to interpret and critically evaluate information that is received either by listening, reading or viewing. They also need to be able to communicate clearly, confidently and appropriately through speaking and writing, and through other forms

of communication and technologies. The development of these skills needs to be supported in all areas of the curriculum. Like language skills, communication skills required in the achievement objectives need to be identified and taught together with the appropriate content.

Language and Communication

The language and communication achievement objectives highlighted in this curriculum statement are based on the types of texts students are required to understand and produce during a year's programme in Food and Textile Technology.

Although the achievement objectives are subject related, they are linked to language and communication skills being developed through the Samoan Language Curriculum and English Language Curriculum. They are highlighted here because in addition to language being developed during Samoan and English classes, there is a very real need for subject teachers to

give attention to the language requirements of their subjects. Guidelines for teaching the language of different types of texts are included in the teachers' manuals.

The achievement objectives are organised under two broad strands: Oral Language Communication and Written Language Communication. The achievement objectives for each year level are determined by the content objectives of all the other strands. Students should achieve these objectives through the learning activities undertaken for the other strands in the year level.

Learning Programmes in Food and Textile Technology

Learning programmes therefore should have these features:

- a planned integration of content and language learning in interesting contexts;
- the provision of opportunities for students to use language for both social and academic purposes;
- a balanced use of listening and speaking, reading and writing; viewing and presenting through a range of activities that promote learning and the skills of communication;
- focused instruction on language structures found in Food and Textile Technology from

word forms and meanings to sentence patterns, to the way information or ideas are grouped and connected into longer texts;

- opportunities in learning activities for students to interact with others in both Samoan and English;
- frequent opportunities for meaningful interaction between teachers and students;
- teachers providing good models of language use and a balanced use of Samoan and English separately.

Inclusive Education

The Ministry of Education, Sports and Culture is committed to providing high quality inclusive education to all Samoan students within a school culture based on respect and acceptance. A key component of quality education is the provision of appropriate programmes and support for a diverse range of students in the gifted range. The principle that 'All students can be successful learners' recognises that all students can succeed when they are provided with sufficient time, support and effective teaching. This ensures that the aims of social justice and equity are seen in practice as all students, irrespective

of race, ethnicity, disability or socio-economic background can achieve quality educational outcomes. It acknowledges the right of all students to be successfully enrolled in schools and experience success through participating in inclusive educational programmes.

For all students, the need to cater for their individual needs and develop appropriate skills, knowledge and personal attributes through a holistic approach to learning is at the centre of all educational programmes. All students have the right to be included in their local school

where they will have the opportunity to access the rich social and cultural setting to best develop the social and cultural skills necessary to be included in the wider community.

Gender

The Samoa Secondary School Curriculum: Curriculum Overview requires education to be gender-inclusive. This means that students should not be excluded from developing good self-esteem or from participating fully and successfully in learning because of narrow gender stereotypes.

Materials used with this curriculum must give learners the opportunities to understand how men and women and girls and boys can have a wide range of occupations, tasks and responsibilities. Materials must also use gender-neutral language where possible.

School programmes and classroom learning tasks should reflect the diversity of roles available to women and men and girls and boys. Teachers need to ensure that gender is not an obstacle to learning success or individual value.

It is the intent of this curriculum to be inclusive of all students. Therefore even when not specified, teachers should always take into the account the needs of those students with a disability.

To ensure this, Food and Textile Technology programmes will:

- include the interests, perspectives and contributions of both females and males in programme content, resources and methods of teaching;
- ensure that both females and males use Food and Textile Technology equipment and take part in investigations and practical work;
- ensure that both females and males take active and valued leadership roles in activities;
- ensure females and males have equitable access to resources, including teachers' time, learning assistance and technological equipment.



Strand, Sub-strand and Learning Outcomes by Levels

Years 9-12

STRAND 1: DESIGN PROCESS

SUB-STRAND: DESIGN PRINCIPLES

MAJOR LEARNING OUTCOMES

From their study of THE DESIGN PROCESS students will understand and use the principles of design through the design process developing an understanding of:

- how designers and technologists work
- how imagination and creativity can solve practical problems
- the role evaluation plays in creating an end product system
- the design decisions in products developed by themselves and others

YEAR 9

YEAR 10

YEAR 11

YEAR 12

Students will be able to investigate and develop their skills and understanding of:

Design principles when they:	Design principles when they:	Design principles when they:	Design principles when they:
<ul style="list-style-type: none"> • Explain the process of design; • Identify the parts which make up a design brief and work through the design; • Explore and use open and closed design brief to solve a problem; • Develop sound investigation skills • Use simple specifications to solve a basic need. 	<ul style="list-style-type: none"> • Use specifications in the development of a design brief; • Interpret problems and understand specifications developed from a problem; • Develop oral and written ways to communicate their design ideas; • Develop a design brief from a client or customer; 	<ul style="list-style-type: none"> • Write a statement for a perceived need or situation; • Resolve competing choices of materials, processes and equipment; • Effectively communicate their design thinking and product proposals; • Competently explain the purpose and construction of design briefs; 	<ul style="list-style-type: none"> • Write a statement for a perceived need or situation; • Resolve competing choices of materials, processes and equipment; • Effectively communicate their design thinking and product proposals; • Competently explain the purpose and construction of design briefs; • Confidently evaluate a product design to introduce business ideas and show them a big picture of business communication.

STRAND 1: DESIGN PROCESS			
SUB-STRAND: HOW DESIGN DECISIONS ARE APPLIED TO DEVELOP PRODUCTS.			
MAJOR LEARNING OUTCOME From their study of THE DESIGN PROCESS students will understand how to design decisions are applied to develop products.			
YEAR 9	YEAR 10	YEAR 11	YEAR 12
			<p>Students will be able to investigate and develop their skills and understanding of:</p> <p>Design decisions when they:</p> <ul style="list-style-type: none"> Evaluate their own designs and those made by others; Secure and show them their own products by reference to their decisions and constraints; Reflect on each stage of the design process. <p>Design decisions when they:</p> <ul style="list-style-type: none"> Develop and use a range of perspectives from which to critique products processes and systems; Investigate the elements of design, including form, function, fitness for purpose; Explain the decisions and choices made in the design and manufacture of products made by themselves and others. <p>Design decisions when they:</p> <ul style="list-style-type: none"> Confidently evaluate a product outcome in relation to the design specifications; Evaluate the strengths and weaknesses of products from different perspectives including, safety, health, environment, cost and appropriate use of resources; Evaluate product outcomes in relation to qualities of appropriateness, elegance, and simplicity. <p>Design decisions when they:</p> <ul style="list-style-type: none"> Confidently evaluate a product outcome in relation to the design specifications; Evaluate the strengths and weaknesses of products from different perspectives including, safety, health, environment, cost and appropriate use of resources; Reflect on product outcomes in relation to qualities of appropriateness, elegance, and simplicity.

STRAND 1: DESIGN PROCESS

SUB-STRAND : IMAGINATION AND CREATIVITY TO SOLVE PRACTICAL PROBLEMS

MAJOR LEARNING OUTCOME

From their study of THE DESIGN PROCESS students will understand and use **their imagination and creativity to solve practical problems.**

YEAR 9	YEAR 10	YEAR 11	YEAR 12
Students will be able to investigate and develop their skills and understanding of:			
Problem solving when they:	Problem solving when they:	Problem solving when they:	Problem solving when they:
<ul style="list-style-type: none"> Develop sound planning and management skills; Apply the design process to the solving of practical problems; Appreciate the need to adapt to changing situations or changes in materials or equipment; 	<ul style="list-style-type: none"> Interpret a design brief and work confidently and independently through the design process using prototypes, models and solutions; Accept a need to modify and change ideas and approaches in response to changing circumstances; Work cooperatively in teams to resolve problems in the development or evaluation of products. 	<ul style="list-style-type: none"> Accept the need to work within organisational structures in the production environment or workplace; Initiate a design brief from a perceived need or situation; Investigate a range of solutions thoroughly; 	<ul style="list-style-type: none"> Investigate how to communicate with authority within the organizational structures in the production environment or workplace. Initiate a design brief from a perceived need or situation; Investigate a range of solutions thoroughly; Defend the choices made of equipment, materials and processes.

STRAND 2: FOOD AND NUTRITION			
SUB-STRAND: KEEPING FOOD SAFE			
MAJOR LEARNING OUTCOME			
YEAR 9	YEAR 10	YEAR 11	YEAR 12
From their study of FOOD AND NUTRITION students will understand keeping food safe .			
Personal hygiene, safe food practices and methods of keeping seasonal food safe when they:	Principles underlying the preservation of food domestically and commercially when they:	The effect technology has on production and preservation of food when they:	The impact of technological developments on the consumer's food choices when they:
<ul style="list-style-type: none"> Describe the importance of food and personal hygiene practices in producing safe food; Explain the basic principles underlying methods of keeping food safe; Investigate the conditions that cause food spoilage and the effect on the consumer; Explain the principles underlying the different methods of preserving seasonal produce e.g., fruit and vegetables; Demonstrate a method of preserving food for later that uses the technology available at home e.g., fruit dried in the sun or oven; Evaluate how technology can save time, energy and money. 	<ul style="list-style-type: none"> Investigate the principles underlying the preservation methods used for food in the past and present; Describe the causes of food-borne illness e.g., bacteria, viruses, parasites, chemicals; Evaluate different preservation methods, making recommendations about the most suitable method; Explain the role of food additives in commercially produced food; Compare the nutritional value of fresh and preserved protein food e.g., corn beef, tinned fish; Investigate how micro-organisms can produce safe foods for later use e.g., fa'apapa, bread, cheese. 	<ul style="list-style-type: none"> Research methods used to process raw foods and preserve food commercially e.g., freezing, canning; Compare the quality, nutritional value, food additives and standard of packaging and labelling of foods preserved commercially in Samoa with similar imported foods; Report on the nutritional content of commercially produced foods and the equivalent fresh food; Investigate the hygiene and safety regulations that exist to ensure food premises produce safe food; Make food products from unprocessed ingredients and compare the results of making the same food substituting some ingredients with ones that have been commercially preserved; Evaluate food products against a range of criteria e.g., time saved, cost, nutritional value, appearance, flavour, texture; Demonstrate personal and safe food practices with fresh and commercially preserved foods. 	<ul style="list-style-type: none"> Compare the function and nutritional consequences of commercial preservation of food e.g., dehydration, canning; Explain the need for regulations in the food industry that relate to the standards for safe food preparation e.g., personal, kitchen and food hygiene; Report on the critical role of time and temperature to thawing, cooking and reheating of food when catering for others; Apply the hygiene and safety regulations for the food industry when preparing, serving or packaging safe food for others; Demonstrate preserving a food in bulk for marketing at a profit; Communicate information about a product produced by using appropriate labelling; and safe food practices when handling a range of foods; Evaluate food products against a range of criteria e.g., cost, appearance, flavour, taste, texture, nutritional value, labelling.

STRAND 2: FOOD AND NUTRITION

Food Nutrients and their Application in Food Preparation.

MAJOR LEARNING OUTCOME

From their study of FOOD AND NUTRITION students will understand **food nutrients and their application in food preparation**.

YEAR 9	YEAR 10	YEAR 11	YEAR 12
<p>MAJOR LEARNING OUTCOME</p> <p>From their study of FOOD AND NUTRITION students will understand food nutrients and their application in food preparation.</p>			
<p>The dietary guidelines for good health, food groups and a health promoting model e.g., food pyramid when they:</p> <ul style="list-style-type: none"> Classify local and imported processed foods into the appropriate section of a Health Promoting Model, giving reasons for classifications; Explore how the food groups and main nutrients fit into each section of a Health Promoting Model; Describe the main functions of the nutrients found in the different food groups e.g., protein, carbohydrates, lipids, water, minerals and vitamins; Demonstrate appropriate cooking methods to show appropriate techniques and processes with foods; 	<p>Nutrients working together in the body when they:</p> <ul style="list-style-type: none"> Explore the inter-relationship of nutrients, grouping them according to their purpose in the body e.g., Iron and Vitamin C for haemoglobin; Make recommendations for supplying good economical sources of main nutrients in meals; Give reasons for the variation in nutritional requirements of two different people e.g., adult and adolescent; Carry out practical activities producing economic snacks and meals that ensure all the essential nutrients are represented; Carry out evaluation to assess how well food prepared meets nutritional requirements and an individual's taste preferences; 	<p>Macronutrients when they:</p> <ul style="list-style-type: none"> Research the structure and function of each in the body e.g., protein, carbohydrates and lipids; Establish the main sources and recommended daily allowances of each; Explore how each is digested and their role in energy production; Investigate the factors that determine the availability of these nutrients in our diet; Carry out sensory and nutritional evaluation to assess how well food prepared meets an individual's requirements. 	<p>Micronutrients when they:</p> <ul style="list-style-type: none"> Research the function of each in the body e.g., minerals and vitamins; Report on the inter-relationship of macro and micronutrients in the body; Discuss the importance of a balanced diet in maintaining the digestion, absorption and metabolism systems in the body; Carry out practical activities to adapt and modify recipes to maximise the nutritional value of food for the following groups of people with special dietary requirements e.g., athletes, vegetarians, diabetics; Carry out a detailed evaluation to validate the suitability of food made for the dietary needs being met, making recommendations for any necessary improvements.

STRAND 2: FOOD AND NUTRITION			
SUB-STRAND: FOOD BUDGETING			
MAJOR LEARNING OUTCOME			
From their study of FOOD AND NUTRITION students will understand food budgeting .			
YEAR 9	YEAR 10	YEAR 11	YEAR 12
<p>Students will be able to investigate and develop their skills and understanding of:</p> <p>Food budgeting and budgeting skills for expensive food items for the individual when they:</p> <ul style="list-style-type: none"> • Compare the cost of locally processed foods with similar imported foods and different food outlets; • Demonstrate making economical family meals for different situations that incorporate locally produced foods with pre-prepared foods; • Explore economical ways of obtaining the nutritional food needs of the family e.g., cheap sources of protein foods; • Demonstrate making economical nutritious snack foods for adolescents; • Compare snack foods produced at home with similar purchased products; • Compare and contrast the different methods of providing food in a rural versus urban environment. <p>Ways to reduce food costs when they:</p> <ul style="list-style-type: none"> • Identify the costs associated with food preferences; 			<p>Food budgeting for a family when they:</p> <ul style="list-style-type: none"> • Produce a nutritious plan for a week's menu for a selected family living on a specified budget; • Analyse the proportion of the food budget spent on each food group; • Investigate the cost of eating out in comparison with preparing similar food in the home; • Evaluate how meal planning principles and budget constraints are met, making recommendations for any necessary improvements; • Experiment with recipes that extend expensive food items; <p>Food budgeting when catering for others when they:</p> <ul style="list-style-type: none"> • Research economical nutritious balanced recipes that could be successfully prepared, cooked, and served in bulk; • Apply knowledge of planning and costing when catering for others, making recommendations for change where necessary; • Demonstrate making economical and appealing meals when catering for others; • Evaluate the success of producing food for special occasions on a specific budget, making recommendations for improvement where necessary. <p>Food budgeting when catering for others when they:</p> <ul style="list-style-type: none"> • Demonstrate making economical meals for family occasions which meet the needs of individual family members; • Apply knowledge of planning and costing; • Evaluate the success of producing food for special occasions on a specific budget, making recommendations for improvement where necessary.

STRAND 3: CARING FOR THE FAMILY

SUB-STRAND: THE CHANGING NATURE OF FAMILIES

MAJOR LEARNING OUTCOME: from their study of CARING FOR THE FAMILY students will understand the changing nature of families.

YEAR 10

YEAR 9

The roles and factors that determine the nature of families when they:

- Identify different types of families;
 - Explain how traditional values and attitudes affect the practices of different family members;
 - Explore how the Soifua maloloina (health and wellbeing) of family members is affected by technology.

The role of the individual in the family when they:

- Compare and contrast the roles and expectations that exist in Samoa for different members of the family in both a rural and urban situation;
 - Explore strategies for coping with the changing roles of different family members.

Students will be able to investigate and develop their skills and understanding of:

The differing Soifua maloloina needs of family members when they:

- Research the career opportunities that exist in the area of caring for families e.g., social worker, child care, nanny, housekeeper; caregiver;
 - Compare and contrast the knowledge, skills and attitudes required to work in two different services that support the family.
 - Examine the food requirements of different family members e.g., pre-schoolers, & school children, pregnant woman, the elderly, sports people, active and passive workers.

velop their skills and understanding of:

Career opportunities in services related to the changing needs of families when they:

- Research the career opportunities that exist in the area of caring for families e.g., social worker, child care, nanny, housekeeper; caregiver;
 - Compare and contrast the knowledge, skills and attitudes required to work in two different services that support the family.

- Develop their skills and understanding of:
 - **Career opportunities in services related to the changing needs of families when they:**
 - Research the career opportunities that exist in the area of caring for families e.g., social worker, child care, nanny, housekeeper, caregiver;
 - Compare and contrast the knowledge, skills and attitudes required to work in two different services that support the family.

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The steps that can be taken at a national level to improve the lifestyle of family

- Review the Nutrition Policy for Samoa;
 - Discuss how the policy can affect the Soifua maloloia of family members.

Students will be able to investigate and develop their skills and understanding of:

The suitability of different types of clothing for the work place when they:

- Discuss the health issues related to the clothing needs of family members of various ages involved in different activities and occupations;
 - Investigate the expectations of the public in relation to personal presentation of people employed in customer service and the hospitality and tourism industry
 - Research the possible causes and symptoms of the common NCDs, distinguishing from common diseases e.g., diabetes, high blood pressure and gout.
 - Make recommendations about the part of the family can play in reducing the risk factors associated with NCDs

STRAND 3: CARING FOR THE FAMILY			
SUB-STRAND: THE RESPONSIBILITIES THAT FAMILY MEMBERS HAVE TO EACH OTHER			
MAJOR LEARNING OUTCOME			
From their study of CARING FOR THE FAMILY students will understand the responsibilities that family members have to each other.			
YEAR 9	YEAR 10	YEAR 11	YEAR 12
<p>The responsibilities associated with caring for the Soifua maloloina (health and wellbeing) of different family members when they:</p> <ul style="list-style-type: none"> Explain how the tasks in the home protect the health and safety of others e.g. <i>rubbish disposal, cooking and storage of food, family laundry;</i> Compare and contrast how technological practices have been used in the past and present when carrying out household tasks. 	<p>Risk factors that need to be considered when taking care of different family members when they:</p> <ul style="list-style-type: none"> Research the risk factors associated with caring for family members who have specific needs e.g. elderly person living alone; Explain how the tasks in the home protect the health and safety of others e.g. <i>rubbish disposal, cooking and storage of food, family laundry;</i> Compare and contrast how technological practices have been used in the past and present when carrying out household tasks. 	<p>Solutions to take care of problems related to family members when they:</p> <ul style="list-style-type: none"> Research possible Soifua maloloina problems associated with different family members e.g., pregnant women drinking alcohol/ smoking or eating contaminated food; Communicate effective ways of managing risk factors associated with different family members; Demonstrate the safe use and care of available appliances which save time when looking after the family. 	<p>Under and over nutrition when they:</p> <ul style="list-style-type: none"> Investigate the factors in society that cause nutritional-related disease; Make recommendations to bring about change at a personal, family and community/ society level. Make recommendations for overcoming the above problems associated with Soifua maloloina.

STRAND 4: CONSUMER RESPONSIBILITIES

SUB-STRAND: THE RIGHTS AND RESPONSIBILITIES OF CONSUMERS

MAJOR LEARNING OUTCOME

From their study of CONSUMER RESPONSIBILITIES students will understand **the rights and responsibilities of consumers**.

YEAR 9	YEAR 10	YEAR 11	YEAR 12
<p>Family members rights and responsibilities as consumers when they:</p> <ul style="list-style-type: none"> • Describe the existing regulations and policies that relate to consumer rights and responsibilities in Samoa; • Demonstrate the skills needed when making a complaint e.g., writing a letter, returning unsatisfactory goods; • Contrast the needs and wants of a family living in a rural and urban situation in Samoa. <p>The decision-making process when they:</p> <ul style="list-style-type: none"> • Apply decision-making skills in a range of different retail situations relating to individual and family choice; • Investigate the effect of the media and advertising on the decisions made by different family members; <p>Existing regulations policies for consumers when they:</p> <ul style="list-style-type: none"> • Explore the issues that can lead to personal grievances and complaints. • Investigate the reasons for personal grievances and complaints. <p>Catering and hospitality services when they:</p> <ul style="list-style-type: none"> • Identify and compare the expectation of the public using the following facilities e.g., hotels, restaurants, take away food establishments. 	<p>Students will be able to investigate and develop their skills and understanding of:</p> <p>Existing regulations policies for consumers when they:</p> <ul style="list-style-type: none"> • Explore the issues that can lead to personal grievances and complaints. • Investigate the reasons for personal grievances and complaints. <p>Catering and hospitality services when they:</p> <ul style="list-style-type: none"> • Identify and compare the expectation of the public using the following facilities e.g., hotels, restaurants, take away food establishments. 	<p>Students will be able to investigate and develop their skills and understanding of:</p> <p>Existing regulations policies for consumers when they:</p> <ul style="list-style-type: none"> • Explore the issues that can lead to personal grievances and complaints. • Investigate the reasons for personal grievances and complaints. <p>Catering and hospitality services when they:</p> <ul style="list-style-type: none"> • Identify and compare the expectation of the public using the following facilities e.g., hotels, restaurants, take away food establishments. 	<p>Students will be able to investigate and develop their skills and understanding of:</p> <p>Existing regulations policies for consumers when they:</p> <ul style="list-style-type: none"> • Explore the issues that can lead to personal grievances and complaints. • Investigate the reasons for personal grievances and complaints. <p>Catering and hospitality services when they:</p> <ul style="list-style-type: none"> • Identify and compare the expectation of the public using the following facilities e.g., hotels, restaurants, take away food establishments.

STRAND 4: CONSUMER RESPONSIBILITIES		SUB-STRAND: THE RESPONSIBILITIES OF SERVICE PROVIDERS		
		MAJOR LEARNING OUTCOME		
		From their study of CONSUMER RESPONSIBILITIES students will understand the responsibilities of service providers.		
YEAR 9	YEAR 10	YEAR 11	YEAR 12	
The effectiveness of services provided in the community when they:	The characteristics of goods and services when they:	Students will be able to investigate and develop their skills and understanding of:	The principle that the customer is always right when they:	Contemporary issues when they:
<ul style="list-style-type: none"> Identify the services available in the community to support the family; Compare the services provided in the urban and rural environment; Describe how well consumer needs are met in terms of services provided for the family in a rural and urban environment e.g., safe water supply, health care, public transport; Make recommendations to improve services where necessary. 	<ul style="list-style-type: none"> Investigate the characteristics and importance of good customer service; Compare and contrast the differences between services providers e.g., local and overseas businesses and government and private businesses. 	<ul style="list-style-type: none"> Investigate and understand the principles of effective customer service; Describe the appropriate personal characteristics and attitudes of a service provider e.g., smile, verbal and body language; Demonstrate the skills needed in a range of customer service situations e.g., waiter, receptionist, shop assistant, vendor; Communicate effective ways of handling customer complaints. 	<ul style="list-style-type: none"> Investigate the relationship between food production, promotion, advertising and the consumption of fast foods; Explore career opportunities related to the food service, catering and hospitality sectors. 	<ul style="list-style-type: none"> Investigate the relationship between food production, promotion, advertising and the consumption of fast foods; Explore career opportunities related to the food service, catering and hospitality sectors.

STRAND 4: CONSUMER RESPONSIBILITIES

SUB-STRAND: RESOURCE MANAGEMENT

MAJOR LEARNING OUTCOME
From their study of CONSUMER RESPONSIBILITIES students will understand **the resource management**.

YEAR 9	YEAR 10	YEAR 11	YEAR 12
<p>Methods of managing resources for the family when they:</p> <ul style="list-style-type: none"> Identify the different resources available to the individual e.g., time, money, skills; Demonstrate skills in resource management, making recommendations for any necessary improvements; Compare and contrast the methods of managing resources available to the family in an urban and rural environment e.g., the supermarket versus locally grown products; availability of time; <p>Students will be able to investigate and develop their skills and understanding of:</p> <p>Effective use of resources for the family when they:</p> <ul style="list-style-type: none"> Identify the steps in goal-setting and apply them to different family situations; Discuss the advantages of goal-setting for the family; Explore how time management skills can enhance family living; <p>The effect lifestyle has on resource management when they:</p> <ul style="list-style-type: none"> Discuss the possible reasons for the increase of expenditure on prepared food e.g., takeaways, convenience foods, meals out. <p>The importance of maintaining resources when they:</p> <ul style="list-style-type: none"> Demonstrate appropriate methods of caring for technological equipment used in food or clothing production e.g., the stove, microwave oven, refrigerator, sewing machine, over locker; Produce a marketable product that conserves and recycles available resources; Communicate information about a product and evaluate it. 			

STRAND 5: DESIGN AND TEXTILES			
SUB-STRAND: FIBRES AND FABRICS			
MAJOR LEARNING OUTCOME From their study of DESIGN AND TEXTILES students will understand fibres and fabrics .			
YEAR 9	YEAR 10	YEAR 11	YEAR 12
<p>Properties of natural fibres and fabrics and the effect technology has in creating regenerated cellulose and synthetic fibres when they:</p> <ul style="list-style-type: none"> Explore the process of changing natural fibres into yarns and the effect this has on the properties of the fabric e.g., <i>coconut, pandanus, cotton</i>; Describe the advantages and disadvantages of natural fibres for clothing and household items in Samoa; Contrast the properties of natural woven and knitted fabrics; Explore simple techniques of block and resist printing, explaining why these methods are suitable for natural fabrics, e.g., <i>vegetable prints, tie and dye</i>; Demonstrate plain weaving to make a simple household item e.g., <i>a mailo (food plate), pola sisi (coconut blinds), pola vai (coconut mat), ili (fan), mama e tuu ai sololina (serviette ring, warp and weft (plain weaving)</i>; Investigate the resources, processes used to make regenerated cellulose, synthetic fibres and their effect on the properties of these fibres; and discuss reasons for the development of regenerated cellulose and synthetic fibres; Make recommendations about caring of regenerated cellulose and synthetic fibres and compare/contrast the strength and resilience of natural yarns with cellulose and synthetic yarns. 	<p>The principles of adding colour and design to textiles, fibres and fabrics when they:</p> <ul style="list-style-type: none"> Explore the colour wheel and the effects different colours have on people; Investigate the different ways of adding colour, texture and design to both traditional and manufactured textiles, fibres and fabrics e.g., <i>pandanus, fau, cotton</i>; Analyse the reasons for the unsuitability of some methods of decoration for certain fibre and fabrics; Demonstrate an understanding of the principles of roller and screen printing by applying one of these methods to fabric printing; Evaluate outcomes commenting on the suitability of the fabric chosen for the printing method. 	<p>The different properties of fibres and fabrics when they:</p> <ul style="list-style-type: none"> Experiment with natural fabrics to determine their properties of strength, elasticity, shrinkage and absorbency; Investigate the preparation and traditional uses of <i>u'a</i> and <i>fau</i>; Experiment with different types of natural dyes e.g., those used in making siapo (<i>tapa</i>) cloth; Investigate the making of siapo (<i>tapa</i>) cloth; Design and make a craft item that incorporates siapo OR 	<p>The properties of a variety of fibres and fabrics when they:</p> <ul style="list-style-type: none"> Compare the characteristics of natural and synthetic fabrics for strength, durability, elasticity, absorbency, resilience and heat resistance; Investigate special finishes on fabrics e.g., <i>anti-stat, flame resistance, thermal finish</i>; Differentiate between yarn e.g., spun and continuous filament and fabric construction, e.g., <i>weaving and crochet</i>; Predict fabric performance based on knowledge of fibre, yarn and fabric construction.

STRAND 5: DESIGN AND TEXTILES

SUB-STRAND: THE TECHNIQUES AND PROCESSES OF TEXTILE PROJECTS

MAJOR LEARNING OUTCOME

From their study of DESIGN AND TEXTILES students will understand **the techniques and processes of textile projects.**

YEAR 9		YEAR 10	YEAR 11	YEAR 12
<p>Basic constructions, sewing techniques and applying appropriate techniques and processes for individual practical projects when they:</p> <ul style="list-style-type: none"> Demonstrate appropriate basic hand sewing techniques and processes with textiles e.g., running stitch, sewing buttons, mending and patching; Identify the function and safe use of equipment for the construction of machine sewn textile items e.g., sewing machine; Demonstrate the selection and use of a basic pattern to construct a garment incorporating simple techniques e.g., plain seams; Demonstrate laying out and safe cutting out techniques to prepare fabric for construction e.g., of a pillow case, table cloth, patchwork item; Experiment with a range of seam and seam finishes assessing their suitability for different purposes; Demonstrate creativity by applying surface decoration e.g., applique, embroidery, patchwork; Evaluate the outcomes of the practical project against the original specifications of the brief. 				
<p>Adapting patterns and selecting appropriate fabric for individual practical projects when they:</p> <ul style="list-style-type: none"> Make decisions about the specifications of practical problems relating to clothing needs e.g., shirt, skirt for school social; Communicate ideas being explored using concept drawings; Select an appropriate design solution indicating the type of fabric and the techniques and processes to be used in construction e.g., French seams for fine fabric; Demonstrate the selection and use of a basic pattern to construct a garment incorporating simple techniques e.g., plain seams; Demonstrate laying out and safe cutting out techniques to prepare fabric for construction e.g., of a pillow case, table cloth, patchwork item; Experiment with a range of seam and seam finishes assessing their suitability for different purposes; Demonstrate creativity by applying surface decoration e.g., applique, embroidery, patchwork; Evaluate the outcomes of the practical project against the original specifications of the brief. 	<p>Production techniques used in manufacture of textile items when they:</p> <ul style="list-style-type: none"> Research the factors that need to be taken into consideration when manufacturing a textile item for retail; Develop a plan to meet a limited production run of identical textile items to be sold for profit; Compare and contrast the different techniques and processes used in manufacturing clothing domestically and commercially; Report on the effectiveness of quality control in completing the textile items to a marketable standard. 	<p>Production techniques used in manufacture of textile items when they:</p> <ul style="list-style-type: none"> Select appropriate materials and use safe practices when creating printed fabrics using a range of methods e.g., block, roller, batik; Select appropriate materials and use safe practices when creating products that incorporate different types of structural design e.g., applique, embroidery, crochet; Explore the influence of technology on textile prints and design using computer aided design (CAD); Produce a design brief for specific needs and purposes which incorporates structural and applied design. 	<p>Structural and applied design when they:</p> <ul style="list-style-type: none"> Select appropriate materials and use safe practices when creating printed fabrics using a range of methods e.g., block, roller, batik; Select appropriate materials and use safe practices when creating products that incorporate different types of structural design e.g., applique, embroidery, crochet; Explore the influence of technology on textile prints and design using computer aided design (CAD); Produce a design brief for specific needs and purposes which incorporates structural and applied design. 	
<p>Students will be able to investigate and develop their skills and understanding of:</p>				

STRAND 6: COMMUNICATION IN FOOD AND TEXTILE TECHNOLOGY		
MAJOR LEARNING OUTCOMES		
In their study of FOOD AND TEXTILE TECHNOLOGY students will participate effectively through developing their oral communication skills.		From their study of CONSUMER RESPONSIBILITIES students will participate effectively through developing their oral communication skills.
YEAR 9	YEAR 10	YEAR 11, 12
<p>Students will be able to investigate and develop their skills and understanding of:</p> <p>Oral communication when they:</p> <ul style="list-style-type: none"> Express ideas appropriately in various group activities; State reasons for their opinions e.g. discussions, planning, state advantages/disadvantages, state comparison/contrast; Give brief descriptions of stages in processes and the effects on the particular resource and state principles underlying technological practice involved e.g., preservation of food, keeping food safe, changing natural fibres into yarns, plain weaving; Use language to state comparison and contrast e.g., compare services, contrast properties; Use paraphrase to give an oral interpretation of information presented visually in charts, diagrams, posters, pictures; Give a brief oral report of their findings from an investigation; State clearly what a problem is, probable causes, and likely solutions; Give brief definitions and explanations of concepts and relationships between concepts. 	<p>Students will be able to investigate and develop their skills and understanding of:</p> <p>Oral communication when they:</p> <ul style="list-style-type: none"> Communicate effectively by sharing ideas, offering advice, opinion and information and reacting to the contributions of others; Demonstrate ability to develop a topic in subject related situations e.g., reporting, describing, comparing, contrasting, state cause and effect, consider interrelationships between concepts; State principles and explain their significance and application to a number of situations; State principles and explain their significance and application to a number of situations; Use analysis, give an oral evaluation and extended reasons for their points of view about a situation; Discuss a plan for an investigation/ research project. 	<p>From their study of CONSUMER RESPONSIBILITIES students will participate effectively through developing their oral communication skills.</p> <p>Oral communication when they:</p> <ul style="list-style-type: none"> Participate in various speaking activities such as seminars, group presentations, oral reports, debates, interviews, review; Summarise main ideas from written or spoken texts using precise language; Select and sustain the use of language and style appropriate to a given situation, purpose, audience; Take notes from extended presentations and draw their own conclusions and make inferences based on the information given; Use oral language to criticise, evaluate, plan and to influence the thinking of others e.g., making a case for lifestyle changes such as in nutritional practices; Defend a point of view applying analysis and principles; Listen to evaluate, draw inferences and make judgements; Discuss ideas for a plan of action, research.

STRAND 6: COMMUNICATION IN FOOD AND TEXTILE TECHNOLOGY

MAJOR LEARNING OUTCOME

In their study of FOOD AND TEXTILE TECHNOLOGY students will **participate effectively through developing their written communication skills.**

YEAR 9

Students will be able to investigate and develop their skills and understanding of:

Written communication when they:

- Use the technical vocabulary of each topic;
- Locate, extract and interpret information from appropriate materials such as signs, maps, charts, graphs, special publications, advertisements and newspapers;
- Recognise the language structures that signal the logical organisation of information in:
 - definitions;
 - chronological sequence;
 - compare/contrast;
 - descriptions of processes;
 - procedural texts;
 - evaluation;
- -recommendations;
- -cause and effect;
- -problem/solution;
- -policies;
- -justification;
- -report of an investigation.

Written communication when they:

- Introduce the use of words from the academic word list, use the technical vocabulary of each topic;
- Use reference materials: locating, evaluating, selecting information;
- Use a variety of sentences simple, compound, and complex;
- Recognise the language structures that signal the logical organisation of information:
 - summary, conclusion;
 - evaluation;
 - principles;
 - recommendations;
 - Write curriculum vitae, covering letters and other business related correspondence;
 - Analyse the problem expressing possible solutions, assumptions, consequences, and conclusions.
- -extended definitions;
- -classifications;
- -analysis;
- -reports.

YEAR 10

YEAR 11

YEAR 12

MAJOR LEARNING OUTCOME
From their study of CONSUMER RESPONSIBILITIES students will **apply their oral and their written communication skills to investigate, research, and report projects.**

Students will be able to investigate and develop their skills and understanding of:

Written communication when they:

- Use words from the academic word list and the technical vocabulary of each topic in a variety of situations at this year level e.g., reports;
- Recognise the language structures that signal the logical organisation of information: 1) research reports; 2) reviews; 3) evaluations.
- Extract more detailed information and write coherent, longer texts integrating information from multiple sources;
- Write research reports using illustrations, graphs or charts;
- Write an analysis of a problem expressing possible solutions, assumptions, consequences, and conclusions. Evidence from other sources is cited to support proposed solutions;
- Take notes, select and synthesise relevant information, plan text sequence and write short essays using different methods of development: comparison, extended definition, cause and effect;
- Follow the conventions of academic writing in their presentation and bibliographies.

STRAND 6: COMMUNICATION IN FOOD AND TEXTILE TECHNOLOGY	
MAJOR LEARNING OUTCOME	In their study of FOOD AND TEXTILE TECHNOLOGY students will apply their oral and their written communication skills to investigate, research, and report projects.
YEAR 9	Students will be able to investigate and develop their skills and understanding of: Written communication when they: <ul style="list-style-type: none">• Express ideas in simple paragraphs to explain principles of technology in certain practices;-express cause and effect;-explain processes;-give basic definitions;-state problems/solutions;-state comparison/contrast;-make evaluative comments.
YEAR 10	Written communication when they: <ul style="list-style-type: none">• Write paragraph summaries, paraphrases of information presented visually;• Record information following conventions of particular texts e.g. recipes, safety procedures.• Combine paragraphs to write increasingly detailed descriptions and explanations, compare/contrast texts, letters of complaints etc.
YEAR 11	Major Learning Outcome From their study of CONSUMER RESPONSIBILITIES students will apply their oral and their written communication skills to investigate, research, and report projects. Communicating information, ideas and opinions through increasingly complex and varied texts when they: <ul style="list-style-type: none">• Use mind maps and other forms of visual representations to express key ideas and show relationships between ideas e.g., flowcharts, diagrams, picture stories etc.
YEAR 12	Major Learning Outcome Students will be able to investigate and develop their skills and understanding of: Communicating information, ideas and opinions through increasingly complex and varied texts when they: <ul style="list-style-type: none">• Write to express ideas in complex paragraphs to explain e.g., the significance of certain principles and their applications in practice;• Write reports of investigations, research projects, stating generalisations from their findings;• Introduce the conventions of academic writing in their Presentations e.g., citing references in writing, quotations, bibliography.

Terms and Definitions

Community

People having common rights etc, refers to the Public, and people in general

Concept Drawing

Sketching ideas, and labelling them to show a range of possible solutions to a design brief.

Consumer Responsibilities

The process of raising awareness, increasing knowledge, developing skills and clarifying values to enable consumers to purchase wisely and take appropriate steps when goods and services offered are inadequate.

Design

- A statement in words, or pictures or a diagram;
- Structural design - having architectural, constructive or skeletal properties;
- Applied design - practical rather than theoretical.

Design Brief

A brief statement which sets out the problem to be solved or instructions about the product you have to make.

Closed Design brief is a statement that tells the designer exactly what the client needs.

Open Design is a statement that gives the designer some choices of creativity in skills, materials & tools to see that it meets the clients expectation.

Design Process

A series of actions, taking place in a planned manner that produces a change or new development. Concept drawings usually form part of the preliminary action when ideas are explored.

Design Solution

The outcome or result of solving a design brief or problem.

Disassemble

Take apart a product to find out how it is made and what it is made from.

Environment

The physical surroundings and conditions that affect people's lives.

Evaluate

Based on findings from an investigation, a method of production or tests carried out on end products. Students describe their findings, state their preferences with reasons and make recommendations for improvement, where necessary.

Marketable Quality

A product, plan or service developed that reaches a standard suitable for selling for profit.

Modify

An alteration to resources e.g., ingredients, materials and/or the method/order of construction to make a product more suitable for a specified purpose.

Multiplicity

A great number, various options possible.

Needs

The requirements, conditions or circumstances that need to be met when solving a problem or design brief.

Technology

Our ability to apply our knowledge, our skills, our understanding to design, make and improve aspects of everyday living.

Process

A 'process' is a number of related techniques or a planned sequence, a systematic series of actions such as stir-fry vegetables, making bread or putting a sleeve into a blouse.

Product

An object or service produced by following a plan of work.

Practical Activities

A task that involves students working with available resources to produce partial solutions to everyday problems.

Resource Management

Using available resources wisely to achieve maximum benefit.

Recycling

Reusing leftover products for a different purpose to conserve resources and avoid waste.

Sensory Evaluation

A technique used to test the quality of a food product e.g., appearance, aroma, flavour, texture.

Soifua Maloloina

Describes the health and well-being of an individual, family or country. It embodies the whole concept of health. It is not only the absence of disease but also being physically, mentally, emotionally, socially and spiritually healthy.

Society

Number of persons associated for a common interest, community, partnership, and the Public.

Specification

A detailed statement usually derived from a design brief which describes the characteristics of the product or system to be designed e.g., details of appearance, size, shape, flavour, colour, nutritional content, cost.

Synthetic Fibre

A fibre that has been manufactured usually from chemicals. Used on its own to make strong crease resistant fabrics or mixed with natural fibres to improve care qualities.

Technique

A 'technique' is a single activity such as grate, chop, peel, boil used to complete a process like making a salad or a sauce. Machining and slip stitch are examples of techniques used with textiles.

