



**MINISTRY OF EDUCATION AND TRAINING**  
**Government of Tonga**

# **Curriculum Framework**

## **for Core Subjects at Class Levels 1 - 8**

**FINAL**

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# Curriculum Framework

## For Core Subjects at Class Levels 1 – 8

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## Section 1: Introduction

### **Purpose of the curriculum framework**

The purpose of this curriculum framework is to provide an overarching document that outlines all the components of the revised curriculum (2022). It sets out the rationale for the revisions and shows how the revised curriculum builds logically on previous versions. It presents the broad aims and learning outcomes of the curriculum, the principles and values that underpin them and the overarching vision and mission of the curriculum. It explains the new model of competency-based intended learning outcomes upon which the design of this curriculum is based in line with established principles of and approaches to curriculum design and development. This model builds upon the previous outcomes-based approach, but offers a more systematic, coherent, and streamlined approach that seamlessly integrates both curriculum and assessment. The curriculum framework also outlines the curriculum structure and the approach to integrating important cross-cutting themes within them. It also explains the educational philosophy upon which the curriculum is based and approaches to teaching, learning and assessment that are fundamental to that philosophy. Finally, it provides guidance for teacher preparation and teacher professional development, developers of resources and textbooks and other resources and requirements for implementation, monitoring, and evaluation of the curriculum. In short, the curriculum framework provides the structure upon which other more detailed curriculum documents such as subject syllabuses, assessment frameworks, teachers' guides, student textbooks and other support materials may be developed.

### **Development of the curriculum framework**

The curriculum framework is based upon several key points of reference. The first of these was a comprehensive review of the current curriculum framework and associated subject syllabi and learning outcomes for English, mathematics, and science. This also involved benchmarking to curricula internationally with the core subjects of the curriculum benchmarked to TIMSS<sup>1</sup> for mathematics and science and to the New Zealand curriculum for English and Tongan Language.

Development of the curriculum framework has also been informed by relevant Government policy statements and documents on education, including the Education Act (2013), Tonga Education Policy Framework 2004-2019, Curriculum Framework for Tonga (2008-2012): quality schooling for a sustainable future, draft Tonga Education Strategic Policy Framework 2022-2032, Lakalaka Policy Framework (2011, Minimum Service Standards (n.d.), Faiako ma'a Tonga (Teacher for Tonga) framework, and the forthcoming National Language Policy.

The main components of the curriculum framework have been the subject of ongoing and widespread local consultation throughout their development. These consultations have included focus group meetings with representative groups of primary school teachers of the four core subjects as well as presentations and discussions with twelve other stakeholder groups. These include presentations and discussions held in Tongatapu, Vava'u, Ha'apai and 'Eua. A full list of

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<sup>1</sup> Mullis, I. V. S., & Martin, M. O. (Eds.). (2017). *TIMSS 2019 Assessment Frameworks*. Retrieved from Boston College, TIMSS & PIRLS International Study Center website: <http://timssandpirls.bc.edu/timss2019/frameworks/>

these consultation sessions is included in Annex I. In addition, a preliminary survey was conducted into the curriculum and pedagogical knowledge of teachers of the core subjects and classroom observations were also conducted to gain insights into how the current curriculum was enacted in the classroom.

The approach to the design of the curriculum framework has been informed by recognised international practice in developing national frameworks for curriculum. Notably, the macro structure of the curriculum framework is based upon approaches set out in the extensive work conducted by UNESCO International Bureau of Education (Marope, 2017., Stabback, 2016., UNESCO-IBE, 2017a, 2017b, 2018).

The inputs and responses from the consultations, document reviews, survey and classroom observations have all been carefully considered and contributed to the ongoing development of the present version of the curriculum framework.

### **Background to the curriculum revision**

Like Ministries of Education all over the world, the Tongan Ministry of Education and Training (MET) is committed to developing the best possible education system it can so that the children of Tonga can develop the competences they need to thrive and succeed both locally and globally in the 21<sup>st</sup> century. The school curriculum and assessment systems are key components of any education system and need to continuously adapt to be able to provide students with opportunities to develop the competences they need to study, live, and work in a fast changing and ever uncertain world.

Following low results in recent high stakes national examinations, the MET decided to conduct comprehensive reviews of the current outcomes-based school curriculum and assessment systems. The reviews identified substantial inconsistencies in the range and types of learning outcomes of core subjects. These include a disproportionate number of low-level learning outcomes and a limited number of outcomes that reflect subject specific skills and processes, and that target higher order cognitive skills. In general, there was also weak alignment of assessment and curriculum outcomes. Furthermore, comparison of core subjects to international benchmarks revealed gaps in content, issues with coherent progression across year levels and weak content matches in some subjects.

The MET has decided to redevelop the curriculum and assessment system in stages to address these issues. The first stage involves redeveloping the curriculum and assessment system for the four core subjects of English, Mathematics, Science and Tongan language for Years 1-8. This will be followed by redevelopment of the curriculum of the four core subjects for Years 9 – 13, and finally by redevelopment of non-core or foundation subjects. At this stage, this curriculum framework is designed to guide the development of the four core subjects at the Primary Phase of Class Levels 1-8. The Curriculum Framework will be further developed at a later stage to incorporate guidance on the revision of the curriculum for the Secondary Phase.

The design of the revised curriculum and assessment system is based upon a new and more streamlined model of competency-based Intended Learning Outcomes (ILOs). The model and its learning outcomes are unique to the Tonga context and ensure that the revised curriculum and assessment system are aligned with recognized international good practice.

The Universal Declaration of Human Rights (UN, 1948) affirms that education is a fundamental human right for everyone. Following increased access to education for large numbers of the world's



population, the focus has shifted to the need to provide quality education. This is captured in Sustainable Development Goal Number 4 Quality Education, which emphasises ensuring “inclusive and equitable quality education and promote lifelong learning opportunities for all” (UN General Assembly, 2015). This revised curriculum framework is designed to provide the platform upon which a quality education system is based for the benefit of all children and the future growth and development of the Kingdom of Tonga.

## Section 2: Overview of the education system in Tonga

Thirteen years of education are available to children in Tonga, plus 1 year of preparatory education at the Early Childhood Education (ECE) Level. The first eight years of school are compulsory and free for all children between the ages of 6 and 14. Following ECE, schooling is divided into three phases; namely, primary, secondary, and upper secondary (figure 1). In 2022 the Primary phase of schooling was extended from six years to eight years (Class 1 – 8). Thus, the Secondary School Entrance Examination (SEE) has now moved from the end of Class 6 to the end of Class 8 (also known as Form 2). The Secondary School Phase consists of two years and is followed by the three-year Upper Secondary School Phase making a total of five years. The secondary level (class 9 – 10) has no national examinations. Students take national examinations at the end of each year of the Upper Secondary phase and may also take regional examinations at the end of Year 11 and 13. Successful completion of the national examinations is required to progress to the next class level.

School phase	Class level	Age	No. of years in school	National Examinations	Regional Examinations
Early childhood	Prep	5- 6	1	n/a	n/a
Primary	1 – 8	6-14	8	Class 8: Secondary School Entrance (SEE)	n/a
Secondary	9–10	15–16	2	n/a	n/a
Upper secondary	11–13	17-19	3	Form 6: Tonga Form 6 Certificate (TFSC) Form 7: Tonga National Form Seven Certificate (TNFSC)	Pacific Senior Secondary Certificate (PSSC) South Pacific Form Seven Certificate (SPFSC)

Figure 1: Overview of the education system

The formal school year consists of 40 weeks, which are divided into four terms, with each term consisting of a notional ten weeks. After considering exam weeks, public holidays, sports week, study days, time off due to bad weather, the number of weeks available for teaching the curriculum is normally 32-33 weeks. Normally there are 5 to 6 teaching periods in a day and between 25 to 30 periods in a week. In total this equates to approximately 825 hours of time for teaching and learning in the school year.

## Section 3: Vision and mission for education 2032

### Vision for education in Tonga

Education is the most valuable asset a person can possess. It is through education that individuals can achieve fulfilment, attain their goals, and improve their standard of living. At the same time a well-informed and educated people is also fundamental to the development and well-being of every society. Education in Tonga should help students achieve the appropriate balance between the needs of the individual and those of the community and wider society. This involves developing a strong Tongan sense of identity through preserving Tongan culture and values, but also developing the competences required to be resilient to survive and thrive in the face of the existential challenges of the increasingly uncertain world in which we live. Education should prepare students to be able to rise to the key challenges of our time including global pandemic, climate change, preservation of the environment, conservation, and management of natural resources.

The *Tonga Education Strategic Policy Framework 2022-2032*<sup>2</sup> (TESPF) is the guiding document that underpins the vision for excellence in education in the Kingdom for the next ten years. It envisages a future based on Lotu (faith), Fonua (culture, land, people) and education. It also recognises the need to strengthen collaboration and solidarity to meet the development needs of Tongan society and develop resilience in the face of the existential challenges of the 21<sup>st</sup> century. These concepts are captured in the vision for education 2032 as follows:

Excellence in education that is based on ‘Ko e ‘Otua mo Tonga ko hotau tofi’a’ (God and Tonga are our inheritance) and founded on our working together.

### Mission for education in Tonga

The national mission for education in Tonga sets out how the vision for Tongan education will be achieved. The national mission for education is:

Ke tau ngāue fakataha ke teu’i ‘a e kakai ‘o e fonuá ke nau a’usia ‘a ‘enau ngaahi taumu’a fisifisimu’á.

That we work together to prepare the people of our country, that they may achieve their aspirations.

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<sup>2</sup> Ministry of Education and Training (2022), *Tonga Education Strategic Policy Framework 2022-2032*, In Print, p. 13.

## Section 4: Overarching goals for education

The *Tonga Education Strategic Policy Framework 2022-2032* also sets out three overarching goals for education as follows:

1. Ako 'okú ne poupou'í 'a e mo'ui fakapotopotó

*An education that is of quality and that is relevant to our way of life, and which will therefore promote the resilience and sustainability of our people.*

2. Vahevahe taau 'a e ngaahi faingamālie akó

*That we share resources and ensure equitable access to education.*

3. Ngāue fakataha pea ke tākanga 'etau fohé

*That we all take responsibility for the education of our people through shared governance, leadership, and delivery as one.*

These goals of education support the new education vision for Tonga. The first goal emphasises a quality education that is relevant and promotes resilience sustainability. This is essential to respond and adapt in order to survive and thrive in the face of the existential threats of climate change and global pandemics.

The second goal relates to the first goal and focuses upon the need to improve equitable access to education among the 45 inhabited islands of Tonga. It recognizes the diversity of the student population and reaffirms that every student regardless of gender, location, disability, socio-economic status, religion, ethnicity, linguistic background, and age is entitled to access to quality education.

The third goal is based on the notions of collaboration and solidarity or working together to improve education. At the curriculum level this means providing a curriculum where students are provided with the opportunities to develop competences to take responsibility, exhibit initiative, and work collaboratively to develop and share knowledge, understanding and skills to investigate, solve problems and arrive at creative solutions.

## Section 5: Principles and values

The revised curriculum is designed to provide a framework within which the overarching goals of education, as they apply to learning and teaching in schools, may be achieved and contribute to realisation of the vision and mission of education in Tonga. The revised curriculum is designed based upon eight core principles. These eight principles inform both the approach to designing the curriculum and the range of content and learning experiences that are provided to students in the core subjects of English, Mathematics, Science and Tongan Language from Class Levels 1 – 8. In the future they will also underpin the design and development of the curriculum for class levels 9 – 13 and extend laterally to non-core subjects. Figure x below outlines each of the eight core principles.

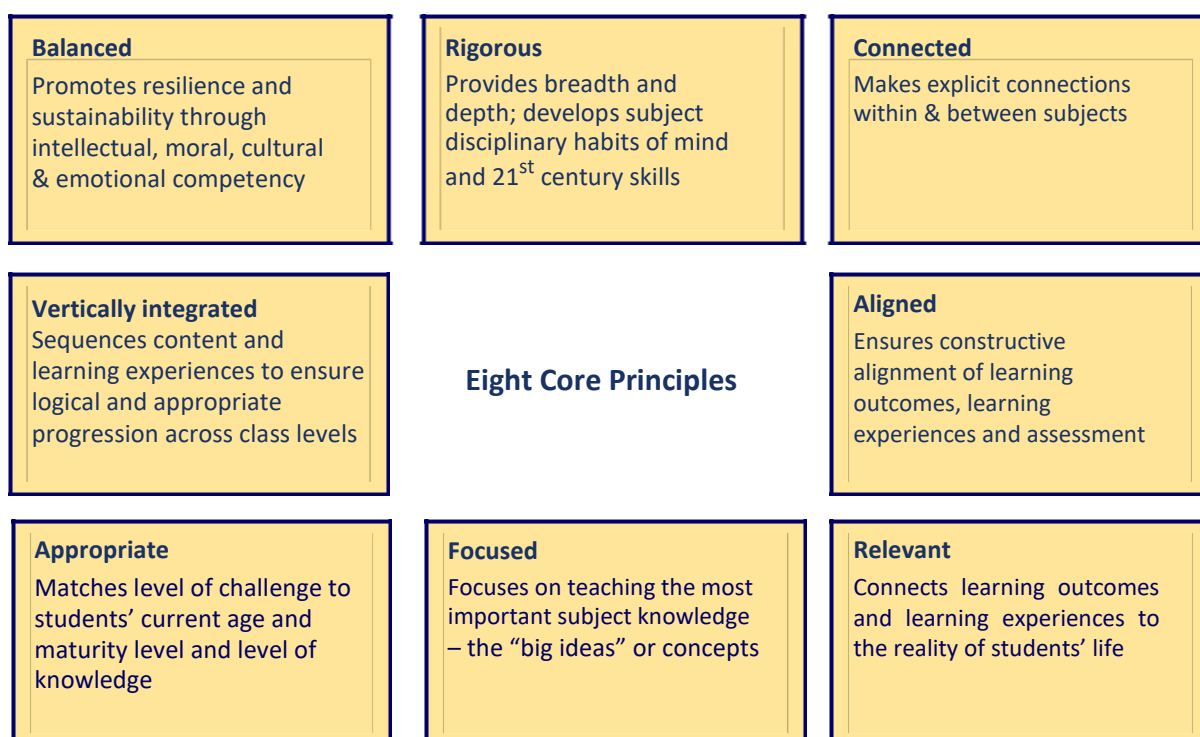


Figure 2: Core principles of the revised curriculum

In addition to the eight core principles, the design of the curriculum and its approaches to teaching and learning are also informed by five core values. The TESPF elaborates and reaffirms the core values that reflect the pillars of Tongan society and culture. These values underpin the approaches to teaching and learning that are advocated in the revised curriculum. They are also integrated within the general and subject specific competences that students should develop during their time in school.

### Core curriculum values

Tui faka-Kalisitiane

The TESPF emphasizes the relevance of Christian faith to how we teach and support our students to develop as well-rounded individuals. Integrating Christian values that are rooted in compassion and empathy for others within the curriculum and in the approaches to teaching and learning supports

the development of students' cultural identity as well as fostering a sense of community. It underpins the other values outlined below.

#### Faka'apa'apa

Respect is the foundation to establishing and maintaining relationships and working in collaboration with others. It applies equally to teachers and students and should underpin the nature of the relationships they have in their interactions with each other.

#### Lototō

Humility is critical for teaching and learning. It means that both teachers and students need to be open to feedback and accepting new knowledge and understanding; to have a positive attitude towards making mistakes and value that we learn from them. For teachers it means providing a safe space for students to make mistakes and learn from them.

#### Mamahi'i me'a

Loyalty and commitment are critical to teaching and learning. For the teacher it means commitment to the teaching profession and to one's students. This involves commitment to being a lifelong learner to constantly strive for growth and improvement; to use the curriculum responsibly; to include and work towards meeting the needs of all students; contribute actively to the profession and school; and foster a commitment to learning among students

#### Feveitokai'aki

Reciprocity is foundational to building a culture of collaboration and solidarity in the classroom. It requires teachers and learners to recognize each other's different strengths and areas that could be further developed. Just as learners can learn from their teachers, they can also learn from each other. Teachers need to provide opportunities in the classroom for students to engage in reciprocal learning by providing opportunities for them to collaborate on tasks that require them to take different roles and learn from each. At the same time teachers should always be open to learning from their students.

### **Mission of the curriculum**

Realisation of the aspirations articulated within the national vision and mission for education and the overarching goals for education are dependent upon the school curriculum providing the framework within which students can work towards developing the relevant competences required to achieving success as they progress on the educational journey in relation to the broad education goals. The mission of the curriculum mission is articulated as follows:

The revised curriculum is designed to provide students with content, opportunities, support, and guidance that enable them to develop the competences they need to study, live and work, and succeed both locally and globally in a fast changing and ever uncertain world.

## Section 6: A competency and outcomes-based curriculum

The revised curriculum builds upon the outcomes-based approach that has been used since 2012 but has introduced a new more streamlined model of competency-based Intended Learning Outcomes (ILOs). These are unique to the Tonga context while ensuring that the revised curriculum conforms with recognized international good practice. This new model of competency-based Intended Learning Outcomes provides a consistent and coherent approach to specifying ILOs across all core subjects to ensure that an appropriate number and range of basic, mid-range and advanced cognitive skills and subject specific competences are included. In addition, content has been reviewed to ensure that the core subjects are comparable to international benchmarks and that any gaps in content have been addressed. The revised curriculum will provide students with the opportunities to develop the competences they need to thrive and succeed as students and ultimately as citizens of a fast changing and ever uncertain world.

### What are competences?

Three definitions of competency have been referenced and informed the conceptualisation of a new model of competency-based learning outcomes, as follows:

‘A competence refers to a complex combination of knowledge, skills, understanding, values, attitudes, and desire which lead to ... action in the world in a particular domain.’

(Hoskins & Deakin Crick, 2010)

‘Competence is not static but may be developed and performed at increasingly complex levels, e.g., from beginner to advanced to expert.’

(Mahon, 2020)

‘Competence is the ability of a person or organisation to achieve particular levels of performance.’

(Mulder, 2001)

*Figure 3: Definitions of competence*

The key points are that competence is not just knowing about being able to do something, it is a holistic concept that involves all the points in the first definition. It is also a dynamic concept in the sense that one can become more and more competent. This relates also to the idea that different levels of competence can be identified through assessment.

### Model of competency-based learning outcomes

A new model of competency-based intended learning outcomes has been developed, which reflects the definitions above. The model is based upon features of the SOLO Taxonomy (Bigg, n.d., Biggs & Collis, 1982), which was used to develop learning outcomes for classes 7 -13 in the 2008-2012 curriculum; the revised version of Bloom’s Taxonomy (Anderson & Krathwohl, 2001., Bloom, 1956) and the influential international benchmark of Trends in Mathematics and Science Study (TIMSS) (2019). The model is designed to both meet the needs of Tonga and its students and to reflect international standards.

Like the SOLO Taxonomy, the model contains four competency levels and generic descriptions of what each level means in terms of student learning (figure 4). A notional percentage of ILOs are indicated for each competency level. The model provides a reference point for the development of four levels of Intended Learning Outcomes (ILOs) that progress from basic to advanced competency for each class level and for each subject. The subject specific ILOs are used to guide the development of the learning experiences provided for students.

<b>Level 4: Advanced competency</b>	<b>Percentage of ILOs</b>
<p>Involves deep and abstract thinking and understanding, including the ability to</p> <ul style="list-style-type: none"> <li>• examine and analyse information critically, judge its value and draw conclusions</li> <li>• extend and apply understandings to new, unfamiliar, or complex situations</li> <li>• use information to generate and create new ideas, products, or ways of seeing things</li> </ul>	20%
<b>Level 3: Proficient competency</b>	<b>Percentage of ILOs</b>
<p>Involves integrating a number of points in a logically related manner, including the ability to</p> <ul style="list-style-type: none"> <li>• take information apart, explore the relationships among the parts and reconstruct in a new form</li> <li>• apply knowledge and understanding of concepts, information, and the relationships among them in new situations</li> </ul>	30%
<b>Level 2: Intermediate competency</b>	<b>Percentage of ILOs</b>
<p>Involves knowing and interpreting facts, concepts, and procedures, including the ability to</p> <ul style="list-style-type: none"> <li>• recognise, recall, remember and interpret information</li> <li>• provide responses with multiple unrelated points</li> </ul>	30%
<b>Level 1: Basic competency</b>	<b>Percentage of ILOs</b>
<p>Involves knowing basic facts and procedures, including the ability to</p> <ul style="list-style-type: none"> <li>• recognise, recall, and remember given information</li> <li>• provide responses based on a single point</li> </ul>	20%

*Figure 4: Competency levels in the revised curriculum*

### **Structure of the model of competency-based learning outcomes**

The four levels of competency outlined above are used to inform development of Intended Learning Outcomes (ILOs) for core subjects at each class level. The curriculum model comprises two levels of ILOs together with content specifications that are linked to the ILOs (see figure 5).

Each subject is divided into a number of strands and sub-strands. A single general Major Learning Outcome (MLO) is then specified for each subject strand. The subject strands include several sub-

strands, each of which has a manageable number of Key Learning Outcomes (KLOs). The KLOs provide clear indicators of the competences that students should be able to develop and demonstrate through their learning, classroom assessment, end of year or national examinations.

Each sub-strand also contains detailed Content Specifications. The Content Specifications define the core content areas of the sub-strand and highlight more detailed content within the content areas. Finally, the content specifications contain examples of Key Learning Experiences (KLEs). The KLEs provide opportunities for students to work towards developing specific competences and achieving the relevant KLOs.

Each KLO comprises at least one action verb that is drawn from one of the four levels of competency. The Key Learning Experiences are incorporated in the Pupils Books together with other supporting activities and exercises. Guidance on using the KLEs are provided in the Teachers' Guides.

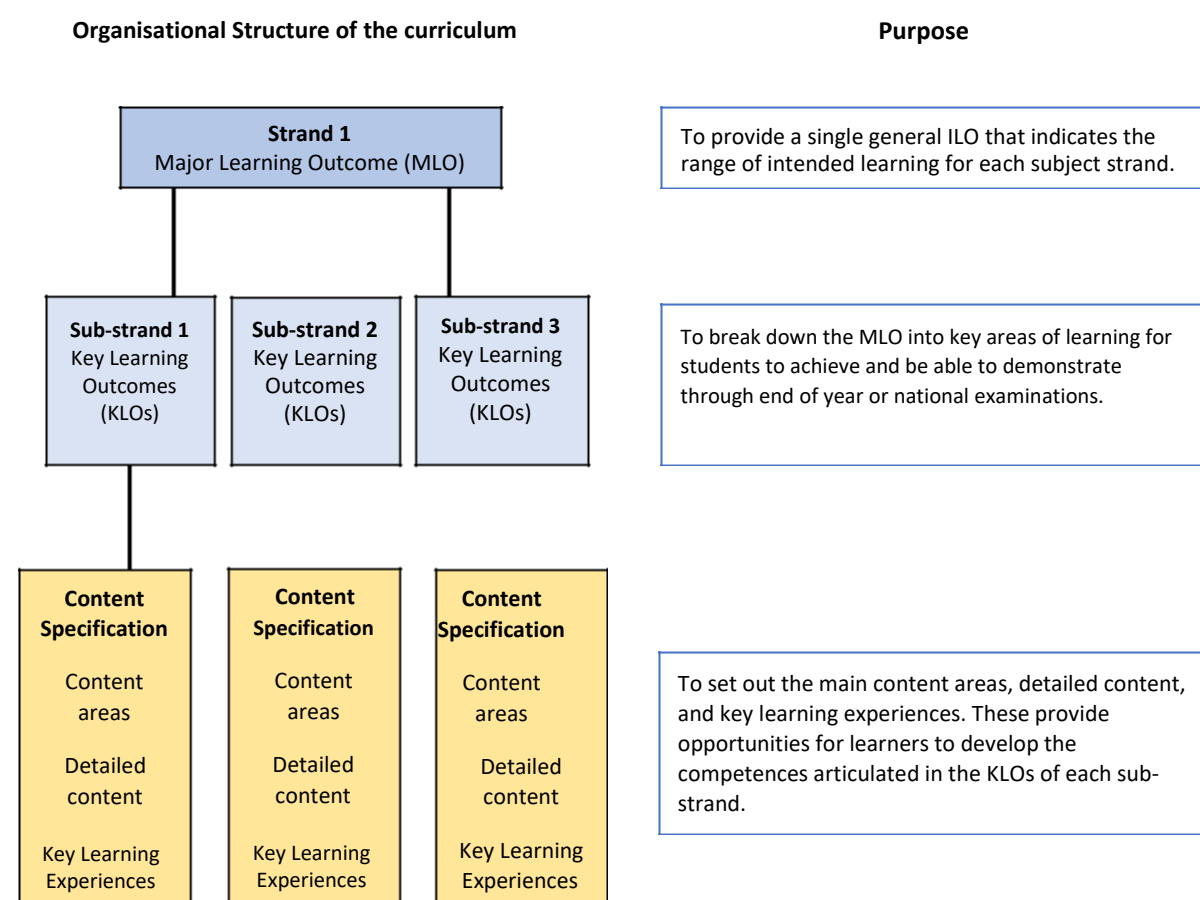


Figure 5: Overview of the curriculum structure

The KLOs and content specifications are used as the basis for teachers' planning, teaching and classroom assessment. Teachers may refer to KLOs and relevant content specifications to inform how they plan for students' learning through Key Learning Experiences (KLEs) in individual lessons or larger units of work. They also inform the teachers' decisions about when and how to conduct classroom assessment. KLEs are an important component of the revised curriculum. They are rich learning tasks that include opportunities for learners to consolidate, extend or apply their learning. They normally comprise multistage tasks and are frequently linked to developing 21<sup>st</sup> century skills or solving problems related to real life situations.



## Section 7: Curriculum innovations

This section briefly explains the range of innovations that are included within the revised curriculum for Tonga. The design of the new model of competency-based learning outcomes described above is a major innovation, which brings a systematic and consistent approach to the development of each subject across the class levels and influences all other aspects of the curriculum. Details of the changes to the curriculum as a result of this innovation are explained below.

### Reorganisation of subject strands and sub-strands

The strands and sub-strands for the four core subjects have been reorganised and, in most cases, renamed to better align with recognised international practice, eliminate gaps in content and provide pathways to ensure clear and coherent progression from one class level to the next.

### Reduction in number of ILOS

Another major change that is aimed to provide a more systematic and streamlined curriculum is that there is a significant reduction in the number of Intended Learning Outcomes for each subject. In the existing 2012 curriculum, as already noted, the number of learning outcomes varies greatly from subject to subject. In most subjects the learning outcomes take second place to the so-called 'DO' Statements. The 'DO' statements are a result of 'unpacking' learning outcomes into detailed statements of content. In some subjects this has resulted in several hundred statements of discrete aspects of learning. In addition, the 'Do' statements also act as assessment criteria. This has had the effect of reducing learning to mainly memorising discrete aspects of content. Furthermore, there are so many statements that teachers are unable to teach them all, which is also distorting what is prioritised in teaching for examinations.

The revised curriculum now has very clearly articulated Major Learning Outcomes (MLOs) for each strand and a manageable number of Key Learning Outcomes (KLOs) for each sub-strand. The Key Learning outcomes specify the range of competences students are expected to develop for each sub-strand and are used to design and develop the range of Key Learning Experiences that will provide opportunities for students to develop these competences. Furthermore, the KLOs are explicitly assessed.

Subject	Strands	Sub-Strands	KLOs
Mathematics	4	11	38
Science	4	15	35
English	3	4	34
Tongan Language	3	5	34

### Replacement of DO statements with success criteria

In addition to reducing the number of KLOs, the revised curriculum has replaced the 'DO' statements with a new element; namely, Success Criteria. The Success Criteria make explicit what students need to do to develop and demonstrate that they have achieved the KLO. They are short learner friendly statements and are included in both the Pupil's Books and Teacher's Guide. The teacher is

expected to share and discuss the success criteria with students at the beginning of the lesson. S/he may also revisit the success criteria during the lesson to monitor student learning and adjust teaching, or at the end of a lesson or unit to review student learning. In this way, they also form an essential part of the classroom assessment process. It is very important to note that they are not used for formal assessment purposes and there is no need to keep formal records of them. As mentioned above, it is only the much smaller number of KLOs that are formally assessed and reported upon.

### **Introduction of KLEs**

As the new KLOs provide more holistic statements of intended learning, new types of student learning activities have been introduced. In order to develop the holistic competences, students are provided with a number of Key Learning Experiences (KLEs) for each sub-strand. The KLEs are linked to specific KLOs and are conceptualised as rich multistage learner-centred activities that provide opportunities for students to develop and apply a wide range of competences. Required to achieve the KLO. The design features of the KLEs are explained in greater detail in Section 9 Approaches to learning and teaching.

### **Alignment of curriculum and assessment**

A key design principle is the seamless integration and alignment of curriculum and assessment. This is based on the concept of constructive alignment (Biggs, 1996 2014). Biggs explains,

“Constructive alignment (CA) is a design for teaching in which what it is intended students should learn, and how they should express their learning, is clearly stated before teaching takes place. Teaching is then designed to engage students in learning activities that optimise their chances of achieving those outcomes, and assessment tasks are designed to enable clear judgments as to how well those outcomes have been attained.” (Biggs, 2014, p. 5-6)

When applied to the revised curriculum, the starting point for teaching and learning is the Key Learning Outcome. Constructive alignment involves designing Key Learning Experiences (KLEs) that will engage students and support them to develop the competences expressed in the KLO. Subject content and learning resources are also explicitly linked to the KLEs and KLO. Assessment Tasks (ATs) mirror KLEs and are explicitly designed to assess students’ achievement of KLOs.

### **Readiness for Distance and Flexible Learning (see TESPF)**

The recent COVID-19 global pandemic has forced education systems worldwide to rethink how they might future-proof learning to avoid the devastating learning losses incurred by billions of students during national lockdowns as well as other natural and man-made disasters. The revised curriculum is designed with this in mind. The revised curriculum focuses on development of competences for resilience and sustainability. This provides the foundation for a Distance and Flexible Learning (DFL) approach to education. Pupil’s Books are designed to contain clear explanations of content supported by examples and practice exercises. These may be converted into asynchronous modes of learning so that students can study independently and flexibly if they are unable to attend school. The Key Learning Experiences in the Pupil’s Books emphasise collaborative learning and application to everyday life problems, where students work through multistage tasks. These can be conducted in traditional classrooms, but equally may be conducted through synchronous modes of learning, where learners come together online at a given time to work on specific tasks. As technology and connectivity becomes more widespread in schools, the promise that DFL holds will become a reality for more and more schools. The revised curriculum is ready to embrace this transformation in modes of learning.

## Section 8: Cross-cutting themes

The revised curriculum contains seven cross-cutting themes that provide key areas of emphasis in teaching and learning across all subjects of the curriculum. The six cross-cutting themes are:

1. Developing 21<sup>st</sup> century skills.
2. Climate change adaptation.
3. Using language across the curriculum (LAC).
4. Connecting learning to students' daily lives.
5. Ensuring relevance to Tongan culture and values
6. Promoting gender sensitivity.
7. Inclusive teaching and learning

These seven cross-cutting themes are infused within all subjects of the curriculum and emphasise a range of competences that students need to thrive and succeed in the ever-challenging local and global worlds in which they live.

### Cross-cutting themes

### Features

#### 21<sup>st</sup> century skills

In response to the fast-paced changes taking place in the local and global environments in which we live, students need new competences to succeed in life, education, and work. The revised curriculum acknowledges that students need to develop 21<sup>st</sup> century skills that can be applied effectively in their life, further studies, and future careers. These skills include:

- Critical thinking
- Communication skills
- Creativity
- Problem solving
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Global awareness
- Self-direction
- Social skills
- Literacy skills
- Innovation skills
- Thinking skills

Opportunities to develop these skills are infused within KLOs and Key Learning Experiences across all core subjects.

#### Climate change adaptation

Tonga is on the frontline of the effects of climate change. It is therefore essential that the curriculum provides opportunities for learners to develop knowledge and understanding of the causes and effects of climate change locally, regionally and globally. In addition, the curriculum also needs to develop in learners the knowledge and skills needed to know how adaptations can be made to human systems and natural environments in order to reduce vulnerability to climate change impacts and to enhance their ability to cope with the impact. All the core subjects provide opportunities for students to

engage and learn about climate change adaptation from different perspectives. While Science provides opportunities for students to learn about the causes and effects of climate change, the Statistics Strand in Mathematics allows students to analyse, interpret and draw conclusions from climate change data, such as temperature, rainfall and carbon dioxide concentrations. In the languages subjects students will be able to read and analyse a range of texts, including news reports and other non-fiction and fiction texts that address the impacts of and adaptations to climate change. Learners can write about climate change topics and engage in discussion and debates about climate change to develop critical thinking and communication skills. The Tongan Language subject also allows students to learn about and preserve the rich indigenous knowledge about climate change and adaptation.

Language across the curriculum

Language Across the Curriculum (LAC) is a concept which acknowledges that language learning takes place not only in traditional languages subjects such as Tongan Language and English, but in all subjects in school, and in every academic activity across the whole curriculum. All subjects have their own distinctive genres or text types which students need to master. Students also need to be able to apply the necessary reading comprehension skills required to comprehend non-linguistic subject matter. In order that students can develop subject-specific language competences, there needs to be explicit focus on integration of subject specific language focus in subjects across the curriculum. Therefore, the revised subject syllabuses provide opportunities for students to develop competency in mathematical and scientific language and literacy.

Connecting learning to students' daily life

Teachers across the globe complain that they cannot motivate their students. One of the reasons for this is that students often struggle to see the relevance of what they are learning in the classroom to the daily realities and experiences of their lives. The revised curriculum places a strong emphasis on developing students' understanding of the world around them by connecting students' everyday life experiences to the underlying subject specific principles and concepts upon which they are based. For example, Science is a subject that is particularly relevant to so many aspects of daily life. Science is involved in cooking, eating, breathing, sleeping, etc. The clothing we wear, the soap and shampoo we use, everything we use; from clothing, soap and shampoo to refrigerators and air conditioners is the result of advancement of science. The revised subject syllabuses include engaging Key Learning Experiences that provide opportunities and support for students to make the connections between the principles, concepts, and practices they learn in the classroom and their application in real life situations. This will deepen, extend, and strengthen their competences.

Relevance to Tongan culture and values

Tongan values and culture play a central role in the previous curriculum framework (2008-2012). Their significance is highlighted in the guiding principles of the curriculum. This is continued in the revised curriculum and students are provided with opportunities to engage with and learn about Tongan culture and values across the curriculum. For example, in Mathematics, opportunities are provided for students to learn the unique Tongan counting system as well as apply mathematical concepts, knowledge

and skills to solving problems that are relevant to Tongan culture and life. While in Science there are opportunities for students to learn about the scientific concepts that underpin traditional Tongan cultural practices such as how to relate phases of the moon to tides and their implications for agriculture and fishing.

Promoting gender sensitivity	A gender sensitivity approach is adopted within the curriculum and a gender responsive approach to teaching is advocated. As a design principle, the curriculum should provide equitable access to children of all genders, while at the same time being sensitive to local cultural practices and values. Gender sensitive teaching approaches will be a feature of teacher training, while Key Learning Experiences and other resources strive to avoid gender stereotypes.
Inclusive teaching and learning	Inclusive teaching is based upon a learner-centred approach to teaching and learning, which recognises and interacts equally with the range of diverse identities within the classroom. This involves creating a welcoming and supportive learning environment for all students regardless of their diverse backgrounds, learning styles, and physical and cognitive abilities.

## Section 9: Approaches to learning and teaching

As this curriculum is built around competency-based learning outcomes, specific approaches to learning and teaching are necessary.

### **Learner-centred approach**

A competency-based learning outcomes curriculum focuses upon the learner, the competences the learner needs to develop and the learning outcomes to be achieved. The revised curriculum therefore places a strong emphasis on adopting a learner-centred approach that is appropriate for the Tongan context. Such an approach involves acknowledging that all students have their own abilities, interests and learning needs and that the teacher's role is to facilitate students' learning as individuals. In a competency-based learning outcomes curriculum, the implications for the role of the teacher when adopting a learner centred approach include that the teacher:

1. Focuses on students' learning outcomes in planning, teaching and assessment.
2. Views students as individual learners, plans and teaches accordingly.
3. Applies Pedagogical Content Knowledge (PCK) to make effective choices to plan and facilitate learning (see below).
4. Recognises and addresses students' misconceptions in planning and teaching.
5. Integrates formative assessment into the learning and teaching process.
6. Links learning and teaching activities to students' daily lives and interests
7. Provides opportunities for interaction and collaboration among students.
8. Emphasises active participation and engagement by the learners.

9. Uses learning resources flexibly and creatively to engage students in learning.
10. Provides opportunities for students to apply what they learn in new contexts.

The revised curriculum places an emphasis on teachers developing and applying these competences when planning and teaching lessons.

### **Pedagogical content knowledge (PCK)**

Teaching any subject effectively is a complex endeavour that involves orchestration of several distinct types of knowledge. On the one hand it requires the teacher to have strong content knowledge (CK) of the subject to be taught and on the other hand it also requires the teacher to apply general pedagogical knowledge (GPK) and skills that apply to most if not all subjects of the curriculum. These range from behaviour management to organising group work, questioning techniques, assessment strategies and so on. In addition, teachers also need to know and be able to use the skills and strategies necessary to teach specific subject topics in ways that students can understand them. This means that teachers need to know what it is about a topic that makes it easy or difficult for students to learn, what misconceptions students may have about the topic and how they as teachers can address such misconceptions.

This type of knowledge is called Pedagogical Content Knowledge (PCK). PCK is a concept that was developed by Lee Shulman (Shulman, 1987) and refers to the knowledge that teachers' hold about how to teach and assess aspects of subject specific content in ways that are effective in developing students' understanding of that content. This concept has become extremely influential and has been extensively researched as it applies to a range of different curriculum subject. At the subject level it involves utilising the following four types of subject PCK:

1. Knowledge of the subject curriculum in terms of its outcomes and content areas,
2. Knowledge of students' understanding of subject topics and typical misconceptions they may hold,
3. Knowledge of effective strategies for teaching topics of the subject both in terms of strategies that apply to any topic and strategies for teaching specific subject topics,
4. Knowledge of what needs to be assessed and methods of assessing learning in the subject both formatively and summatively.

PCK is therefore subject specific and distinct from General Pedagogical Knowledge (GPK), which refers to general teaching skills and strategies that can be used across a range of different subjects. Subject specific PCK is developed through experience over time and research indicates that it is an important element in effective teaching.

### **Key Learning Experiences**

In terms of learning and teaching an important component of the revised curriculum are the Key Learning Experiences (KLEs). These are rich and varied multistage learner-centred activities that provide opportunities for students to develop and apply a wide range of competences. The KLEs include the following features.

1. Each KLE is aligned to a specific KLO.
2. Explicit focus on the learner.

3. Comprise multi-staged activities that offer opportunities for initial success and allow students to build upon them
4. Challenge students to think for themselves.
5. Include different levels of challenge, e.g., by including extension activities.
6. Provide choice and allow for a variety of open-ended responses.
7. Include opportunities for learners to collaborate, discuss and pose their own questions.
8. Provide opportunities for learners to apply what they learn to new situations.
9. Connect learning to real life use.
10. Provide opportunities for formative assessment.

### **Resources to support learning and teaching**

Implementation of the revised curriculum in the four core subjects is supported by three published resources that will be made available in every school. These are the Subject Syllabuses, Teacher's Guides and Pupil's Books. During Phase 1 of the curriculum development process. These three resources will be developed for the four core subjects at each class level from 1 – 8.

### **Subject syllabuses**

The subject syllabuses are an important document for teacher's reference as they provide a complete overview of what is involved in subject teaching for the class level. Each subject syllabus includes four main sections. They begin with an introduction to the revised curriculum, the model of competency-based learning outcomes and the cross-cutting themes. There is a section on the nature of the subject including its importance, aims, guiding principles of the subject, comparison of the previous and revised curriculum. The third section focuses upon learning and teaching in the subject and explains subject specific teaching approaches and resources. The final section provides details of how to assess subject learning both formatively and summatively. Finally, each syllabus provides an overview of the Strands, Sub-strands, Major Learning Outcomes (MLOs) and Key Learning Outcomes (KLOs) for the subject.

### **Teacher's Guides**

A Teacher's Guide is produced for each subject at each class level. The Teacher's Guides provide an overview of the Content Specifications for each sub-strand, including the MLO, KLOs, main content area of each sub-strand and more detailed content for each content area or topic. The Teacher's Guides also outlines the Key Learning Experiences (KLEs) that are linked to each sub-strand and KLO and that are included in the Pupil's Books. The KLEs also indicate when and how formative assessment may be carried out. The Teacher's Guide provides clear guidelines on how to teach the KLEs and other activities in the Pupil's Books. These guidelines are an important form of support for the teacher, who should refer to them constantly to help them plan their units of work and lessons.

## Pupil's Books

Pupil's Books are produced for each subject at each class level. The Pupil's Books are organised into Strands and sub-strands and contain several Units of Work. Each Unit of Work is linked to at least one KLO and contains a range of activities. The success criteria for achieving each KLO are also provided. The Units include introductory activities which may involve activating previous learning, revision, or introduction of a new topic. Multistage KLEs are provided in each unit, and these are supported by a range of short explanations, examples, practice exercises and activities. The KLOs are designed to introduce a 'Big Idea' or 'Need to Know' which introduces the most important points of content that students need to know. Most of the KLEs include some form of collaborative activities and instructions for these are also included. The Pupil's Books are written in clear concise language and, where necessary, Key Words are highlighted. Teachers will need to study the Pupil's Books and Teacher's Guides carefully in order to plan effective lessons for their pupils.

## Section 10: Formative and summative assessment

### Outcomes-based assessment

Outcomes-based assessment is the assessment that students take throughout their learning journey. It is designed to collect evidence about the extent to which students can demonstrate their competency development as a consequence of following the taught curriculum. Assessment may be administered at the national level by the MET (such as the STAT and the high-stake examinations) and at the school level by individual teachers (classroom assessment). Outcomes-based assessment is student-oriented, and the result is used to determine a student's achievement relative to a set of pre-determined standards as defined by the Key Learning Outcomes. It is also used to identify gaps in student learning. The revised curriculum is based upon four national competency standards to be used for assessing student performance from Year 1 to Year 13 in both national and classroom assessment. This section focuses on outcomes-based assessment carried out by teachers.

Each KLO clearly states the competences (knowledge and skills, and attitudes) that students **are expected to know and be able to demonstrate at the completion of the lesson, unit, or program of study**. When assessing student competency, the teacher needs to have a good understanding of the nature and scope of the KLO, the type of Key Learning Experiences that provide opportunity to develop or apply competency as well as the success criteria to be used for assessing student achievement of the KLO.

For each strand and sub-strand, a set of generic success criteria has been developed for each of the four competency standards. These criteria form a generic rubric that helps guide both the teaching and assessment for each subject at each year level.

### Classroom assessment

Classroom assessment refers to the assessment carried out by teachers and students during daily activities in the classroom. It includes a range of possible ways of collecting written, oral, and other forms of evidence on the learning or achievement of the student. The main purpose of the assessment is to provide 'real time' information to support teaching and learning. In adopting



classroom assessment, teachers use the result of the assessment for two main purposes, to improve student learning (formative) and to make judgments on the achievement of students (summative). The teacher can also use the results of classroom assessment, such as observations of students' learning or their response to questions to adjust their teaching during the lesson or to inform planning for future lessons. This type of assessment is NOT used for formal assessment purposes.

### **Formative Assessment (Assessment for/as Learning)**

Formative Assessment, commonly referred to as assessment for learning (AfL), refers to the assessment that teachers carry out during the process of teaching for the purpose of improving both the teaching and student learning. What makes an assessment 'formative' is not the design of the assessment activities, but rather the way the teacher uses the result of the assessment, that is, to inform and modify teaching and learning throughout the instruction. The effectiveness of formative assessment depends on the teacher's competence in providing quality and timely feedback that would help them improve their teaching and inform students of where they are and what they need to do to improve their learning. This helps the teacher to identify the gap in what the student has yet to achieve. This then assists the teacher to focus their planning on closing the gap between the student's actual level of performance and the desired level of performance as indicated in the Key Learning Outcomes

### **Summative Assessment (Assessment of Learning)**

Summative Assessment, commonly referred to as assessment of learning (AoL), refers to any assessment that the teacher administers at the end of a lesson, unit, term/year. It enables the teacher to measure a student's competence, typically against standardized criteria and learning outcomes. Its primary purpose is to gauge students' comprehension of the material presented or ability to apply their learning at the end of a period of learning such as a unit of work of term and is often measured with a grade or percentage mark. A common example of summative assessment is the teacher designed test although there are other types of assessment methods available such as mid-term/end of term/end of year exams.

Because summative assessment happens after the instruction process, it has little diagnostic value and does not provide teachers with vital information they need to plan and develop targeted interventions as in the case of formative assessment. Figure 6 below provides an overview of the characteristics of both formative and summative assessment.

Characteristics	Formative Assessment ( <i>Assessment for learning</i> )	Summative Assessment ( <i>Assessment of Learning</i> )
Goal	• To improve student learning.	• To prove student learning.
Purpose	• Evaluate and improve student learning.	• Evaluate and make judgments about student learning.
Timing	• During the learning process.	• After the learning process.
Frequency	• Continuous.	• At certain points in time.

Use of the evidence	<ul style="list-style-type: none"> <li>• Monitor student learning.</li> <li>• Provide ongoing feedback.</li> <li>• Identify learning gaps.</li> </ul>	<ul style="list-style-type: none"> <li>• Compare student performance.</li> <li>• Award grades.</li> <li>• Selection to higher level.</li> </ul>
Nature of evaluation	<ul style="list-style-type: none"> <li>• An ongoing process.</li> </ul>	<ul style="list-style-type: none"> <li>• A product.</li> </ul>
Status of assessment	<ul style="list-style-type: none"> <li>• Usually low stake.</li> <li>• Comprised both formal and informal techniques.</li> <li>• Low status and less reliable.</li> </ul>	<ul style="list-style-type: none"> <li>• Usually, high-stake.</li> <li>• Comprised formal testing.</li> <li>• High status and reliable.</li> </ul>
Assessment method	<ul style="list-style-type: none"> <li>• Use a range of both formal and informal assessment methods (tests, quizzes, observations, performances, homework, classroom activities, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>• Use only a limited number of assessment methods (End of Lesson/Topic/Term/Year Tests, examination papers, etc.).</li> </ul>
Level of student engagement	<ul style="list-style-type: none"> <li>• Actively engaged (self-assessment - assessment as learning).</li> <li>• Use evidence from assessment to monitor own progress.</li> </ul>	<ul style="list-style-type: none"> <li>• Not involved in design of assessment.</li> <li>• No involvement in use of evidence for monitoring.</li> </ul>

Figure 6: Characteristics of formative and summative assessment

### Assessing Learning Outcomes for Class 8 core subjects

The revised Class 8 subject syllabuses are structured around a small number of strands and sub-strands. There is a single overarching Major Learning Outcome (MLO) for each strand and several Key Learning Outcomes (KLOs) for each sub-strand.

The revised curriculum has also specified four competency levels that apply to all subjects. These contain generic criteria that define each competency level. Weighting (%) is allocated for each strand as well as each competency level.

The weighting reflects the importance of each strand in the subject as a whole. The weighting allocated to each strand is used to determine the time allocated to the teaching of the content associated with the strands. Similarly, the weighting allocated to each competency level also needs to be provided as this has significant influence both in the development of summative examination papers as well as on the emphasis in teaching. Figure 7 below indicates the samples weighting for mathematics.

Strand / Sub-strand	Weighting	Competency Level			
		Basic	Intermediate	Proficient	Advanced
Numbers	35%				
Algebra	25%				
Geometry	20%				
Statistics	20%				

Figure 7: Weighting of strands and sub-strands

## Section 11: Teacher preparation and professional development

The introduction of a new curriculum or a curriculum which has been substantially revised, such as this one, is a critical development in any education system. Although substantial time and resources have been expended to develop the curriculum, it is not sufficient on its own to ensure that implementation is successful. The successful implementation of this revised curriculum will depend first and foremost upon the teachers who teach it and the extent to which they have been prepared to teach it effectively.

The quality of teacher preparation and continuing professional development are crucial to the successful implementation. The time required to adequately prepare both teachers and school principals should not be underestimated. The history of curriculum reform initiatives around the world is littered with failed implementation simply because teachers were not properly prepared to teach it.

The introduction of a new or revised curriculum presents several challenges and risks for teachers. For experienced serving teachers it means learning and understanding the main changes and how they translate into classroom practice. In the case of this revised curriculum, teachers need to fully understand the new competency levels and the learning outcomes for their subject, how they are used and the implications for teaching learning and assessment. They need to learn the new pedagogical practices associated with the Key Learning Experiences as well as how to incorporate the success criteria into teaching and use them to inform formative assessment and planning. The concepts are not difficult, but teachers need time and support to come to terms with them and develop confidence to use them. Otherwise, the revised curriculum can have the unwelcome outcome of deskilling experienced teachers and eroding their confidence and belief in the new approaches that are advocated.

To avoid such a scenario requires a substantial investment into training teachers. A one or two-day workshop in which teachers and principals are simply informed about the new curriculum and then left to get on with by themselves is a recipe for failure. Instead, a sustained training programme for experienced teachers is required (Guskey, 2003., Guskey & Yoon, 2008). This needs to take place ideally over at least a week and take place well in advance of implementation. Sometimes this needs to take place in school holidays. In addition, the training programme should not be a single one-off event. Furthermore, the training should not just be information based, but should be interactive and provide teachers with the opportunity to work with the new curriculum materials, learn new pedagogical approaches and engage in collaborative planning.

In addition to initial centralised training for all teachers of a specific class level, there should be follow up training throughout the year. This can take different forms, such as providing district-based training for one or two days at the end of each term so that teachers can come together and be guided to reflect upon and share their experiences of implementing the curriculum with other teachers. This will enable teachers to form a 'community of practice' and identify successes, challenges, and solutions. Teachers can also be encouraged to utilise social media and form Facebook or WhatsApp groups so that they can interact with each other and continue to share their experiences and good ideas while teaching. These approaches can both support and empower teachers. Finally, MET has an ongoing role to play in visiting teachers in schools to monitor their progress identify and difficulties that have arisen and offer advice and support.

Regarding pre-service student teachers, they also need to come to understand the expectations embedded within the revised curriculum. This means revision of the initial teacher education courses to incorporate the key structural elements of the revised curriculum as well as the subject specific elements, such as the KLOs and KLEs. Student teachers need opportunities to develop increasing familiarity with the key resources, including the curriculum framework, subject syllabuses, teacher's guides, and pupil's books. They also need to develop understanding of the implications for formative and summative assessment. The requirements for Practicum may also need to be reconfigured to match the changes in the curriculum, e.g., lesson planning and lesson observation forms may need to be revised to include some of the new areas of emphasis in the curriculum.

Finally, the role of School Principals is also crucial to successful curriculum implementation. School Principals need to be provided with training opportunities to ensure that they fully understand the main elements of the revised curriculum, address any concerns they might have and help them understand their role. They need to know that their role is to support teachers to implement the curriculum in their school and the kinds of strategies they can adopt to do this. MET should also follow up and monitor any difficulties that School Principals have encountered.

## Section 12: Conclusion

This curriculum framework is an overarching document that outlines all the underlying concepts, principles, and components of the revised curriculum (2022) for the four core subjects of English Mathematics, Science and Tongan Language from Class Level 1 through to Class 8/Form 2. It provides the framework for the design and development of more detailed curriculum documents including subject syllabuses, assessment frameworks, teachers' guides, pupils' textbooks, and other support materials. It also provides a model and a template for developing the detailed curriculum documents for Class Levels 9-13/Form 3-7 and ultimately for extending the development to include non-core curriculum subjects at later stages.

The curriculum framework is forward looking and takes into account the need for students in Tonga to develop the competences to become resilient and be able to live sustainable lives in the face of local and global challenges. It builds upon the outcomes-based approach of the curriculum of 2012 but goes further by presenting a new model of competency-based intended learning outcomes and approaches to learning which will provide opportunities for students to develop the competences they need to thrive in an uncertain world. The revised curriculum is designed in line with established principles of and approaches to curriculum design and development and the four core subjects are benchmarked to recognised international practice. The revised curriculum is designed to offer a systematic, coherent, and streamlined approach that seamlessly integrates curriculum, student learning and assessment. If the appropriate levels of support and resourcing are provided, the revised curriculum has the potential to address the issues that have impacted upon implementation of the 2012 curriculum and pave the way for more productive learning and teaching, and ultimately lead to improvement in student learning outcomes and the quality of teaching.

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## Annex I: Curriculum Consultation Process

Stakeholder consultation has been an important aspect of the process of developing the revised curriculum. Consultations included surveys of teachers, focus group meetings with teachers and a series of presentations and meetings with a range of other stakeholder groups at key stages throughout the development process.

### Preliminary Analysis Phase

During the preliminary analysis phase and prior to commencing design of the revised curriculum framework an initial survey of 150 primary school teachers and 150 secondary school teachers from Tongapatu, Ha'apai, Vava'u and 'Eua was conducted (Mahon, 2021). The survey elicited teachers' opinions about the curriculum, its structure and learning outcomes; the approaches they adopt to teach the curriculum and their professional development in relation to implementation of the curriculum.

Following analysis of the responses, follow up Focus Group meetings with samples of primary and secondary school teachers who had completed the surveys were held to validate the findings and to gain deeper insights into specific areas of enquiry highlighted in the surveys (see below). The report on the curriculum review process included recommendations for the design of a revised curriculum for the core subjects.

Date	Stakeholder consultation
November 2020	Survey of 150 primary school and 150 secondary school teachers
16 December 2020	Focus group of Primary School Teachers
17 December 2020	Focus group of Secondary School Teachers

### Development Phase

Following development of the main concepts and components of the curriculum framework, including the framework of learning outcomes, further focus group meetings with teachers were held. Teachers were introduced to draft subject syllabuses for class 8 and exemplar units from the teacher's guide and pupil's book and their feedback elicited.

In addition, a wide range of organisations, Ministry departments and individuals were consulted during the further development of the draft revised curriculum (see below). The views of all parties were considered and have informed the ongoing development of the curriculum framework and its associated curriculum documents, including the subject syllabuses, Teacher's Guides and Pupil's Books.

Date	Stakeholder consultation
15-24 November 2021	Focus group meeting of teachers of mathematics and science from government and non-government schools
16 August 2022	Directors of Ministry of Education and Training (MET)
17 August 2022	Staff of MET Quality Assurance Division and Professional Development

18 August 2022	Tonga Council of Directors of Education Systems
22 August 2020	Government Secondary School Officers and School Principals
24 August 2020	Dr. Seu'ula Johansson Fua, Director, Institute of Education, School of Pacific Arts, Communication and Education (SPACE), University of the South Pacific, Tonga Campus
25 August 2022	Presentation to MET Senior Executive Management Team (SEMT) In-house retreat
26 August 2022	Tonga Institute of Education (TIOE)
2 September 2022	Government Primary School Officers and School Principals
5 September 2022	School Principals, Heads of Department, Senior staff and Ministry officers of Vava'u
12 September 2022	School Principals, Heads of Department, Senior staff and Ministry officers of Ha'apai
14 September 2022	Association of Secondary School Principals of Tongatapu



## Annex II: Curriculum Development Team

Name	Position
Teresa Pahulu	Head of Curriculum
‘Ana Lupe Voi	Deputy CEO, Curriculum and Assessment Division (up to August 2021)
‘Ileini Takeifanga	English Subject Writers Team
Pētina Vi	English Subject Writers Team
Liu Nuku	Mathematics Subject Writers Team (Up to August 2022)
Latu Folau	Mathematics Subject Writers Team
Sālesi Sime	Mathematics Subject Writers Team
Losena Manu	Science Subject Writers Team
Selina Kiola Mahe	Science Subject Writers Team
Ekiaki Politoni	Science Subject Writers Team
‘Akanesi Vikilani Folau	Science Subject Writers Team (from August 2022)
Mele Tahaafe	Science Subject Writers Team (from August 2022)
‘Ana Lupe Voi	Tongan Language Subject Writers Team
Toli’a Fifita	Tongan Language Subject Writers Team
‘Akata Lui	Tongan Language Subject Writers Team
Ului Pele	Tongan Language Subject Writers Team
Emalile Latu	Tongan Language Subject Writers Team (from August 2022)
Asena T. Ma	Tongan Language Subject Writers Team (from August 2022)
Tony Mahon	International Consultant, The World Bank

