



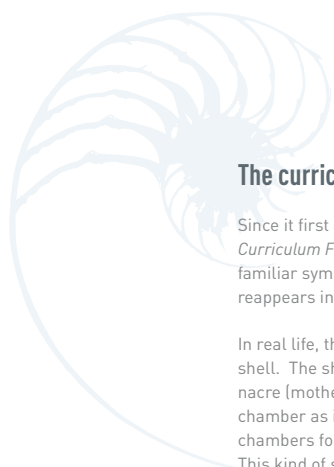
MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

The New Zealand Curriculum



*for English-medium
teaching and learning
in years 1–13*



The curriculum nautilus

Since it first appeared on the cover of *The New Zealand Curriculum Framework* in 1993, the nautilus has become a familiar symbol for the New Zealand Curriculum. It reappears in this curriculum with a new look.

In real life, the nautilus is a marine animal with a spiral shell. The shell has as many as thirty chambers lined with nacre (mother-of-pearl). The nautilus creates a new chamber as it outgrows each existing one, the successive chambers forming what is known as a logarithmic spiral. This kind of spiral appears elsewhere in nature, for example, in sunflower and cauliflower heads, cyclones, and spiral galaxies.

Physician, writer, and poet Oliver Wendell Holmes (1809–94) saw the spiral shell of the nautilus as a symbol of intellectual and spiritual growth. He suggested that people outgrew their protective shells and discarded them as they became no longer necessary: “One’s mind, once stretched by a new idea, never regains its original dimensions.”

It is as a metaphor for growth that the nautilus is used as a symbol for the New Zealand Curriculum.

The New Zealand Curriculum





The diagram on page 35 is based on the work of Drs Graeme Aitken and Claire Sinnema of Auckland University.

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Foreword



Tēnā koutou katoa

It is my pleasure to introduce this revision of the New Zealand Curriculum. Like its predecessors, it is the work of many people who are committed to ensuring that our young people have the very best of educational opportunities.

The previous curriculum, implemented from 1992 onwards, was our first outcomes-focused curriculum: a curriculum that sets out what we want students to know and to be able to do. Since it was launched, there has been no slowing of the pace of social change. Our population has become increasingly diverse, technologies are more sophisticated, and the demands of the workplace are more complex. Our education system must respond to these and the other challenges of our times. For this reason, a review of the curriculum was undertaken in the years 2000–02.

Following this review, Cabinet agreed that the national curriculum should be revised. A widely representative reference group oversaw a development process that included trials in schools, collaborative working parties, online discussions, and an inquiry into relevant national and international research. This process led to the publication of *The New Zealand Curriculum: Draft for Consultation 2006*. The Ministry of Education received more than 10 000 submissions in response. These were collated and analysed and were taken into consideration when the document that you now have in your hands was being written.

The New Zealand Curriculum is a clear statement of what we deem important in education. It takes as its starting point a vision of our young people as lifelong learners who are confident and creative, connected, and actively involved. It includes a clear set of principles on which to base curriculum decision making. It sets out values that are to be encouraged, modelled, and explored. It defines five key competencies that are critical to sustained learning and effective participation in society and that underline the emphasis on lifelong learning.

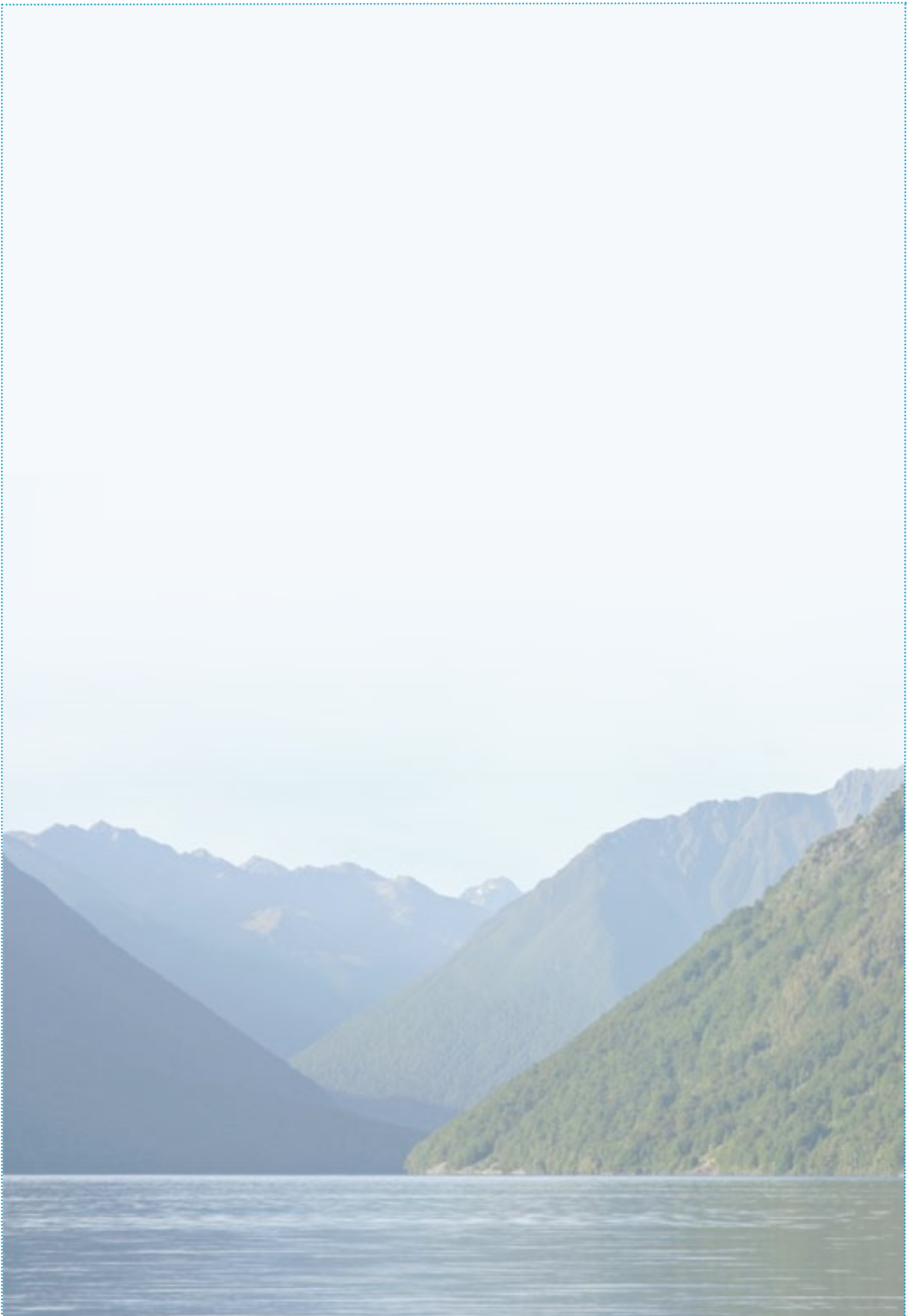
The New Zealand Curriculum states succinctly what each learning area is about and how its learning is structured. The sets of achievement objectives have been carefully revised by teams of academics and teachers to ensure that they are current, relevant, and well-defined outcomes for students. A new learning area, learning languages, has been added to encourage students to participate more actively in New Zealand's diverse, multicultural society and in the global community.

My thanks go to all who have contributed to the development of *The New Zealand Curriculum*: members of the reference group, teachers, principals, school boards, parents, employer representatives, curriculum associations, education sector bodies, academics, and the wider community. You can be proud of the part you have played in creating this sound framework for teaching and learning; a framework designed to ensure that all young New Zealanders are equipped with the knowledge, competencies, and values they will need to be successful citizens in the twenty-first century.

The challenge now is to build on this framework, offering our young people the most effective and engaging teaching possible and supporting them to achieve to the highest of standards.

Nāku noa

Karen Sewell
Secretary for Education



Purpose and Scope

A statement of official policy



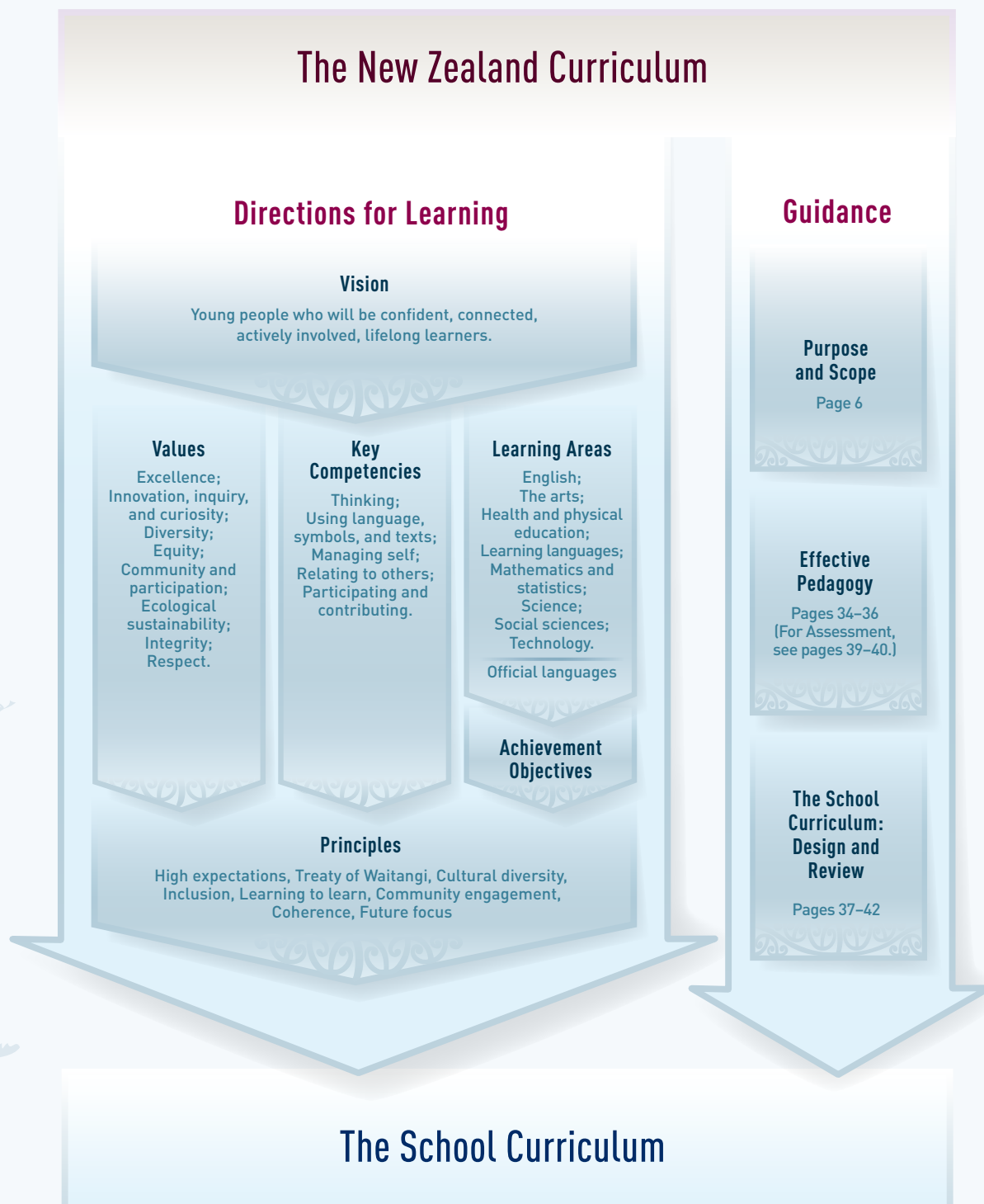
The New Zealand Curriculum is a statement of official policy relating to teaching and learning in English-medium New Zealand schools. Its principal function is to set the direction for student learning and to provide guidance for schools as they design and review their curriculum. A parallel document, *Te Marautanga o Aotearoa*, will serve the same function for Māori-medium schools. Although they come from different perspectives, both start with visions of young people who will develop the competencies they need for study, work, and lifelong learning and go on to realise their potential. Together, the two documents will help schools give effect to the partnership that is at the core of our nation's founding document, Te Tiriti o Waitangi / the Treaty of Waitangi.

The New Zealand Curriculum applies to all English-medium state schools (including integrated schools) and to all students in those schools, irrespective of their gender, sexuality, ethnicity, belief, ability or disability, social or cultural background, or geographical location. The term “students” is used throughout in this inclusive sense unless the context clearly relates to a particular group.

Schools that also offer Māori-medium programmes may use *Te Marautanga o Aotearoa* as the basis for such programmes.

Overview

A schematic view of
this document



Vision

What we want for our young people



Our vision is for young people:

- who will be creative, energetic, and enterprising;
- who will seize the opportunities offered by new knowledge and technologies to secure a sustainable social, cultural, economic, and environmental future for our country;
- who will work to create an Aotearoa New Zealand in which Māori and Pākehā recognise each other as full Treaty partners, and in which all cultures are valued for the contributions they bring;
- who, in their school years, will continue to develop the values, knowledge, and competencies that will enable them to live full and satisfying lives;
- who will be confident, connected, actively involved, and lifelong learners.

Confident

Positive in their own identity
Motivated and reliable
Resourceful
Enterprising and entrepreneurial
Resilient

Connected

Able to relate well to others
Effective users of communication tools
Connected to the land and environment
Members of communities
International citizens

Actively involved

Participants in a range of life contexts
Contributors to the well-being of New Zealand –
social, cultural, economic, and environmental

Lifelong learners

Literate and numerate
Critical and creative thinkers
Active seekers, users, and creators of knowledge
Informed decision makers



Principles

Foundations of curriculum decision making



The principles set out below embody beliefs about what is important and desirable in school curriculum – nationally and locally. They should underpin all school decision making.

These principles put students at the centre of teaching and learning, asserting that they should experience a curriculum that engages and challenges them, is forward-looking and inclusive, and affirms New Zealand's unique identity.

Although similar, the principles and the values have different functions. The principles relate to how curriculum is formalised in a school; they are particularly relevant to the processes of planning, prioritising, and review. The values are part of the everyday curriculum – encouraged, modelled, and explored.

All curriculum should be consistent with these eight statements:

High expectations

The curriculum supports and empowers all students to learn and achieve personal excellence, regardless of their individual circumstances.

Treaty of Waitangi

The curriculum acknowledges the principles of the Treaty of Waitangi and the bicultural foundations of Aotearoa New Zealand. All students have the opportunity to acquire knowledge of te reo Māori me ōna tikanga.

Cultural diversity

The curriculum reflects New Zealand's cultural diversity and values the histories and traditions of all its people.

Inclusion

The curriculum is non-sexist, non-racist, and non-discriminatory; it ensures that students' identities, languages, abilities, and talents are recognised and affirmed and that their learning needs are addressed.

Learning to learn

The curriculum encourages all students to reflect on their own learning processes and to learn how to learn.

Community engagement

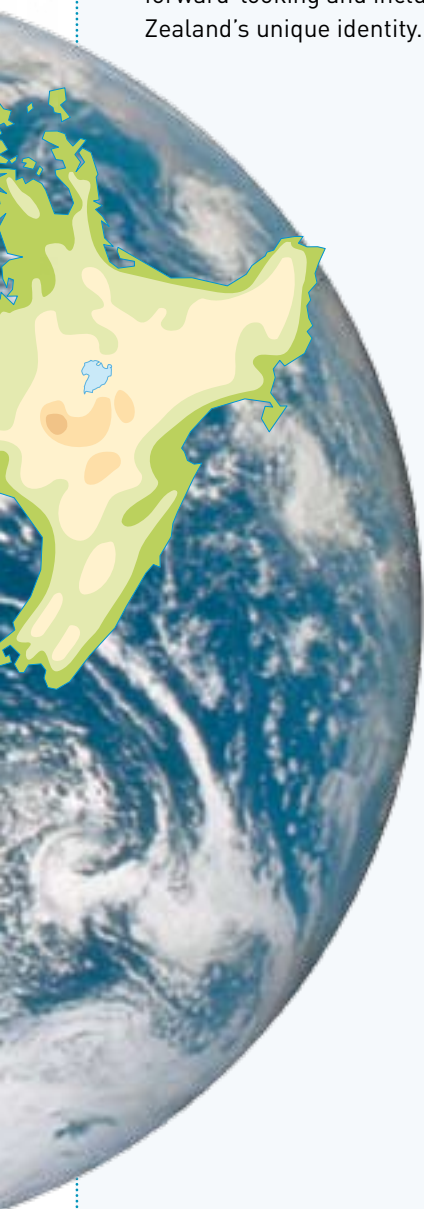
The curriculum has meaning for students, connects with their wider lives, and engages the support of their families, whānau, and communities.

Coherence

The curriculum offers all students a broad education that makes links within and across learning areas, provides for coherent transitions, and opens up pathways to further learning.

Future focus

The curriculum encourages students to look to the future by exploring such significant future-focused issues as sustainability, citizenship, enterprise, and globalisation.



Values

To be encouraged,
modelled, and explored



Values are deeply held beliefs about what is important or desirable. They are expressed through the ways in which people think and act.

Every decision relating to curriculum and every interaction that takes place in a school reflects the values of the individuals involved and the collective values of the institution.

The values on the list below enjoy widespread support because it is by holding these values and acting on them that we are able to live together and thrive. The list is neither exhaustive nor exclusive.

Students will be encouraged to value:

- **excellence**, by aiming high and by persevering in the face of difficulties;
- **innovation, inquiry, and curiosity**, by thinking critically, creatively, and reflectively;
- **diversity**, as found in our different cultures, languages, and heritages;
- **equity**, through fairness and social justice;
- **community and participation** for the common good;
- **ecological sustainability**, which includes care for the environment;
- **integrity**, which involves being honest, responsible, and accountable and acting ethically;

and to **respect** themselves, others, and human rights.

The specific ways in which these values find expression in an individual school will be guided by dialogue between the school and its community. They should be evident in the school's philosophy, structures, curriculum, classrooms, and relationships. When the school community has developed strongly held and clearly articulated values, those values are likely to be expressed in everyday actions and interactions within the school.

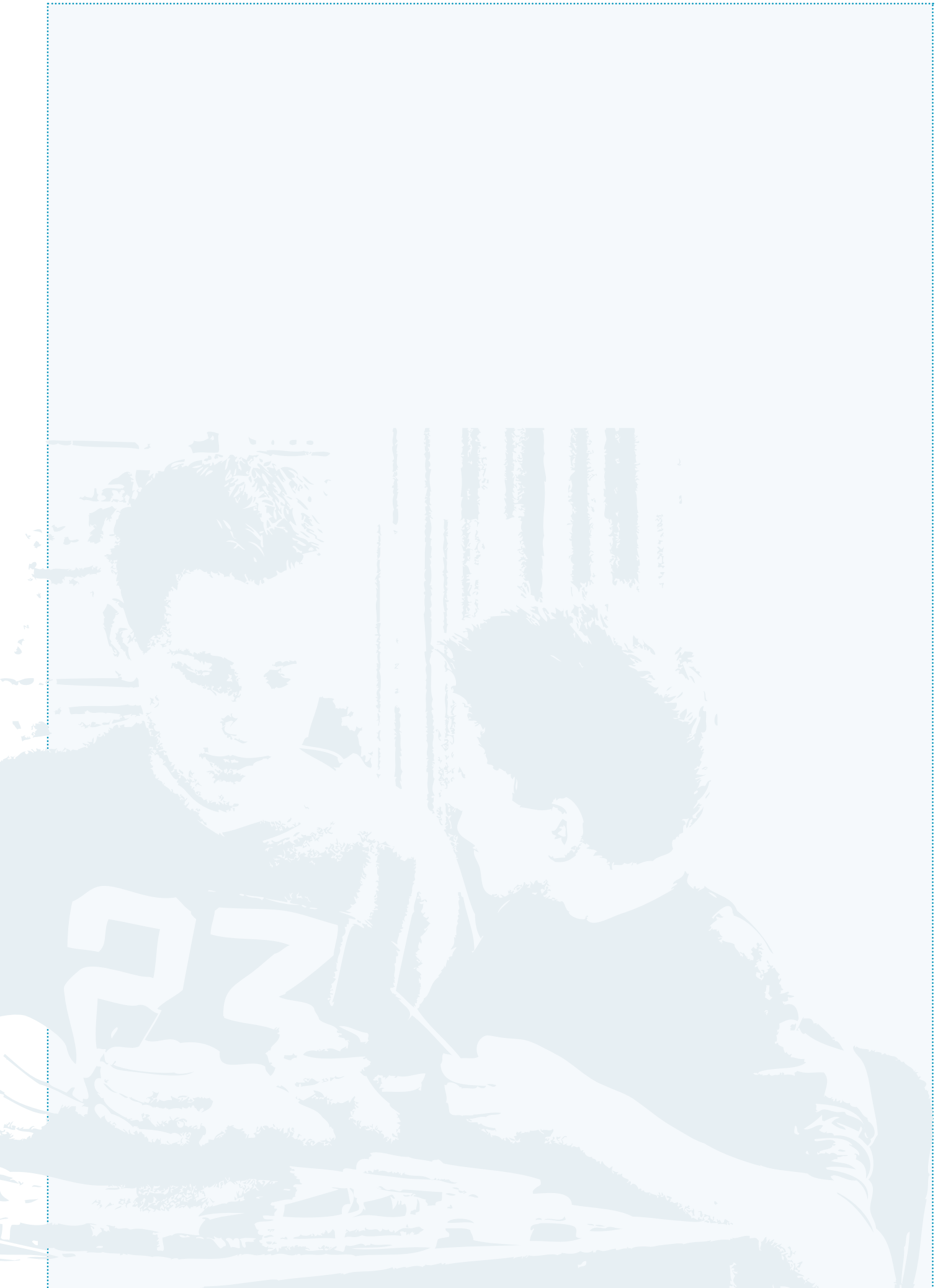
Through their learning experiences, students will learn about:

- their own values and those of others;
- different kinds of values, such as moral, social, cultural, aesthetic, and economic values;
- the values on which New Zealand's cultural and institutional traditions are based;
- the values of other groups and cultures.

Through their learning experiences, students will develop their ability to:

- express their own values;
- explore, with empathy, the values of others;
- critically analyse values and actions based on them;
- discuss disagreements that arise from differences in values and negotiate solutions;
- make ethical decisions and act on them.

All the values listed above can be expanded into clusters of related values that collectively suggest their fuller meanings. For example, *community and participation for the common good* is associated with values and notions such as peace, citizenship, and manaakitanga.



Key Competencies

Capabilities for living and lifelong learning



The New Zealand Curriculum identifies five key competencies:

- thinking
- using language, symbols, and texts
- managing self
- relating to others
- participating and contributing.

People use these competencies to live, learn, work, and contribute as active members of their communities. More complex than skills, the competencies draw also on knowledge, attitudes, and values in ways that lead to action. They are not separate or stand-alone. They are the key to learning in every learning area.

The development of the competencies is both an end in itself (a goal) and the means by which other ends are achieved. Successful learners make use of the competencies in combination with all the other resources available to them. These include personal goals, other people, community knowledge and values, cultural tools (language, symbols, and texts), and the knowledge and skills found in different learning areas. As they develop the competencies, successful learners are also motivated to use them, recognising when and how to do so and why.

Opportunities to develop the competencies occur in social contexts. People adopt and adapt practices that they see used and valued by those closest to them, and they make these practices part of their own identity and expertise.

The competencies continue to develop over time, shaped by interactions with people, places, ideas, and things. Students need to be challenged and supported to develop them in contexts that are increasingly wide-ranging and complex.

Thinking

Thinking is about using creative, critical, and metacognitive processes to make sense of information, experiences, and ideas. These processes can be applied to purposes such as developing understanding, making decisions, shaping actions, or constructing knowledge. Intellectual curiosity is at the heart of this competency.

Students who are competent thinkers and problem-solvers actively seek, use, and create knowledge. They reflect on their own learning, draw on personal knowledge and intuitions, ask questions, and challenge the basis of assumptions and perceptions.

Using language, symbols, and texts

Using language, symbols, and texts is about working with and making meaning of the codes in which knowledge is expressed. Languages and symbols are systems for representing and communicating information, experiences, and ideas. People use languages and symbols to produce texts of all kinds: written, oral/aural, and visual; informative and imaginative; informal and formal; mathematical, scientific, and technological.

Students who are competent users of language, symbols, and texts can interpret and use words, number, images, movement, metaphor, and technologies in a range of contexts. They recognise how choices of language, symbol, or text affect people's understanding and the ways in which they respond to communications. They confidently use ICT (including, where appropriate, assistive technologies) to access and provide information and to communicate with others.

Managing self

This competency is associated with self-motivation, a "can-do" attitude, and with students seeing themselves as capable learners. It is integral to self-assessment.

Students who manage themselves are enterprising, resourceful, reliable, and resilient. They establish personal goals, make plans, manage projects, and set high standards. They have strategies for meeting challenges. They know when to lead, when to follow, and when and how to act independently.

Relating to others

Relating to others is about interacting effectively with a diverse range of people in a variety of contexts. This competency includes the ability to listen actively, recognise different points of view, negotiate, and share ideas.

Students who relate well to others are open to new learning and able to take different roles in different situations. They are aware of how their words and actions affect others. They know when it is appropriate to compete and when it is appropriate to co-operate. By working effectively together, they can come up with new approaches, ideas, and ways of thinking.

■ Participating and contributing

This competency is about being actively involved in communities. Communities include family, whānau, and school and those based, for example, on a common interest or culture. They may be drawn together for purposes such as learning, work, celebration, or recreation. They may be local, national, or global. This competency includes a capacity to contribute appropriately as a group member, to make connections with others, and to create opportunities for others in the group.

Students who participate and contribute in communities have a sense of belonging and the confidence to participate within new contexts. They understand the importance of balancing rights, roles, and responsibilities and of contributing to the quality and sustainability of social, cultural, physical, and economic environments.



Official Languages

English

Te Reo Māori

New Zealand Sign Language



Te reo Māori and New Zealand Sign Language (NZSL) are official languages of New Zealand.¹ English, the medium for teaching and learning in most schools, is a de facto official language by virtue of its widespread use. For these reasons, these three languages have special mention in *The New Zealand Curriculum*.

Te Reo Māori

*Ko te reo te manawa pou o te Māori,
Ko te ihi te waimanawa o te tangata,
Ko te roimata, ko te hūpē te waiaroha.*

Ko tōku nui, tōku wehi, tōku whakatiketike, tōku reo.

Te reo Māori is indigenous to Aotearoa New Zealand. It is a taonga recognised under the Treaty of Waitangi, a primary source of our nation's self-knowledge and identity, and an official language. By understanding and using te reo Māori, New Zealanders become more aware of the role played by the indigenous language and culture in defining and asserting our point of difference in the wider world.

*Ko te reo Māori te kākahu o te whakaaro,
te huarahi i te ao tūroa.*

By learning te reo and becoming increasingly familiar with tikanga, Māori students strengthen their identities, while non-Māori journey towards shared cultural understandings. All who learn te reo Māori help to secure its future as a living, dynamic, and rich language. As they learn, they come to appreciate that diversity is a key to unity.

Te reo Māori underpins Māori cultural development and supports Māori social and economic development in Aotearoa New Zealand and internationally. Understanding te reo Māori stretches learners cognitively, enabling them to think in different ways and preparing them for leadership.

By learning te reo Māori, students are able to:

- participate with understanding and confidence in situations where te reo and tikanga Māori predominate and to integrate language and cultural understandings into their lives;
- strengthen Aotearoa New Zealand's identity in the world;
- broaden their entrepreneurial and employment options to include work in an ever-increasing range of social, legal, educational, business, and professional settings.

*Ko te manu e kai ana i te miro, nōna te ngahere.
Ko te manu e kai ana i te mātauranga, nōna te ao.*

Ko te reo te mauri o te mana Māori.

All three may be studied as first or additional languages. They may also be the medium of instruction across all learning areas. Requirements for the teaching of English are outlined on page 18. Guidelines specific to the learning of te reo Māori and NZSL (published separately) provide detailed information for schools that choose to offer them.

New Zealand Sign Language

Unique to New Zealand, NZSL is a complete visual-gestural language with its own grammar, vocabulary, and syntax. Like other signed languages, it uses the hands, the body, and facial expressions (including lip patterns) to express meaning and the eyes to perceive meaning. Like any language, it is capable of communicating an infinite number of ideas. Face-to-face interaction is particularly important in NZSL because it has no written form. There are, however, notation systems that are used for recording signs on paper.

NZSL is primarily used by members of New Zealand's Deaf community and those affiliated in some way with this community, for example, hearing people who have Deaf relatives or people (such as interpreters) who work with Deaf people.

For many Deaf people, NZSL is essential for effective daily communication and interactions. New Zealand needs more people who are fluent users of the language and who have an appreciation of Deaf culture. By learning NZSL, hearing students are able to communicate with their Deaf peers and participate in the Deaf community. Skilled communicators may find career opportunities that involve working with Deaf people. As Deaf people come to have a wider circle to converse with, our society becomes more inclusive.

Learning NZSL can be a positive and enriching experience for both deaf and hearing people of any age. By learning NZSL, Deaf children and hearing children of Deaf parents gain a sense of belonging in the Deaf community.

For hearing students who wish to learn a second or subsequent language, NZSL may be offered as another option alongside the spoken languages offered by their school. In such cases, schools need to consult with their Deaf communities and ensure that, wherever possible, students have access to Deaf role models with NZSL as their first language. Learners need to have opportunities for sustained conversations with other users of NZSL, and they need to be exposed to language role models in a variety of situations.

¹ The Māori Language Act 1987 and the New Zealand Sign Language Act 2006



Learning Areas

Important for a broad,
general education



The New Zealand Curriculum specifies eight learning areas: English, the arts, health and physical education, learning languages, mathematics and statistics, science, social sciences, and technology.

The learning associated with each area is part of a broad, general education and lays a foundation for later specialisation. Like the key competencies, this learning is both end and means: valuable in itself and valuable for the pathways it opens to other learning.

While the learning areas are presented as distinct, this should not limit the ways in which schools structure the learning experiences offered to students. All learning should make use of the natural connections that exist between learning areas and that link learning areas to the values and key competencies.

Learning areas and language

Each learning area has its own language or languages. As students discover how to use them, they find they are able to think in different ways, access new areas of knowledge, and see their world from new perspectives.

For each area, students need specific help from their teachers as they learn:

- the specialist vocabulary associated with that area;
- how to read and understand its texts;
- how to communicate knowledge and ideas in appropriate ways;
- how to listen and read critically, assessing the value of what they hear and read.

In addition to such help, students who are new learners of English or coming into an English-medium environment for the first time need explicit and extensive teaching of English vocabulary, word forms, sentence and text structures, and language uses.

As language is central to learning and English is the medium for most learning in the New Zealand Curriculum, the importance of literacy in English cannot be overstated.



In **English**, students study, use, and enjoy language and literature communicated orally, visually, or in writing.

In **the arts**, students explore, refine, and communicate ideas as they connect thinking, imagination, senses, and feelings to create works and respond to the works of others.

In **health and physical education**, students learn about their own well-being, and that of others and society, in health-related and movement contexts.

In **learning languages**, students learn to communicate in an additional language, develop their capacity to learn further languages, and explore different world views in relation to their own.

In **mathematics and statistics**, students explore relationships in quantities, space, and data and learn to express these relationships in ways that help them to make sense of the world around them.

In **science**, students explore how both the natural physical world and science itself work so that they can participate as critical, informed, and responsible citizens in a society in which science plays a significant role.

In the **social sciences**, students explore how societies work and how they themselves can participate and take action as critical, informed, and responsible citizens.

In **technology**, students learn to be innovative developers of products and systems and discerning consumers who will make a difference in the world.





*Ko te reo te tuakiri
Ko te reo tōku ahurei
Ko te reo te ora.*

What is English about?

English is the study, use, and enjoyment of the English language and its literature, communicated orally, visually, and in writing, for a range of purposes and audiences and in a variety of text forms. Learning English encompasses learning the language, learning through the language, and learning about the language.

Understanding, using, and creating oral, written, and visual texts of increasing complexity is at the heart of English teaching and learning. By engaging with text-based activities, students become increasingly skilled and sophisticated speakers and listeners, writers and readers, presenters and viewers.

Why study English?

Literacy in English gives students access to the understanding, knowledge, and skills they need to participate fully in the social, cultural, political, and economic life of New Zealand and the wider world. To be successful participants, they need to be effective oral, written, and visual communicators who are able to think critically and in depth.

By understanding how language works, students are equipped to make appropriate language choices and apply them in a range of contexts. Students learn to deconstruct and critically interrogate texts in order to understand the power of language to enrich and shape their own and others' lives.

Students appreciate and enjoy texts in all their forms. The study of New Zealand and world literature contributes to students' developing sense of identity, their awareness of New Zealand's bicultural heritage, and their understanding of the world.

Success in English is fundamental to success across the curriculum. All learning areas (with the possible exception of languages) require students to receive, process, and present ideas or information using the English language as a medium. English can be studied both as a heritage language and as an additional language.

English presents students with opportunities to engage with and develop the key competencies in diverse contexts.

How is the learning area structured?

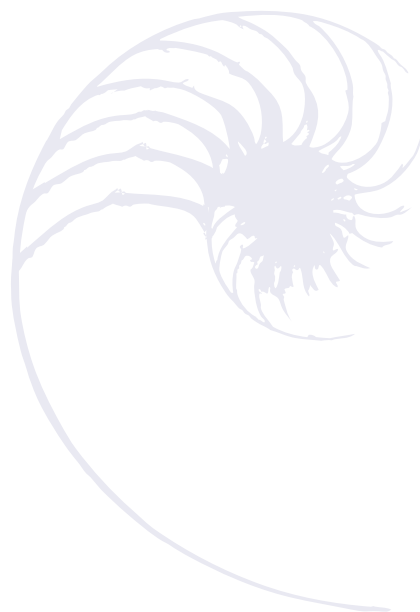
English is structured around two interconnected strands, each encompassing the oral, written, and visual forms of the language. The strands differentiate between the modes in which students are primarily:

- making meaning of ideas or information they receive (**Listening, Reading, and Viewing**);
- creating meaning for themselves or others (**Speaking, Writing, and Presenting**).

The achievement objectives within each strand suggest progressions through which most students move as they become more effective oral, written, and visual communicators. Using a set of underpinning processes and strategies, students develop knowledge, skills, and understandings related to:

- text purposes and audiences;
- ideas within language contexts;
- language features that enhance texts;
- the structure and organisation of texts.

Students need to practise *making meaning* and *creating meaning* at each level of the curriculum. This need is reflected in the way that the achievement objectives are structured. As they progress, students use their skills to engage with tasks and texts that are increasingly sophisticated and challenging, and they do this in increasing depth.





The Arts



*Te toi whakairo, ka ihiihi, ka wehiwehi,
ka aweawe te ao katoa.*

What are the arts about?

The arts are powerful forms of expression that recognise, value, and contribute to the unique bicultural and multicultural character of Aotearoa New Zealand, enriching the lives of all New Zealanders. The arts have their own distinct languages that use both verbal and non-verbal conventions, mediated by selected processes and technologies. Through movement, sound, and image, the arts transform people's creative ideas into expressive works that communicate layered meanings.

Why study the arts?

Arts education explores, challenges, affirms, and celebrates unique artistic expressions of self, community, and culture. It embraces *toi Māori*, valuing the forms and practices of customary and contemporary Māori performing, musical, and visual arts.

Learning in, through, and about the arts stimulates creative action and response by engaging and connecting thinking, imagination, senses, and feelings. By participating in the arts, students' personal well-being is enhanced. As students express and interpret ideas within creative, aesthetic, and technological frameworks, their confidence to take risks is increased. Specialist studies enable students to contribute their vision, abilities, and energies to arts initiatives and creative industries.

In the arts, students learn to work both independently and collaboratively to construct meanings, produce works, and respond to and value others' contributions. They learn to use imagination to engage with unexpected outcomes and to explore multiple solutions.

Arts education values young children's experiences and builds on these with increasing sophistication and complexity as their knowledge and skills develop. Through the use of creative and intuitive thought and action, learners in the arts are able to view their world from new perspectives. Through the development of arts literacies, students, as creators, presenters, viewers, and listeners, are able to participate in, interpret, value, and enjoy the arts throughout their lives.

How is the learning area structured?

The arts learning area comprises four disciplines: dance, drama, music – sound arts, and visual arts. Within each, students develop literacies as they build on skills, knowledge, attitudes, and understandings at each of the eight levels of the curriculum. Through arts practices and the use of traditional and new technologies, students' artistic ideas are generated and refined through cycles of action and reflection.

Each discipline is structured around four interrelated strands: **Understanding the Arts in Context**, **Developing Practical Knowledge** in the arts, **Developing Ideas** in the arts, and **Communicating and Interpreting** in the arts. The achievement objectives for each discipline reflect its distinct body of knowledge and practices. By building on and revisiting learning from previous levels, arts programmes in each discipline provide progressions of learning opportunities in all four strands. This spiral process ensures that students' learning is relevant, in-depth, and meaningful.

Over the course of years 1–8, students will learn in all four disciplines. Over the course of years 9–10, they will learn in at least two. Students in years 11–13 may specialise in one or more of the disciplines or undertake study in multimedia and other new technologies.

Dance

Dance is expressive movement that has intent, purpose, and form. In dance education, students integrate thinking, moving, and feeling. They explore and use dance elements, vocabularies, processes, and technologies to express personal, group, and cultural identities, to convey and interpret artistic ideas, and to strengthen social interaction. Students develop literacy in dance as they learn about, and develop skills in, performing, choreographing, and responding to a variety of genres from a range of historical and contemporary contexts.

Drama

Drama expresses human experience through a focus on role, action, and tension, played out in time and space. In drama education, students learn to structure these elements and to use dramatic conventions, techniques, and technologies to create imagined worlds. Through

purposeful play, both individual and collaborative, they discover how to link imagination, thoughts, and feelings.

As students work with drama techniques, they learn to use spoken and written language with increasing control and confidence and to communicate effectively using body language, movement, and space. As they perform, analyse, and respond to different forms of drama and theatre, they gain a deeper appreciation of their rich cultural heritage and language and new power to examine attitudes, behaviours, and values.

By means of the drama that they create and perform, students reflect and enrich the cultural life of their schools, whānau, and communities.

Music – Sound Arts

Sound from natural, acoustic, and digital environments is the source material for expressive ideas in music. These ideas are manipulated and extended into forms, genres, and styles that are recognised as music. Music is a fundamental form of expression, both personal and cultural. Value is placed upon the musical heritages of New Zealand's diverse cultures, including traditional and contemporary Māori musical arts. By making, sharing, and responding to music, students contribute to the cultural life of their schools, whānau, peer groups, and communities. As they engage with and develop knowledge and deeper understandings of music, they draw on cultural practices and on histories, theories, structures, technologies, and personal experiences.

In music education, students work individually and collaboratively to explore the potential of sounds and technologies for creating, interpreting, and representing music ideas. As they think about and explore innovative sound and media, students have rich opportunities to further their own creative potential.

Students develop literacies in music as they listen and respond, sing, play instruments, create and improvise, read symbols and notations, record sound and music works, and analyse and appreciate music. This enables them to develop aural and theoretical skills and to value and understand the expressive qualities of music.

As students learn to communicate musically with increasing sophistication, they lay a foundation for lifelong enjoyment of and participation in music. Some will go on to take courses in musicology, performance, or composition. These may be steps on the way to music-related employment.

Visual Arts

Through engaging in the visual arts, students learn how to discern, participate in, and celebrate their own and others' visual worlds. Visual arts learning begins with children's curiosity and delight in their senses and stories and extends to communication of complex ideas and concepts. An understanding of Māori visual culture is achieved through exploration of Māori contexts. The arts of European, Pasifika, Asian, and other cultures add significant dimensions to New Zealand visual culture.

In visual arts education, students develop visual literacy and aesthetic awareness as they manipulate and transform visual, tactile, and spatial ideas to solve problems. They explore experiences, stories, abstract concepts, social issues, and needs, both individually and collaboratively. They experiment with materials, using processes and conventions to develop their visual enquiries and create both static and time-based art works. They view art works, bringing their own experiences, sharing their responses, and generating multiple interpretations. Their meaning making is further informed by investigation of the contexts in which art works are created, used, and valued. As they develop their visual literacy, students are able to engage with a wider range of art experiences in increasingly complex and conscious ways.

The visual arts develop students' conceptual thinking within a range of practices across drawing, sculpture, design, painting, printmaking, photography, and moving image. Art history may include a study of theories of the arts, architecture, and design. Theoretical investigations also inform practical enquiry. Opportunities to explore and communicate in the visual arts continue to expand as technologies and multi-disciplinary practices evolve.



Health and Physical Education



He oranga ngākau, he pikinga waiora.

What is health and physical education about?

In health and physical education, the focus is on the well-being of the students themselves, of other people, and of society through learning in health-related and movement contexts.

Four underlying and interdependent concepts are at the heart of this learning area:

- **Hauora** – a Māori philosophy of well-being that includes the dimensions taha wairua, taha hinengaro, taha tinana, and taha whānau, each one influencing and supporting the others.
- **Attitudes and values** – a positive, responsible attitude on the part of students to their own well-being; respect, care, and concern for other people and the environment; and a sense of social justice.
- **The socio-ecological perspective** – a way of viewing and understanding the interrelationships that exist between the individual, others, and society.
- **Health promotion** – a process that helps to develop and maintain supportive physical and emotional environments and that involves students in personal and collective action.

Why study in this learning area?

Through learning and by accepting challenges in health-related and movement contexts, students reflect on the nature of well-being and how to promote it. As they develop resilience and a sense of personal and social responsibility, they are increasingly able to take responsibility for themselves and contribute to the well-being of those around them, of their communities, of their environments (including natural environments), and of the wider society.

This learning area makes a significant contribution to the well-being of students beyond the classroom, particularly when it is supported by school policies and procedures and by the actions of all people in the school community.

How is the learning area structured?

The learning activities in health and physical education arise from the integration of the four concepts above, the following four strands and their achievement objectives, and seven key areas of learning.

The four strands are:

- **Personal Health and Physical Development**, in which students develop the knowledge, understandings, skills, and attitudes that they need in order to maintain and enhance their personal well-being and physical development;
- **Movement Concepts and Motor Skills**, in which students develop motor skills, knowledge and understandings about movement, and positive attitudes towards physical activity;
- **Relationships with Other People**, in which students develop understandings, skills, and attitudes that enhance their interactions and relationships with others;
- **Healthy Communities and Environments**, in which students contribute to healthy communities and environments by taking responsible and critical action.

The seven key areas of learning are:

mental health, sexuality education, food and nutrition, body care and physical safety, physical activity, sport studies, and outdoor education.

All seven areas are to be included in teaching and learning programmes at both primary and secondary levels.

Note that:

- it is expected that schools will consult with their communities when developing health and sexuality education programmes;
- it is expected that all students will have had opportunities to learn basic aquatics skills by the end of year 6 and practical cooking skills by the end of year 8;
- outdoor education programmes must follow safe practice and meet legal requirements.

Health and physical education encompasses three different but related subjects: health education, physical education, and home economics. These subjects share a conceptual framework and achievement objectives.

Health education

In health education, students develop their understanding of the factors that influence the health of individuals, groups, and society: lifestyle, economic, social, cultural, political, and environmental factors. Students develop competencies for mental wellness, reproductive health and positive sexuality, and safety management, and they develop understandings of nutritional needs. Students build resilience through strengthening their personal identity and sense of self-worth, through managing change and loss, and through engaging in processes for responsible decision making. They learn to demonstrate empathy, and they develop skills that enhance relationships. Students use these skills and understandings to take critical action to promote personal, interpersonal, and societal well-being.

Physical education

In physical education, the focus is on movement and its contribution to the development of individuals and communities. By learning in, through, and about movement, students gain an understanding that movement is integral to human expression and that it can contribute to people's pleasure and enhance their lives. They learn to understand, appreciate, and move their bodies, relate positively to others, and demonstrate constructive attitudes and values. This learning takes place as they engage in play, games, sport, exercise, recreation, adventure, and expressive movement in diverse physical and social environments. Physical education encourages students to engage in movement experiences that promote and support the development of physical and social skills. It fosters critical thinking and action and enables students to understand the role and significance of physical activity for individuals and society.

Home economics

In home economics, students develop an understanding of the factors that influence the well-being of individuals and families within the home and community and of the actions people take to enhance and sustain those environments. In the context of food and nutrition, students evaluate current issues and theories of nutrition, identify and reflect on factors that influence people's choices and behaviours, and use this knowledge to make informed decisions. Through the processes of selecting, preparing, cooking, and serving food, students develop their creativity and experience a sense of accomplishment. At the same time, they develop personal and interpersonal understandings and skills that contribute to well-being.



Learning Languages



*Ko tōu reo, ko tōku reo,
te tuakiri tangata.
Tihei uriuri, tihei nakonako.*

What is learning languages about?

Learning a new language provides a means of communicating with people from another culture and exploring one's own personal world.

Languages are inseparably linked to the social and cultural contexts in which they are used. Languages and cultures play a key role in developing our personal, group, national, and human identities. Every language has its own ways of expressing meanings; each has intrinsic value and special significance for its users.

This learning area provides the framework for the teaching and learning of languages that are additional to the language of instruction. Level 1 of the curriculum is the entry level for students with no prior knowledge of the language being learned, regardless of their school year.

Why study a language?

Languages link people locally and globally. They are spoken in the community, used internationally, and play a role in shaping the world. Oral, written, and visual forms of language link us to the past and give us access to new and different streams of thought and to beliefs and cultural practices.

Te reo Māori and New Zealand Sign Language (NZSL) are official languages of New Zealand. Because of New Zealand's close relationships with the peoples of the Pacific, Pasifika languages also have a special place.

By learning an additional language and its related culture(s), students come to appreciate that languages and cultures are systems that are organised and used in particular ways to achieve meaning. Learning a new language extends students' linguistic and cultural understanding and their ability to interact appropriately with other speakers. Interaction in a new language, whether face to face or technologically facilitated, introduces them to new ways of thinking about, questioning, and interpreting the world and their place in it. Through such interaction, students acquire knowledge, skills, and attitudes that equip them for living in a world of diverse peoples, languages, and cultures. As they move between, and respond to, different languages and different cultural practices,

they are challenged to consider their own identities and assumptions.

As they learn a language, students develop their understanding of the power of language. They discover new ways of learning, new ways of knowing, and more about their own capabilities. Learning a language provides students with the cognitive tools and strategies to learn further languages and to increase their understanding of their own language(s) and culture(s).

How is the learning area structured?

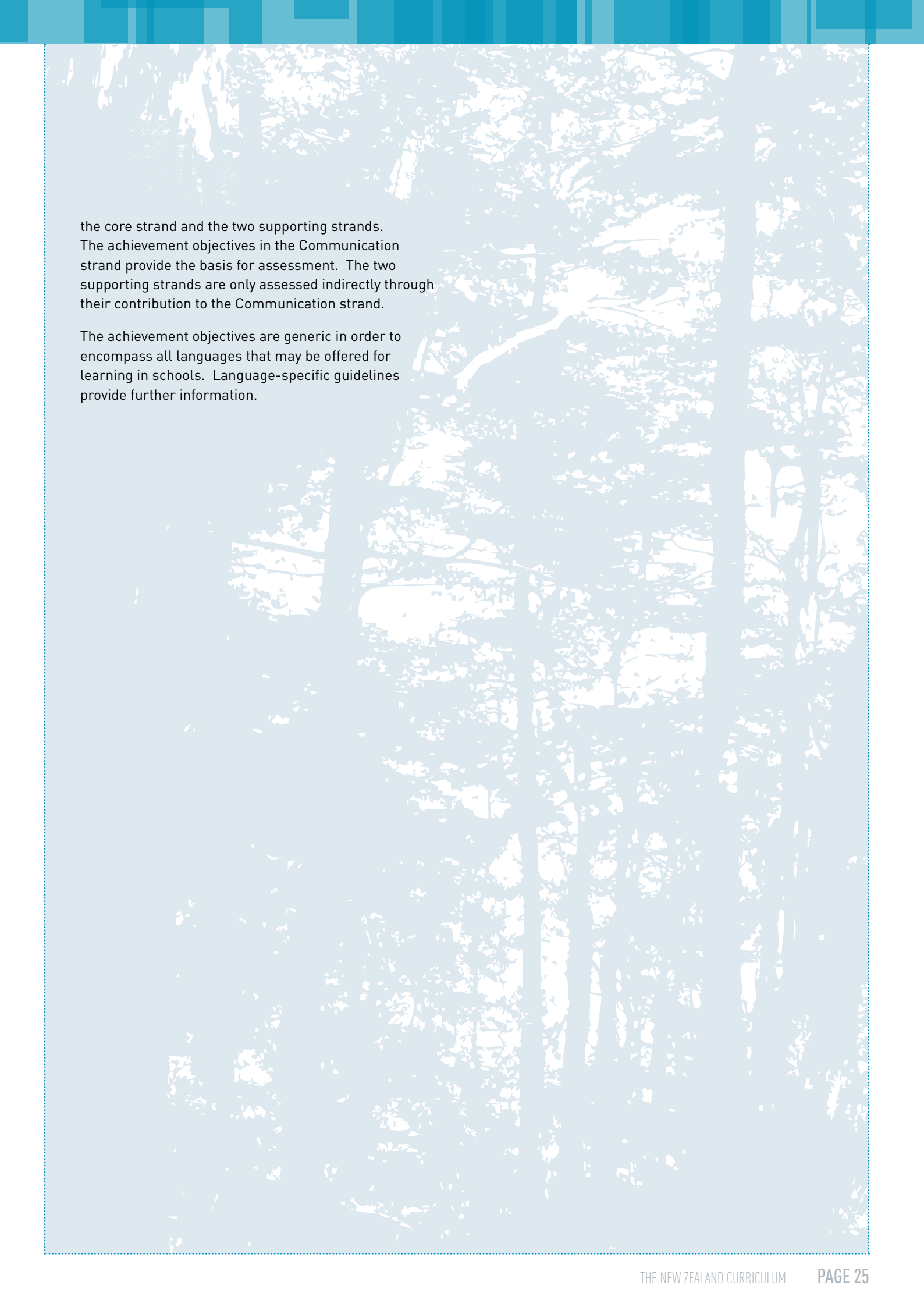
This learning area puts students' ability to communicate at the centre by making Communication the core strand. This strand is supported by two further strands, which are directed specifically at developing the linguistic and cultural awareness needed for communicative competence.

In the core **Communication** strand, students learn to use the language to make meaning. As their linguistic and cultural knowledge increases, they become more effective communicators, developing the receptive skills of listening, reading, and viewing and the productive skills of speaking, writing, and presenting or performing.

In the supporting **Language Knowledge** strand, students study the language in order to understand how it works. They learn about the relationships between different words and different structures, how speakers adjust their language when negotiating meaning in different contexts and for different purposes, and how different types of text are organised. This strand helps students to develop explicit knowledge of the language, which will, over time, contribute to greater accuracy of use.

In the supporting **Cultural Knowledge** strand, students learn about culture and the interrelationship between culture and language. They grow in confidence as they learn to recognise different elements of the belief systems of speakers of the target language. They become increasingly aware of the ways in which these systems are expressed through language and cultural practices. As they compare and contrast different beliefs and cultural practices, including their own, they understand more about themselves and become more understanding of others.

The content of the learning area is specified in terms of a general proficiency statement for each progressive pair of levels, together with achievement objectives for



the core strand and the two supporting strands. The achievement objectives in the Communication strand provide the basis for assessment. The two supporting strands are only assessed indirectly through their contribution to the Communication strand.

The achievement objectives are generic in order to encompass all languages that may be offered for learning in schools. Language-specific guidelines provide further information.

Mathematics and Statistics



*Kei hopu tōu ringa ki te aka tāepa,
engari kia mau ki te aka matua.*

What is mathematics and statistics about?

Mathematics is the exploration and use of patterns and relationships in quantities, space, and time. Statistics is the exploration and use of patterns and relationships in data. These two disciplines are related but different ways of thinking and of solving problems. Both equip students with effective means for investigating, interpreting, explaining, and making sense of the world in which they live.

Mathematicians and statisticians use symbols, graphs, and diagrams to help them find and communicate patterns and relationships, and they create models to represent both real-life and hypothetical situations. These situations are drawn from a wide range of social, cultural, scientific, technological, health, environmental, and economic contexts.

Why study mathematics and statistics?

By studying mathematics and statistics, students develop the ability to think creatively, critically, strategically, and logically. They learn to structure and to organise, to carry out procedures flexibly and accurately, to process and communicate information, and to enjoy intellectual challenge.

By learning mathematics and statistics, students develop other important thinking skills. They learn to create models and predict outcomes, to conjecture, to justify and verify, and to seek patterns and generalisations. They learn to estimate with reasonableness, calculate with precision, and understand when results are precise and when they must be interpreted with uncertainty. Mathematics and statistics have a broad range of practical applications in everyday life, in other learning areas, and in workplaces.

How is the learning area structured?

The achievement objectives are presented in three strands. It is important that students can see and make sense of the many connections within and across these strands.

Number and Algebra. Number involves calculating and estimating, using appropriate mental, written, or machine calculation methods in flexible ways. It also involves knowing when it is appropriate to use estimation and being able to discern whether results are reasonable. Algebra involves generalising and representing the patterns and relationships found in numbers, shapes, and measures.

Geometry and Measurement. Geometry involves recognising and using the properties and symmetries of shapes and describing position and movement. Measurement involves quantifying the attributes of objects, using appropriate units and instruments. It also involves predicting and calculating rates of change.

Statistics involves identifying problems that can be explored by the use of appropriate data, designing investigations, collecting data, exploring and using patterns and relationships in data, solving problems, and communicating findings. Statistics also involves interpreting statistical information, evaluating data-based arguments, and dealing with uncertainty and variation.







*Mā te whakaaro nui e hanga te whare;
mā te mātauranga e whakaū.*

What is science about?

Science is a way of investigating, understanding, and explaining our natural, physical world and the wider universe. It involves generating and testing ideas, gathering evidence – including by making observations, carrying out investigations and modelling, and communicating and debating with others – in order to develop scientific knowledge, understanding, and explanations. Scientific progress comes from logical, systematic work and from creative insight, built on a foundation of respect for evidence. Different cultures and periods of history have contributed to the development of science.

Why study science?

Science is able to inform problem solving and decision making in many areas of life. Many of the major challenges and opportunities that confront our world need to be approached from a scientific perspective, taking into account social and ethical considerations.

By studying science, students:

- develop an understanding of the world, built on current scientific theories;
- learn that science involves particular processes and ways of developing and organising knowledge and that these continue to evolve;
- use their current scientific knowledge and skills for problem solving and developing further knowledge;
- use scientific knowledge and skills to make informed decisions about the communication, application, and implications of science as these relate to their own lives and cultures and to the sustainability of the environment.

How is the learning area structured?

The fundamental aims of science education are expressed as a series of achievement aims, grouped by strand. (For these, see the chart of achievement objectives for science, available separately.) The achievement objectives at each level are derived from the aims and are similarly grouped by strand.

The **Nature of Science** strand is the overarching, unifying strand. Through it, students learn what science is and how scientists work. They develop the skills, attitudes, and values to build a foundation for understanding the world. They come to appreciate that while scientific knowledge is durable, it is also constantly re-evaluated in the light of new evidence. They learn how scientists carry out investigations, and they come to see science as a socially valuable knowledge system. They learn how science ideas are communicated and to make links between scientific knowledge and everyday decisions and actions. These outcomes are pursued through the following major contexts in which scientific knowledge has developed and continues to develop.

The **Living World** strand is about living things and how they interact with each other and the environment. Students develop an understanding of the diversity of life and life processes, of where and how life has evolved, of evolution as the link between life processes and ecology, and of the impact of humans on all forms of life. As a result, they are able to make more informed decisions about significant biological issues. The emphasis is on the biology of New Zealand, including the sustainability of New Zealand's unique fauna and flora and distinctive ecosystems.

The **Planet Earth and Beyond** strand is about the interconnecting systems and processes of the Earth, the other parts of the solar system, and the universe beyond. Students learn that Earth's subsystems of geosphere (land), hydrosphere (water), atmosphere (air), and biosphere (life) are interdependent and that all are important. They come to appreciate that humans can affect this interdependence in both positive and negative ways.

Students also learn that Earth provides all the resources required to sustain life except energy from the Sun, and that, as humans, we act as guardians of these finite resources. This means knowing and understanding the numerous interactions of Earth's four systems with the solar system. Students can then confront the issues facing our planet and make informed decisions about the protection and wise use of Earth's resources.

The **Physical World** strand provides explanations for a wide range of physical phenomena, including light, sound, heat, electricity, magnetism, waves, forces, and motion, united by the concept of energy, which is transformed from one form to another without loss. By studying physics, students gain an understanding of interactions between parts of the physical world and of

the ways in which they can be represented. Knowing about physics enables people to understand a wide range of contemporary issues and challenges and potential technological solutions.

The **Material World** strand involves the study of matter and the changes it undergoes. In their study of chemistry, students develop understandings of the composition and properties of matter, the changes it undergoes, and the energy involved. They use their understanding of the fundamental properties of chemistry to make sense of the world around them. They learn to interpret their observations by considering the properties and behaviour of atoms, molecules, and ions. They learn to communicate their understandings, using the symbols and conventions of chemistry. Using their knowledge of chemistry, they are better able to understand science-related challenges, such as

environmental sustainability and the development of new materials, pharmaceuticals, and sources of energy.

The core strand, Nature of Science, is required learning for all students up to year 10. The other strands provide contexts for learning. Over the course of years 1–10, science programmes should include learning in all four context strands.

Students in years 11–13 are able to specialise in one or more science disciplines, depending on the choices offered in their schools. The achievement objectives in the context strands provide for strand-based specialisations, but a wider range of programmes is possible; for example, schools may offer programmes in biochemistry, education for sustainability, agriculture, horticulture, human biology, or electronics.



Social Sciences



*Unuhia te rito o te harakeke kei whea te kōmako e kō?
Whakatairangitia – rere ki uta, rere ki tai;
Ui mai koe ki ahau he aha te mea nui o te ao,
Māku e kī atu he tangata, he tangata, he tangata!*

What are the social sciences about?

The social sciences learning area is about how societies work and how people can participate as critical, active, informed, and responsible citizens. Contexts are drawn from the past, present, and future and from places within and beyond New Zealand.

Why study the social sciences?

Through the social sciences, students develop the knowledge and skills to enable them to: better understand, participate in, and contribute to the local, national, and global communities in which they live and work; engage critically with societal issues; and evaluate the sustainability of alternative social, economic, political, and environmental practices.

Students explore the unique bicultural nature of New Zealand society that derives from the Treaty of Waitangi. They learn about people, places, cultures, histories, and the economic world, within and beyond New Zealand. They develop understandings about how societies are organised and function and how the ways in which people and communities respond are shaped by different perspectives, values, and viewpoints. As they explore how others see themselves, students clarify their own identities in relation to their particular heritages and contexts.

How is the learning area structured?

Achievement objectives for social studies at levels 1–5 integrate concepts from one or more of four conceptual strands:

Identity, Culture, and Organisation – Students learn about society and communities and how they function. They also learn about the diverse cultures and identities of people within those communities and about the effects of these on the participation of groups and individuals.

Place and Environment – Students learn about how people perceive, represent, interpret, and interact with places and environments. They come to understand the relationships that exist between people and the environment.

Continuity and Change – Students learn about past events, experiences, and actions and the changing ways in which these have been interpreted over time. This helps them to understand the past and the present and to imagine possible futures.

The **Economic World** – Students learn about the ways in which people participate in economic activities and about the consumption, production, and distribution of goods and services. They develop an understanding of their role in the economy and of how economic decisions affect individuals and communities.

Understandings in relation to the achievement objectives can be developed through a range of approaches. Using a social inquiry approach, students:

- ask questions, gather information and background ideas, and examine relevant current issues;
- explore and analyse people's values and perspectives;
- consider the ways in which people make decisions and participate in social action;
- reflect on and evaluate the understandings they have developed and the responses that may be required.

Inquiry in the social sciences is also informed by approaches originating from such contributing disciplines as history, geography, and economics.

Learning based on the level 1–5 social studies achievement objectives establishes a foundation for the separate social science disciplines offered in the senior secondary school. At levels 6–8, students are able to specialise in one or more of these, depending on the choices offered by their schools. Achievement objectives are provided for social studies, economics, geography, and history, but the range of possible social science disciplines that schools can offer is much broader, including, for example, classical studies, media studies, sociology, psychology, and legal studies.



Technology



*Kaua e rangiruatia te hāpai o te hoe;
e kore tō tātou waka e ū ki uta.*

What is technology about?

Technology is intervention by design: the use of practical and intellectual resources to develop products and systems (technological outcomes) that expand human possibilities by addressing needs and realising opportunities. Adaptation and innovation are at the heart of technological practice. Quality outcomes result from thinking and practices that are informed, critical, and creative.

Technology makes enterprising use of its own particular knowledge and skills, together with those of other disciplines. Graphics and other forms of visual representation offer important tools for exploration and communication.

Technology is never static. It is influenced by and in turn impacts on the cultural, ethical, environmental, political, and economic conditions of the day.

Why study technology?

The aim is for students to develop a broad technological literacy that will equip them to participate in society as informed citizens and give them access to technology-related careers. They learn practical skills as they develop models, products, and systems. They also learn about technology as a field of human activity, experiencing and/or exploring historical and contemporary examples of technology from a variety of contexts.

Technology is associated with the transformation of energy, information, and materials. Technological areas include structural, control, food, and information and communications technology and biotechnology. Relevant contexts can be as varied as computer game software, food products, worm farming, security systems, costumes and stage props, signage, and taonga.

How is the learning area structured?

The learning area comprises three strands: Technological Practice, Technological Knowledge, and Nature of Technology. Teaching and learning programmes will integrate all three, though a particular unit of work may focus on just one or two.

Knowledge and skills are learned in context. By offering a variety of contexts, teachers help their students to recognise links and develop generic understandings. Students should be encouraged to access relevant knowledge and skills from other learning areas.

In the **Technological Practice** strand, students examine the practice of others and undertake their own. They develop a range of outcomes, including concepts, plans, briefs, technological models, and fully realised products or systems. Students investigate issues and existing outcomes and use the understandings gained, together with design principles and approaches, to inform their own practice. They also learn to consider ethics, legal requirements, protocols, codes of practice, and the needs of and potential impacts on stakeholders and the environment.

Through the **Technological Knowledge** strand, students develop knowledge particular to technological enterprises and environments and understandings of how and why things work. Students learn how functional modelling is used to evaluate design ideas and how prototyping is used to evaluate the fitness for purpose of systems and products as they are developed. An understanding of material properties, uses, and development is essential to understanding how and why products work the way they do. Similarly, an understanding of the constituent parts of systems and how these work together is essential to understanding how and why systems operate in the way they do.

Through the **Nature of Technology** strand, students develop an understanding of technology as a discipline and of how it differs from other disciplines. They learn to critique the impact of technology on societies and the environment and to explore how developments and outcomes are valued by different peoples in different times. As they do so, they come to appreciate the socially embedded nature of technology and become increasingly able to engage with current and historical issues and to explore future scenarios.

In years 11–13, students work with fewer contexts in greater depth. This requires them to continue to draw fully on learning from other disciplines. For example, students working with materials and/or food technology will need to refer to chemistry, and students working on an architectural project will find that an understanding of art history is invaluable. Some schools may offer courses such as electronics and horticulture as technology specialisations.

Learning for senior students opens up pathways that can lead to technology-related careers. Students may access the workplace learning opportunities available in a range of industries or move on to further specialised tertiary study.



Effective Pedagogy

Teacher actions promoting student learning



While there is no formula that will guarantee learning for every student in every context, there is extensive, well-documented evidence about the kinds of teaching approaches that consistently have a positive impact on student learning. This evidence tells us that students learn best when teachers:

- create a supportive learning environment;
- encourage reflective thought and action;
- enhance the relevance of new learning;
- facilitate shared learning;
- make connections to prior learning and experience;
- provide sufficient opportunities to learn;
- inquire into the teaching–learning relationship.

■ Creating a supportive learning environment

Learning is inseparable from its social and cultural context. Students learn best when they feel accepted, when they enjoy positive relationships with their fellow students and teachers, and when they are able to be active, visible members of the learning community. Effective teachers foster positive relationships within environments that are caring, inclusive, non-discriminatory, and cohesive. They also build good relationships with the wider school community, working with parents and caregivers as key partners who have unique knowledge of their children and countless opportunities to advance their children’s learning. Effective teachers attend to the cultural and linguistic diversity of all their students. The classroom culture exists within and alongside many other cultures, including the cultures of the wider school and the local community, the students’ peer culture, and the teacher’s professional culture.

■ Encouraging reflective thought and action

Students learn most effectively when they develop the ability to stand back from the information or ideas that they have engaged with and think about these objectively. Reflective learners assimilate new learning, relate it to what they already know, adapt it for their own purposes, and translate thought into action. Over time, they develop their creativity, their ability to think critically about information and ideas, and their metacognitive ability (that is, their ability to think about their own thinking). Teachers encourage such thinking when they design tasks and opportunities that require students to critically evaluate the material they use and consider the purposes for which it was originally created.

■ Enhancing the relevance of new learning

Students learn most effectively when they understand what they are learning, why they are learning it, and how they will be able to use their new learning. Effective teachers stimulate the curiosity of their students, require them to search for relevant information and ideas, and challenge them to use or apply what they discover in new contexts or in new ways. They look for opportunities to involve students directly in decisions relating to their own learning. This encourages them to see what they are doing as relevant and to take greater ownership of their own learning.

■ Facilitating shared learning

Students learn as they engage in shared activities and conversations with other people, including family members and people in the wider community. Teachers encourage this process by cultivating the class as a learning community. In such a community, everyone, including the teacher, is a learner; learning conversations and learning partnerships are encouraged; and challenge, support, and feedback are always available. As they engage in reflective discourse with others, students build the language that they need to take their learning further.

■ Making connections to prior learning and experience

Students learn best when they are able to integrate new learning with what they already understand. When teachers deliberately build on what their students know and have experienced, they maximise the use of learning time, anticipate students’ learning needs, and avoid unnecessary duplication of content. Teachers can help students to make connections across learning areas as well as to home practices and the wider world.

■ Providing sufficient opportunities to learn

Students learn most effectively when they have time and opportunity to engage with, practise, and transfer new learning. This means that they need to encounter new learning a number of times and in a variety of different tasks or contexts. It also means that when curriculum coverage and student understanding are in competition, the teacher may decide to cover less but cover it in greater depth. Appropriate assessment helps the teacher to determine what “sufficient” opportunities

mean for an individual student and to sequence students' learning experiences over time.

■ Teaching as inquiry

Since any teaching strategy works differently in different contexts for different students, effective pedagogy requires that teachers inquire into the impact of their teaching on their students.

Inquiry into the teaching–learning relationship can be visualised as a cyclical process that goes on moment by moment (as teaching takes place), day by day, and over the longer term. In this process, the teacher asks:

- What is important (and therefore worth spending time on), given where my students are at?

This *focusing inquiry* establishes a baseline and a direction. The teacher uses all available information to determine what their students have already learned and what they need to learn next.

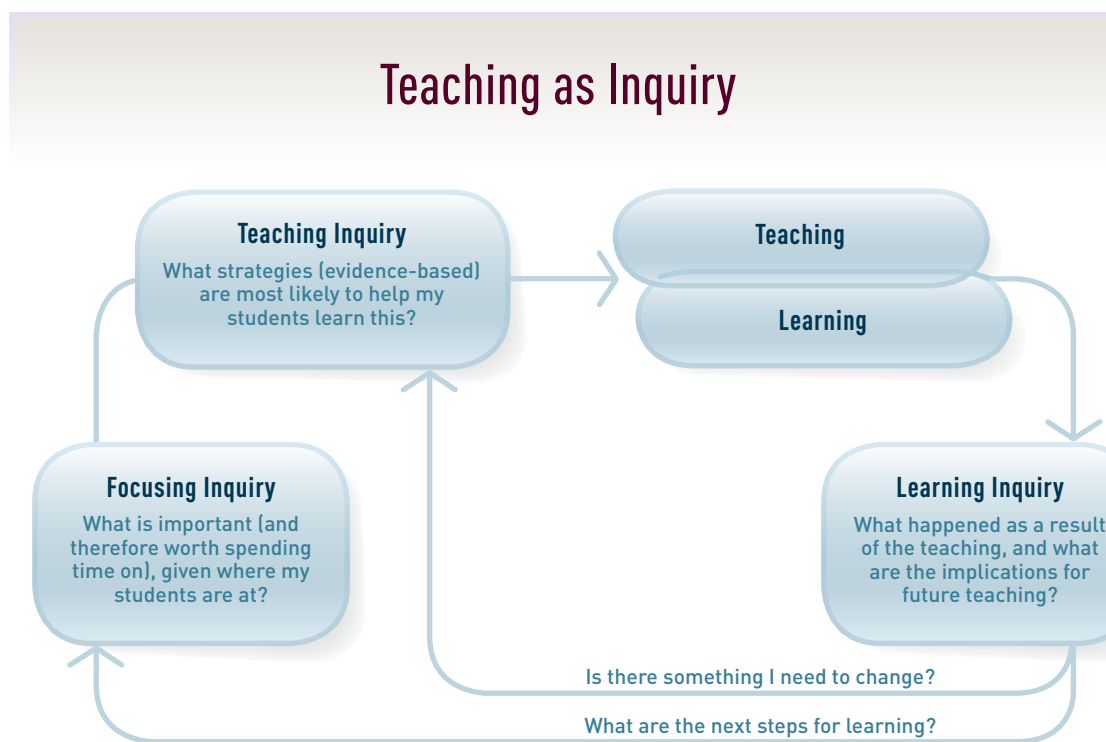
- What strategies (evidence-based) are most likely to help my students learn this?

In this *teaching inquiry*, the teacher uses evidence from research and from their own past practice and that of colleagues to plan teaching and learning opportunities aimed at achieving the outcomes prioritised in the focusing inquiry.

- What happened as a result of the teaching, and what are the implications for future teaching?

In this *learning inquiry*, the teacher investigates the success of the teaching in terms of the prioritised outcomes, using a range of assessment approaches. They do this both while learning activities are in progress and also as longer-term sequences or units of work come to an end. They then analyse and interpret the information to consider what they should do next.

See pages 39–40 for a discussion of purposeful assessment.



E-learning and pedagogy

Information and communication technology (ICT) has a major impact on the world in which young people live. Similarly, e-learning (that is, learning supported by or facilitated by ICT) has considerable potential to support the teaching approaches outlined in the above section.

For instance, e-learning may:

- assist the making of *connections* by enabling students to enter and explore new learning environments, overcoming barriers of distance and time;

- facilitate *shared learning* by enabling students to join or create communities of learners that extend well beyond the classroom;
- assist in the creation of *supportive learning environments* by offering resources that take account of individual, cultural, or developmental differences;
- enhance *opportunities to learn* by offering students virtual experiences and tools that save them time, allowing them to take their learning further.

Schools should explore not only how ICT can supplement traditional ways of teaching but also how it can open up new and different ways of learning.



The School Curriculum: Design and Review

From New Zealand Curriculum to school curriculum



Curriculum design and review is a continuous, cyclic process. It involves making decisions about how to give effect to the national curriculum in ways that best address the particular needs, interests, and circumstances of the school's students and community. It requires a clear understanding of the intentions of the New Zealand Curriculum and of the values and expectations of the community. Above all, it clarifies priorities for student learning, the ways in which those priorities will be addressed, and how student progress and the quality of teaching and learning will be assessed. Curriculum change should build on existing good practice and aim to maximise the use of local resources and opportunities.

Curriculum is designed and interpreted in a three-stage process: as the national curriculum, the school curriculum, and the classroom curriculum. The national curriculum provides the framework and common direction for schools, regardless of type, size, or location. It gives schools the scope, flexibility, and authority they need to design and shape their curriculum so that teaching and learning is meaningful and beneficial to their particular communities of students. In turn, the design of each school's curriculum should allow teachers the scope to make interpretations in response to the particular needs, interests, and talents of individuals and groups of students in their classes.

All New Zealand students, regardless of where they are situated, should experience a rich and balanced education that embraces the intent of the national curriculum. The *principles* should underpin and guide the design, practice, and evaluation of curriculum at every stage. The *values*, *key competencies*, and *learning areas* provide the basis for teaching and learning across schools and within schools. This learning will contribute to the realisation of a vision of young people who will be confident, connected, actively involved, lifelong learners.

Key considerations

- The relationship between the New Zealand Curriculum and the school curriculum
- Principles
- Values, key competencies, and learning areas
- Achievement objectives
- Assessment
- Learning pathways

The relationship between the New Zealand Curriculum and the school curriculum

The New Zealand Curriculum sets the direction for teaching and learning in English-medium New Zealand schools. But it is a framework rather than a detailed plan. This means that while every school curriculum must be clearly aligned with the intent of this document, schools have considerable flexibility when determining the detail. In doing this, they can draw on a wide range of ideas, resources, and models.

Schools are required to base their curriculum on the principles of the New Zealand Curriculum, to encourage and model the values, and to develop the key competencies at all year levels.

In years 1–10, schools are required to provide teaching and learning in English, the arts, health and physical education, mathematics and statistics, science, the social sciences, and technology.

Principles

The principles are foundations of curriculum decision-making. They embody beliefs about the nature of the educational experience and the entitlement of students; they apply equally to all schools and to every aspect of the curriculum. Schools should be able to clearly demonstrate their commitment to the principles and to articulate how they are given effect in teaching and learning.

Values, key competencies, and learning areas

The New Zealand Curriculum identifies *values* to be encouraged and modelled and to be explored by students, *key competencies* that students will develop over time and in a range of settings, and *learning areas* that describe what they will come to know and do. Schools need to consider how each of these aspects of the curriculum will be promoted and developed in teaching and learning. They can do this in different ways.

Schools may, for example, decide to organise their curriculum around one of these three aspects (values, key competencies, or learning areas) and deliberately weave the other two through their programmes. Alternatively, they may decide to organise their

curriculum around central themes, integrating values, key competencies, knowledge, and skills across a number of learning areas. Or they may use another approach or a combination of approaches.

The values, competencies, knowledge, and skills that students will need for addressing real-life situations are rarely confined to one part of the curriculum. Wherever possible, schools should aim to design their curriculum so that learning crosses apparent boundaries.

■ Values

Every school has a set of values. They are expressed in its philosophy, in the way it is organised, and in interpersonal relationships at every level. Following discussions with their communities, many schools list their values in their charters.

The New Zealand Curriculum identifies a number of values that have widespread community support. These values are to be encouraged and modelled, and they are to be explored by students. Schools need to consider how they can make the values an integral part of their curriculum and how they will monitor the effectiveness of the approach taken.

■ Key competencies

The key competencies are both end and means. They are a focus for learning – and they enable learning. They are the capabilities that young people need for growing, working, and participating in their communities and society.

The school curriculum should challenge students to use and develop the competencies across the range of learning areas and in increasingly complex and unfamiliar situations. Opportunities for doing this can often be integrated into existing programmes of work. Use can also be made of opportunities provided by the ways in which school environments and events are structured. There will be times when students can initiate activities themselves. Such activities provide meaningful contexts for learning and self-assessment.

In practice, the key competencies are most often used in combination. When researching an issue of interest, for example, students are likely to need to:

- set and monitor personal goals, manage time frames, arrange activities, and reflect on and respond to ideas they encounter (*managing self*);

- interact, share ideas, and negotiate with a range of people (*relating to others*);
- call on a range of communities for information and use that information as a basis for action (*participating and contributing*);
- analyse and consider a variety of possible approaches to the issue at hand (*thinking*);
- create texts to record and communicate ideas, using language and symbols appropriate to the relevant learning area(s) (*using language, symbols, and texts*).

When designing and reviewing their curriculum, schools will need to consider how to encourage and monitor the development of the key competencies. They will need to clarify their meaning for their students. They will also need to clarify the conditions that will help or hinder the development of the competencies, the extent to which they are being demonstrated, and how the school will evaluate the effectiveness of approaches intended to strengthen them.

With appropriate teacher guidance and feedback, all students should develop strategies for self-monitoring and collaborative evaluation of their performance in relation to suitable criteria. Self-assessments might involve students examining and discussing various kinds of evidence, making judgments about their progress, and setting further goals.

■ Learning areas

The learning area statements (pages 18–33) describe the essential nature of each learning area, how it can contribute to a young person's education, and how it is structured. These statements, rather than the achievement objectives, should be the starting point for developing programmes of learning suited to students' needs and interests. Schools are then able to select achievement objectives to fit those programmes.

None of the strands in the required learning areas is optional, but in some learning areas, particular strands may be emphasised at different times or in different years. Schools should have a clear rationale for doing this and should ensure that each strand receives due emphasis over the longer term.

Links between learning areas should be explored. This can lead, for example, to units of work or broad programmes designed to:

- develop students' knowledge and understandings in relation to major social, political, and economic shifts of the day, for example, through studies of Asia and the Pacific Rim;
- develop students' financial capability, positioning them to make well-informed financial decisions throughout their lives.

Future focus

Future-focused issues are a rich source of learning opportunities. They encourage the making of connections across the learning areas, values, and key competencies, and they are relevant to students' futures. Such issues include:

- **sustainability** – exploring the long-term impact of social, cultural, scientific, technological, economic, or political practices on society and the environment;
- **citizenship** – exploring what it means to be a citizen and to contribute to the development and well-being of society;
- **enterprise** – exploring what it is to be innovative and entrepreneurial;
- **globalisation** – exploring what it means to be part of a global community and to live amongst diverse cultures.

Achievement objectives

The achievement objectives found in the New Zealand Curriculum set out selected learning processes, knowledge, and skills relative to eight levels of learning. These desirable levels of knowledge, understanding, and skills represent progress towards broader outcomes that ultimately amount to deeper learning. When designing and reviewing their curriculum, schools choose achievement objectives from each area to fit the learning needs of their students.

Some achievement objectives relate to skills or understandings that can be mastered within a particular learning level. Others are more complex and are developed with increasing sophistication across a number of learning levels. The broader and more complex an objective, the more significant it is likely to be for a student's learning.

It is important for both planning and teaching purposes that schools provide clear statements of learning expectations that apply to particular levels or across a number of levels. These expectations should be stated in ways that help teachers, students, and parents to recognise, measure, discuss, and chart progress.

A school's curriculum is likely to be well designed when:

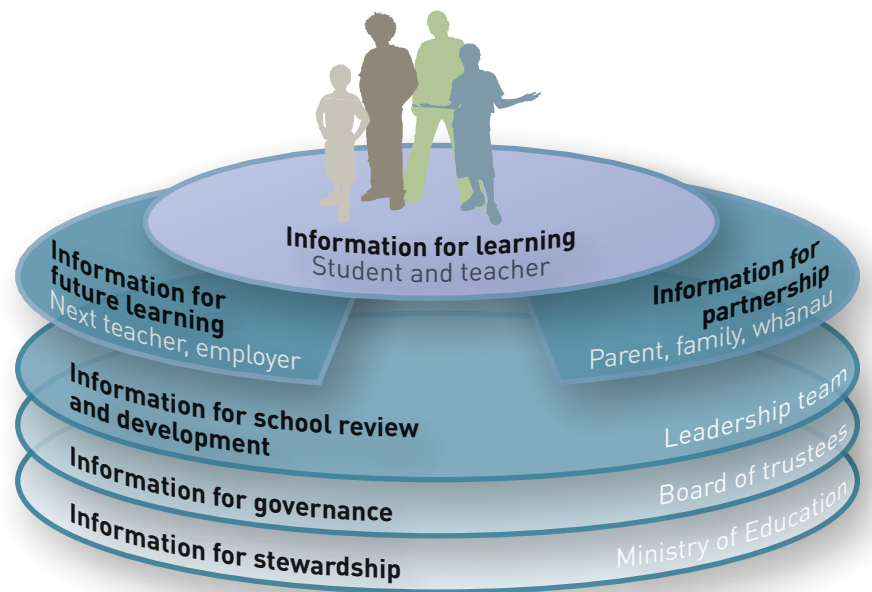
- Principals and teachers can show what it is that they want their students to learn and how their curriculum is designed to achieve this.
- Students are helped to build on existing learning and take it to higher levels. Students with special needs are given quality learning experiences that enable them to achieve, and students with special abilities and talents are given opportunities to work beyond formally described objectives.
- The long view is taken: each student's ultimate learning success is more important than the covering of particular achievement objectives.

Curriculum design and practice should begin with the premise that all students can learn and succeed (see the *high expectations* principle) and should recognise that, as all students are individuals, their learning may call for different approaches, different resourcing, and different goals (see the *inclusion* principle).

Assessment

The primary purpose of assessment is to improve students' learning and teachers' teaching as both student and teacher respond to the information that it provides. With this in mind, schools need to consider how they will gather, analyse, and use assessment information so that it is effective in meeting this purpose.

Assessment for the purpose of improving student learning is best understood as an ongoing process that arises out of the interaction between teaching and learning. It involves the focused and timely gathering, analysis, interpretation, and use of information that can provide evidence of student progress. Much of this evidence is "of the moment". Analysis and interpretation often take place in the mind of the teacher, who then uses the insights gained to shape their actions as they continue to work with their students.



Uses of assessment information

The adjacent diagram shows the different groups of people involved in supporting students' learning and the purposes for which they need assessment information.

Some characteristics of effective assessment

Effective assessment:

- **benefits students** – It clarifies for them what they know and can do and what they still need to learn. When students see that they are making progress, their motivation is sustained and their confidence increases.
- **involves students** – They discuss, clarify, and reflect on their goals, strategies, and progress with their teachers, their parents, and one another. This develops students' capacity for self- and peer assessment, which lead in turn to increased self-direction.
- **supports teaching and learning goals** – Students understand the desired outcomes and the criteria for success. Important outcomes are emphasised, and the teacher gives feedback that helps the students to reach them.
- **is planned and communicated** – Outcomes, teaching strategies, and assessment criteria are carefully matched. Students know in advance how and why they are to be assessed. The teacher's programme planning is flexible so that they can make changes in response to new information, opportunities, or insights.
- **is suited to the purpose** – Evidence is obtained through a range of informal and formal assessment approaches. These approaches are chosen to suit the nature of the learning being assessed, the varied characteristics and experiences of the students, and the purpose for which the information is to be used.

- **is valid and fair** – Teachers obtain and interpret information from a range of sources and then base decisions on this evidence, using their professional judgment. Conclusions are most likely to be valid when the evidence for them comes from more than one assessment.

Assessment is integral to the teaching inquiry process (see page 35) because it is the basis for both the focusing inquiry and the learning inquiry.

School-wide assessment

Schools need to know what impact their programmes are having on student learning. An important way of getting this information is by collecting and analysing school-wide assessment data. Schools can then use this information as the basis for changes to policies or programmes or changes to teaching practices as well as for reporting to the board of trustees, parents, and the Ministry of Education. Assessment information may also be used to compare the relative achievement of different groups of students or to compare the achievement of the school's students against national standards.

Assessment for national qualifications

The New Zealand Curriculum provides the basis for the ongoing development of achievement standards and unit standards registered on the National Qualifications Framework, which are designed to lead to the award of qualifications in years 11–13. These include the National Certificate of Educational Achievement and other national certificates that schools may choose to offer.

The New Zealand Curriculum, together with the Qualifications Framework, gives schools the flexibility to design and deliver programmes that will engage all students and offer them appropriate learning pathways. The flexibility of the qualifications system also allows schools to keep assessment to levels that are manageable and reasonable for both students and teachers. Not all aspects of the curriculum need to be formally assessed, and excessive high-stakes assessment in years 11–13 is to be avoided.

Learning pathways

As students journey from early childhood through secondary school and, in many cases, on to tertiary training or tertiary education in one of its various forms, they should find that each stage of the journey prepares them for and connects well with the next. Schools can design their curriculum so that students find the transitions positive and have a clear sense of continuity and direction.

Early childhood learning

Te Whāriki: He Whāriki Mātauranga mō ngā Mokopuna o Aotearoa, the curriculum for early childhood education, provides children with a foundation for ongoing learning. It is based on four principles: Empowerment, Holistic Development, Family and Community, and Relationships.

Te Whāriki includes five curriculum strands: Exploration – Mana Aotūroa, Communication – Mana Reo, Well-being – Mana Atua, Contribution – Mana Tangata, and Belonging – Mana Whenua. Together, they provide a foundation for lifelong learning. These strands correspond to the key competencies identified in this document.

Learning in years 1–6

The transition from early childhood education to school is supported when the school:

- fosters a child's relationships with teachers and other children and affirms their identity;
- builds on the learning experiences that the child brings with them;
- considers the child's whole experience of school;
- is welcoming of family and whānau.

This new stage in children's learning builds upon and makes connections with early childhood learning and experiences. Teaching and learning programmes are developed through a wide range of experiences across all learning areas, with a focus on literacy and numeracy along with the development of values and key competencies.

Learning in years 7–10

During these years, students have opportunities to achieve to the best of their abilities across the breadth and depth of the New Zealand Curriculum – values, key competencies, and learning areas – laying a foundation for living and for further learning.

A responsive curriculum will recognise that students in these years are undergoing rapid physical development, becoming increasingly socially aware, and encountering increasingly complex curriculum contexts. Particularly important are positive relationships with adults, opportunities for students to be involved in the community, and authentic learning experiences.

Students' learning progress is closely linked to their ongoing development of literacy and numeracy skills. These continue to require focused teaching.

Learning in years 11–13

The New Zealand Curriculum allows for greater choice and specialisation as students approach the end of their school years and as their ideas about future direction become clearer. Schools recognise and provide for the diverse abilities and aspirations of their senior students in ways that enable them to appreciate and keep open a range of options for future study and work. Students can specialise within learning areas or take courses across or outside learning areas, depending on the choices that their schools are able to offer.

In these years, students gain credits towards a range of recognised qualifications. Schools can extend this range by making it possible for students to participate in programmes or studies offered by workplaces and tertiary institutions. Credits gained in this way can often be later transferred to tertiary qualifications.

The values and key competencies gain increasing significance for senior school students as they appreciate that these are the values and capabilities they will need as adults for successful living and working and for continued learning.

Tertiary education and employment

Tertiary education in its various forms offers students wide-ranging opportunities to pursue an area or areas of particular interest. Some tertiary education focuses on the highly specific skills and discipline knowledge required, for example, by trades, ICT, and health professions. In other cases, the emphasis is on more broadly applicable skills and theoretical

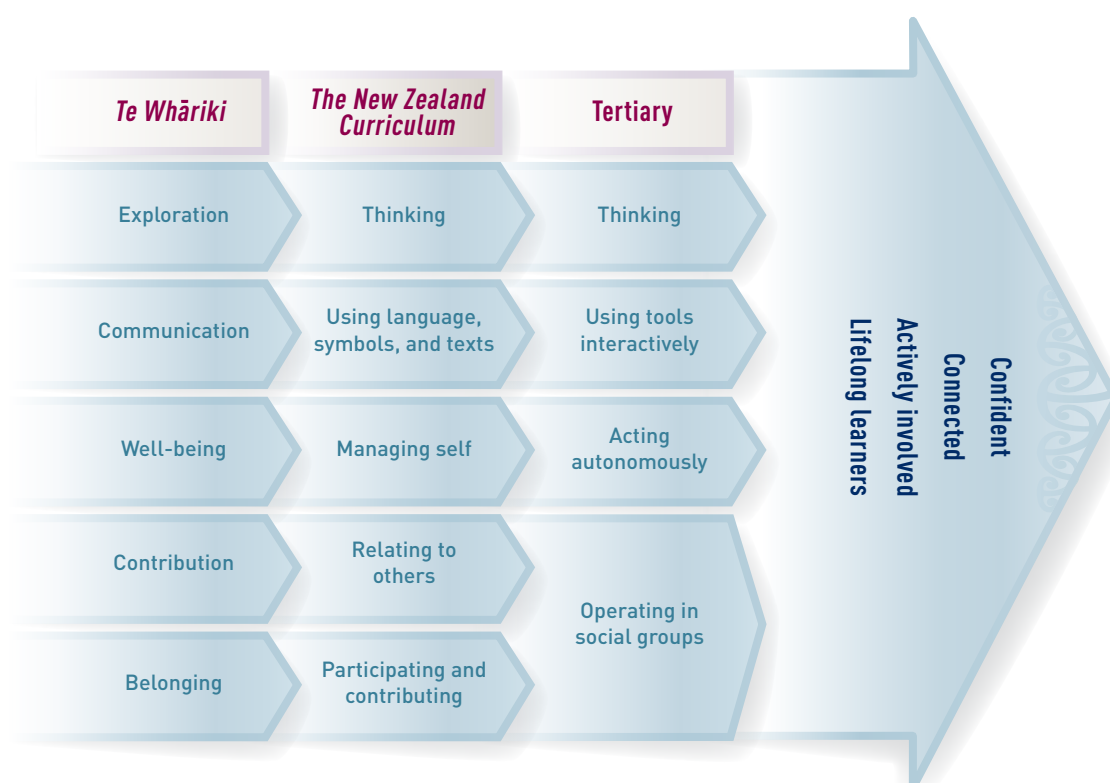
understandings, developed and explored in depth, which provide a foundation for knowledge creation.

Tertiary education builds on the values, competencies, discipline knowledge, and qualifications that students have developed or gained during their school years. Recognising the importance of key competencies to success at tertiary level, the sector has identified four as crucial: thinking, using tools interactively, acting autonomously, and operating in social groups. These correspond closely to the five key competencies defined in this document.

In the past, many young people finished all formal learning when they left school. Today, all school leavers, including those who go directly into paid employment, should take every opportunity to continue learning and developing their capabilities. New Zealand needs its young people to be skilled and educated, able to contribute fully to its well-being, and able to meet the changing needs of the workplace and the economy.

The key competencies: Cross-sector alignment

This diagram suggests how the tertiary competencies align with those of *Te Whāriki* and *The New Zealand Curriculum*:



The Education Act and the Curriculum



Requirements for Boards of Trustees



Each board of trustees, through the principal and staff, is required to develop and implement a curriculum for students in years 1–13:

- that is underpinned by and consistent with the principles set out on page 9;
- in which the values set out on page 10 are encouraged and modelled and are explored by students;
- that supports students to develop the key competencies set out on pages 12–13.

Each board of trustees, through the principal and staff, is required to provide all students in years 1–10 with effectively taught programmes of learning in:

English, as specified on page 18; the arts, as specified on pages 20–21; health and physical education, as specified on pages 22–23; mathematics and statistics, as specified on page 26; science, as specified on pages 28–29; social sciences, as specified on page 30; and technology, as specified on pages 32–33.

When designing and reviewing their curriculum, schools select achievement objectives from each area in response to the identified interests and learning needs of their students.

Note: All schools with students in years 7–10 should be working towards offering students opportunities for

learning a second or subsequent language. Teaching programmes should be based on the learning languages statement found on pages 24–25 and the achievement objectives for this learning area. Teaching programmes for students in years 11–13 should be based, in the first instance, on the appropriate national curriculum statements.

Each board of trustees, through the principal and staff, is required:

- to gather information that is sufficiently comprehensive to enable evaluation of student progress and achievement;
- to identify students and groups of students who are not achieving, who are at risk of not achieving, or who have special needs and to identify aspects of the curriculum that require particular attention;
- in consultation with the school's Māori community, to develop and make known its plans and targets for improving the achievement of Māori students.

Each board of trustees, through the principal and staff, is required to implement its curriculum in accordance with the priorities set out in the National Education Goals and the National Administration Guidelines.

These requirements will be confirmed by notice in *The New Zealand Gazette*.



Glossary

Hauora (page 22)

In health and physical education, the use of the word hauora is based on Mason Durie's Te Whare Tapa Whā model (Durie, 1994). Hauora and well-being, though not synonyms, share much common ground. Taha wairua relates to spiritual well-being; taha hinengaro to mental and emotional well-being; taha tinana to physical well-being; and taha whānau to social well-being.

Whakataukī

Te Reo Māori (page 14)

Ko te reo te manawa pou o te Māori,
Ko te ihi te waimanawa o te tangata,
Ko te roimata, ko te hūpē te waiaroha.

Language is the lifeblood of Māori,
The life force and the sacred energy of man.
Tears and mucus are the spiritual expressions of feelings.

Ko tōku nui, tōku wehi, tōku whakatiketike, tōku reo.

My language is my greatness, my inspiration,
that which I hold precious.

Ko te reo Māori te kākahu o te whakaaro,
te huarahi i te ao tūroa.

The Māori language is the cloak of thought
and the pathway to this natural world.

Ko te manu e kai ana i te miro, nōna te ngahere.
Ko te manu e kai ana i te mātauranga, nōna te ao.

The bird that partakes of the miro berry reigns in the forest.
The bird that partakes of the power of knowledge has access
to the world.

Ko te reo te mauri o te mana Māori.

Language is the life force of Māori.

English (page 18)

Ko te reo te tuakiri
Ko te reo tōku ahurei
Ko te reo te ora.

Language is my identity.
Language is my uniqueness.
Language is life.

The Arts (page 20)

Te toi whakairo, ka ihiihi, ka wehiwehi, ka aweawe te ao katoa.

Artistic excellence makes the world sit up in wonder.

Health and Physical Education (page 22)

He oranga ngākau, he pikinga waiora.

Positive feelings in your heart will enhance
your sense of self-worth.

Learning Languages (page 24)

Ko tōu reo, ko tōku reo,
te tuakiri tangata.
Tīhei uriuri, tīhei nakonako.

Your voice and my voice
are expressions of identity.
May our descendants live on and our hopes be fulfilled.

Mathematics and Statistics (page 26)

Kei hopu tōu ringa ki te aka tāepa,
engari kia mau ki te aka matua.

Cling to the main vine, not the loose one.

Science (page 28)

Mā te whakaaro nui e hanga te whare;
mā te mātauranga e whakaū.

Big ideas create the house;
knowledge maintains it.

Social Sciences (page 30)

Unuhia te rito o te harakeke kei whea te kōmako e kō?
Whakatairangitia – rere ki uta, rere ki tai;
Uī mai koe ki ahau he aha te mea nui o te ao,
Māku e kī atu he tangata, he tangata, he tangata!

Remove the heart of the flax bush and where will the
kōmako sing?
Proclaim it to the land, proclaim it to the sea;
Ask me, "What is the greatest thing in the world?"
I will reply, "It is people, people, people!"

Technology (page 32)

Kaua e rangiruatia te hāpai o te hoe;
e kore tō tātou waka e ū ki uta.

Don't paddle out of unison;
our canoe will never reach the shore.



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