Stage D: Building Independence
Working towards Level 1 of the Victorian Essential Learning Standards

Curriculum advice
Trial materials

Every child, every opportunity
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Minister’s Foreword

Through the Blueprint for Education and Early Childhood Development the Victorian Government agreed to an ambitious and challenging forward agenda to ensure that all Victorian children and young people have every opportunity to thrive, learn and grow.

This commitment will be achieved by ensuring our teachers and educators have the necessary knowledge, competencies and attitudes to meet the needs of all children and young people, including those who have additional learning needs and disabilities.

One of the key actions the Victorian Government has committed to is the development of an Abilities Index. The Abilities Index will provide schools and teachers with a means of meeting the learning aspirations of students with additional learning needs within an abilities based approach to teaching and learning. This approach identifies the individual student’s strengths and capability and will enhance the confidence of parents as partners in the education of students with additional learning needs.

The Abilities Index will enable the Department to deliver on its inclusion agenda and build the capacity of the education system to support each and every student in a consistent and meaningful way while also valuing the diversity and differences inherent in all students.

I am pleased to provide the first resource for schools resulting from the Abilities Index project. The resource contains scientifically validated curriculum advice presented in a Victorian Essential Learning Standards format for school leaders and teachers. This high quality resource contributes to a universal design for learning in Victorian schools.

It provides the capacity for schools to treat all students on the same basis and to meet their obligations in the Disability Discrimination Act, Disability Standards for Education (2005) with regard to Curriculum provision.

The curriculum advice will meet the challenge to embrace the inclusion agenda and extend the abilities based approach to teaching and learning of the Victorian Essential Learning Standards for all students.

Hon Maxine Morand MP
Minister for Children and Early Childhood Development
Introduction

This document supports the delivery of the Victorian Essential Learning Standards (VELS). It provides a framework for developing effective learning programs and mapping, monitoring and assessing for the many students in Victorian schools who are recognised as working towards Level 1.

These students are a diverse group, of different ages, with different disabilities, abilities, and learning needs from differing backgrounds and with varying educational experiences.

This document provides an overview of:
- the broad stages of development for students working towards Level 1 of the VELS
- a set of learning focuses, standards and indicators describing the experiences and expectations for learners.

Teachers should use this document to assist them when assessing and planning learning programs for students with additional needs who are working towards Level 1 of the VELS. It directly quotes from the doctoral work of Bernadette Coles-Janess, Eileen Roberts and Kerry Woods, The University of Melbourne.

Relationship with the VELS

The VELS are designed for all students. Programs for students with additional learning needs will be planned within the curriculum described in the standards and using these documents.

For schools, this may mean examining:
- organisational structures
- relationships with parent/guardian/carer and the community
- curriculum design, delivery and adaptation
- available resources and expertise
- types of supports that are utilised and
- links from the curriculum to the wider community.

The Stage documents provide curriculum support for students working towards Level 1 of the VELS.
Stages of Learning

Whilst it is recognised that student learning is a continuum from Years Prep to 10, and different students develop at different rates, they broadly progress through three stages of learning. The enhancement documents for students with additional needs working towards Level 1 support the delivery of VELS.

Students working towards Level 1
This curriculum advice focuses on progressing students from a pre-intentional to intentional state. It encourages students to develop their independence as they explore, participate and engage in the world around them. The curriculum advice focuses largely on foundational literacy and numeracy skills and development of physical, personal and social capacities.

Years Prep to 4 – Laying the foundations
In these years the curriculum focuses on developing the fundamental knowledge, skills and behaviours in literacy and numeracy and other areas, including physical and social capacities, which underpin all future learning.

Years 5 to 8 – Building breadth and depth
In these years students progress beyond the foundations and their literacy and numeracy become more developed. An expanded curriculum program provides the basis for in-depth learning within all domains in the three learning strands.

Years 9 to 10 – Developing pathways
In these years students develop greater independence of mind and interests. They seek deeper connections between their learning and the world around them and explore how learning might be applied in that world. They need to experience learning in work and community settings as well as the classroom. They are beginning to develop preferred areas for their learning.

Footnotes: 1,2,3,4 VCAA www.vcaa.vic.edu.au, ‘DEECD
This curriculum advice focuses on progressing students from a pre-intentional to intentional state. It encourages students to develop their independence as they explore, participate and engage in the world around them. Curriculum expectations for student achievement are set at four stages: Stages A to D. These stages are not associated with any set age or year level that links chronological age to cognitive progress. As students progress through these stages the level of support decreases as they proceed towards becoming independent learners. The stages focus largely on foundational literacy and numeracy skills and development of physical, personal and social capacities. At Stages A to D, standards are written for English, Mathematics, Health and Physical Education, the Arts and Interpersonal Development.

The relationship between stage and student learning focus is:

**Stage A: Beginning to Explore**
At this level students experience a range of learning activities that will assist them to attend to and explore the world around them with as much independence as possible. Experiences are designed to move students from a pre-intentional level of responding to a level where the response indicates beginning intention. Students will need high levels of coactive support and focused attention from the teacher to help them initiate and refine their responses. Students demonstrate some awareness and recognition of familiar people and routine activities.

**Stage B: Active Exploration**
Students at this level become less reliant on high levels of coactive support and become more reliant on verbal prompts and gestures to facilitate their learning. They begin to explore their world independently and engage in simple cause-and-effect play activities. Students are able to focus on structured learning activities for short periods of time. They respond to familiar people and events and begin to use ‘yes/no’ responses.

**Stage C: Intentional Participation**
Students at this level are less dependent on coactive support and respond more consistently to prompts and simple clear directions from the teacher to support them in their learning. They are displaying the first signs of independence and becoming more peer focused. Students participate in structured learning activities with others and they begin to use pictures, photos and objects to communicate personal interests and experiences. They start to use and link some familiar words and images to form a meaningful communication.

**Stage D: Building Independence**
With teacher support and curriculum scaffolding, students at this level participate cooperatively in group learning activities. They express their feelings, needs and choices in increasingly appropriate ways and combine and sequence key words and images to communicate personal interests and to recount significant experiences. They indicate beginning understanding of social rules and expectations and are beginning to reflect on their own behaviour.
Structure of the Curriculum

This document focuses on Stage D and is organised into domains. Each section includes a domain learning focus statement, indicators and, where appropriate, a set of standards organised by dimension.

Stages
There are four stages students progress through as they work towards Level 1 of the VELS. They provide a profile of students working at each stage, A to D.

Learning Focus
Learning focus statements are written for each domain and stage. These outline the learning that students need to focus on if they are to progress and achieve the standards at the stage where they apply. They suggest appropriate learning experiences rather than defining a syllabus or prescribing specific teaching methods. Teachers can draw from these statements to develop relevant teaching and learning activities.

Standards
The standards represent what students would be expected to attain following successful learning. They provide a set of practical, observable ways in which students are likely to demonstrate their achievements. The standards for each stage should be read in conjunction with the learning focus, taking into account the teaching setting and the degree of teacher support available.

The standards do not represent specific tasks to be completed in narrowly defined ways. Students will be required to demonstrate their achievement of the standards, using a wide variety of learning activities and tasks. The standards do not determine how teachers will assess.

Indicators
The indicators represent examples of what students would be expected to display as they progress towards the standards. This is not an exclusive or exhaustive list. The indicators provide a set of practical, observable ways in which students are likely to demonstrate their achievements. The indicators for each stage should be read in conjunction with the learning focus and standards, taking into account the teaching setting and the degree of teacher support available.
VELS incorporate the opportunities to learn covered in the national Statements of Learning (www.curriculum.edu.au/mceetya/the_statements_of_learning,22835.html). The Statements of Learning describe essential skills, knowledge, understandings and capacities that all young Australians should have the opportunity to learn by the end of Years 3, 5, 7 and 9 in English, Mathematics, Science, Civics and Citizenship and Information and Communication Technologies (ICT).

The Statements of Learning were developed as a means of achieving greater national consistency in curriculum outcomes across the eight Australian states and territories. It was proposed that they be used by state and territory departments or curriculum authorities (their primary audience) to guide the future development of relevant curriculum documents. They were agreed to by all states and territories in August 2006.

During 2007, the VCAA prepared a detailed map to show how the Statements of Learning are addressed and incorporated in the VELS. In the majority of cases, the VELS learning focus statements incorporate the Statements of Learning. Some Statements of Learning are covered in more than one domain. In some cases, VELS learning focus statements have been elaborated to address elements of the Statements of Learning not previously specified.

(VCAA www.vca.vic.edu.au)
Accommodations for Students

It is understood that students with additional learning needs may require additional support and accommodations to ensure their wellbeing and learning needs are met. This could include support from specialists, therapists and outside agencies.

Accommodations are student specific. The student’s abilities, disabilities and learning characteristics will determine the communication, equipment, specific assistance, strategies and teaching approaches applied.

Students may communicate their learning in a variety of ways. These may include:

- gesture: pointing, touching, hand squeeze, eye blinking, eye contact, miming, facial expression, Makaton® keyword signing, Auslan®
- voice: vocalising, speech
- visual aids: written words, pictures, photos, picture symbols, diagrams, Braille
- communication devices: voice output communication devices, computers.

Students may need assistance in a number of ways when working towards a standard of progress. Support should allow the student as much independence as possible. Assistance may include:

- coactive assistance: physical assistance
- prompting: verbal, visual and/or gesture prompts
- physical aids: modified grips, hand splints, body braces, leg splints, walking frames, wheelchairs, modified equipment
- explicit, targeted teaching strategies.

This support may occur throughout or be offered at different levels as required during an activity.
Physical, Personal and Social Learning

A curriculum designed to equip students for the challenging world of the 21st century needs to ensure that students develop as people who take increasing responsibility for their own physical wellbeing, learning, relationships with others and their role in the local, national and global community.

Within the Physical, Personal and Social Learning strand the learning domains are:

Health and Physical Education
A healthy, physically active lifestyle is conducive to more effective participation in all that society has to offer and greater levels of success within and beyond school. This requires students to develop the knowledge, skills and behaviours that enable them to:

- maintain good health and live a healthy lifestyle
- understand the role of physical activity in ensuring good health
- engage in physical activity.

Interpersonal Development
In our highly interconnected and interdependent world, students must learn to work with others by:

- building positive social relationships
- working and learning in teams
- managing and resolving conflicts.

Personal Learning
As students progress through school they need to be encouraged and supported to take greater responsibility for their own learning and participation at school. This involves developing as individual learners who:

- acquire self-knowledge and dispositions that support learning
- can learn with peers, including by seeking and responding appropriately to feedback
- increasingly manage their own learning and growth, including by setting goals and managing resources to achieve these
- recognise and enact appropriate values within and beyond the school context.

(VCAA www.vcaa.vic.edu.au)
Civics and Citizenship

Students need to develop the knowledge, skills and behaviours that enable them to take action as informed, confident members of a diverse and inclusive Australian society. They need to understand the political and legal systems and processes and the history that underpins them. This involves a focus on students:

- understanding their identity and roles in their community
- knowing their rights and responsibilities as citizens
- appreciating Australia’s role in the global community
- having the knowledge, skills and behaviours to participate in society and take responsible action in relation to other citizens and the environment at a local and broader level.

(VCAA www.vcoa.vic.edu.au)
Health and Physical Education

Introduction

The domain of Health and Physical Education provides students with knowledge, skills and behaviours to enable them to achieve a degree of autonomy in developing and maintaining their physical, mental, social and emotional health. This domain focuses on the importance of a healthy lifestyle and physical activity in the lives of individuals and groups in our society.

This domain is unique in having the potential to impact on the physical, social, emotional and mental health of students. It promotes the potential for lifelong participation in physical activity through the development of motor skills and movement competence, health-related physical fitness and sport education.

Engaging in physical activity, games, sport and outdoor recreation contributes to a sense of community and social connectedness. These are vital components of improved wellbeing.

Students’ involvement in physical activity can take many forms, ranging from individual, non-competitive activity through to competitive team games. Emphasis is placed on combining motor skills and tactical knowledge to improve individual and team performance. Students progress from the development of basic motor skills to the performance of complex movement patterns that form part of team games. They learn how developing physical capacity in areas such as strength, flexibility and endurance is related to both fitness and physical performance.

Students progress from learning simple rules and procedures to enable them to participate in movement and physical activity safely, to using equipment safely and confidently. Students undertake a variety of roles when participating in sports, such as umpire, coach, player and administrator, and assume responsibility for the organisation of aspects of a sporting competition.

This domain explores the developmental changes that occur throughout the human lifespan. It begins by identifying the health factors necessary to promote and maintain growth and development, followed by discussion of significant transitions across the lifespan, including puberty, to gaining an understanding of human sexuality and factors that influence its expression. The exploration of human development also includes a focus on the establishment of personal identity, factors that shape identity and the validity of stereotypes.

Students develop an understanding of the right to be safe and explore the concepts of challenge, risk and safety. They identify the harms associated with particular situations and behaviours and how to take action to minimise these harms.

Through the provision of health knowledge, this domain develops an understanding of the importance of personal and community actions in promoting health and knowledge
about the factors that promote and protect the physical, social, mental and emotional health of individuals, families and communities. Students investigate issues ranging from individual lifestyle choices to provision of health services by both government and non-government bodies. In investigating these issues, they explore differing perspectives and develop informed positions.

This domain examines the role of food in meeting dietary needs and the factors that influence food choice. Students progress from learning about the importance of eating a variety of foods to understanding the role of a healthy diet in the prevention of disease.

The Health and Physical Education domain provides students with the knowledge, skills and behaviours necessary for the pursuit of lifelong involvement in physical activity, health and wellbeing.

Dimensions

Standards in the Health and Physical Education domain are organised in two dimensions:

- Movement and physical activity – from Stage A
- Health knowledge and promotion – from Level 3.

Movement and physical activity

The Movement and physical activity dimension focuses on the important role that physical activity, sport and recreation need to play in the lives of all Australians by providing opportunities for challenge, personal growth, enjoyment and fitness. It promotes involvement in a manner that reflects awareness that everyone has the right to participate in a healthy and active lifestyle. It develops students’ confidence in using movement skills and strategies to increase their motivation to become active as well as improve their performance and maintain a level of fitness that allows them to participate in physical activity without undue fatigue. It builds understanding of how training and exercise in areas such as strength, flexibility and endurance relate to physical performance.

Health knowledge and promotion

The Health knowledge and promotion dimension examines physical, social, emotional and mental health and personal development across various stages of the lifespan. It focuses on safety and the identification of strategies to minimise harms associated with particular situations or behaviours. Students examine the promotion of health of individuals and the community through the use of specific strategies and the provision of health resources, services and products. They examine the factors that influence food selection and the role of nutrition in healthy growth and development.

Structure of the domain

The Health and Physical Education domain is organised into four stages (Stage A to D, working towards Level 1); and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards (where appropriate) and indicators organised by dimension. In Health and Physical Education, standards for assessing and reporting on student achievement apply from Stage A.
Strand: Physical, Personal and Social Learning
Domain: Health and Physical Education
Stage D: Building Independence

Learning Focus

Students engage in a variety of physical activities in a range of environments (indoor, outdoor and aquatic). They take turns with a partner or in a small group and begin to anticipate the next step in familiar physical routines.

Students with support and clear directions, learn to identify, recognise, collect and use familiar pieces of equipment. They begin to participate in simple games, with support, to follow instructions and to remain on task. During aquatic sessions students learn to perform a safe entry into the pool and blow bubbles with their face in the water. They practise floating on their back and stomach, kick their legs and move forward in the water with the support of the teacher and floatation devices.

Students undertake basic self-care and personal hygiene activities with occasional prompts and minimal supervision. They recognise when they need to use the toilet and will call for assistance if needed.

Students are provided with opportunities to explore and learn about major body parts, their family, healthy eating, feelings and safety. Students begin to prepare healthy snacks with support from the teacher and are actively involved in health programs such as ‘SunSafe’.

Students develop an awareness of their own bodies and are introduced to the concept of privacy. They begin to identify situations where they feel unsafe and learn some basic strategies that they may use in these situations.

Through structured socialisation programs, they judge right and wrong on the basis of the consequences of their actions. They show some consideration for the needs and feelings of others and demonstrate an awareness of the cause and effect of emotional responses.
**Standards**

**Movement and Physical Activity**
At Stage D students perform simple gross motor movements confidently and freely within defined spaces. They can negotiate steps and a pathway through a space. Students can coordinate two activities in a sequence, for example, walk and jump; run and kick. Students use fine motor skills to grasp, hold and manipulate objects and basic tools to complete a task. They follow a sequence of movement instructions and can identify some safety equipment used to minimise injury during physical activities.

**Indicators**

Students:
- show increasing control in using equipment for climbing, scrambling, sliding and swinging
- sit on the side of the pool and make a safe entry into the pool
- float on back and stomach using flotation devices and with head supported by the teacher
- float with support from the teacher and flotation devices
- float with support from flotation devices and kick with legs to move forward
- blow bubbles with face in water
- begin to use vocabulary associated with movement
- follow basic safety directions related to physical activities and the use of basic equipment and facilities
- begin to consider space around them as part of planning for the way students move
- identify safety equipment used to minimise injury during physical activities
- prepare for physical activities by collecting and dressing in appropriate clothing and safety gear
- use familiar equipment with competency
- demonstrate basic ball skills such as pushing, throwing, catching or striking a ball with a bat
- ride a bicycle in structured environments
- share familiar play equipment and assist in its distribution to fellow students
- demonstrate an understanding of and follow familiar game rules
- demonstrate sportsmanship by cheering on fellow students.

**Health Knowledge and Promotion**
In Health and Physical Education standards for the *Health knowledge and promotion* dimension are introduced at level 3.

Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 3 standards.

Students may:
- anticipate familiar self-care routines and carry them out with minimal supervision
- identify personal hygiene routines that need to be carried out each day
- initiate sun-protection procedures with minimal prompts
- dress and undress independently
- recognise and indicate the need to use the toilet and request assistance when needed
- manage own lunch box and drink bottle at lunchtime
- identify the major parts of the body by their proper names and begin to describe their function
- identify those parts of the body that are ‘private’
- demonstrate basic food-preparation skills
- demonstrate an understanding of basic food-handling hygiene
- identify different foods one might eat at different times of the day and at different social events
- use pictures and/or words to describe how they feel
- identify and classify familiar foods into different food groups
- identify situations when they might feel angry, afraid, happy, sad, lonely, anxious or excited
- demonstrate an understanding of different kinds of relationships, for example, family, friend
- describe how family and friends care for one another
- describe self and others in terms of physical characteristics
- identify situations where they feel safe and unsafe
- demonstrate a beginning understanding of safety by identifying basic safety risks
- recognise safety signs and warnings in the environment around them
- identify safe places to cross the road.
Interpersonal Development

This document provides a framework for developing effective learning programs and Learning in the Interpersonal Development domain supports students to initiate, maintain and manage positive social relationships with a range of people in a range of contexts. It is through the development of positive social relationships that individuals become linked to society, develop a sense of belonging and learn to live and work with others. In a pluralistic, multicultural society such as Australia, with varying interests, values and beliefs, it is essential that individuals learn to participate in groups whose members are from diverse backgrounds. In this domain there is a particular focus on developing students’ capacity to work cooperatively as part of a team, as this is widely acknowledged as being a core requirement for success in the workplace and in the community.

Building effective social relationships and relating well to others requires individuals to be empathetic, and to be able to deal effectively with their own emotions and inner moods. It also requires them to be aware of the social conventions and responsibilities that underpin the formation of effective relationships. All social relationships have the potential to create conflict. Students need to develop the skills and strategies to manage and resolve conflict in a sensible, fair and effective manner and not see it as something to avoid or eliminate.

Working cooperatively as part of a team requires the skills outlined above. In addition, it requires individuals to be able to balance commitment to the group and its norms with their own needs. This requires competence in presenting their own ideas and listening to those of others, approaching topics from different viewpoints, and understanding their specific role and responsibilities in relation to those of others and the overall team goal.

Relationships with peers and adults at the school provide students with opportunities for reflection and growth. Adults at the school can reinforce this learning by providing positive role models. Interactions should be positive, fair, respectful and friendly and be supported by a classroom culture that is open, honest and accepting.

The Interpersonal Development domain provides students with learning opportunities and experiences that will support their learning across the curriculum, particularly in relation to working in teams where collaboration and cooperation, sharing resources and completing agreed tasks on time are highlighted. Learning related to building social relationships encourages students to maintain positive learning environments across their learning programs.

(VCAA www.vcaa.vic.edu.au)
Dimensions
Standards in the Interpersonal Development domain are organised in two dimensions:

- Building social relationships
- Working in teams.

Building social relationships
Learning in the Building social relationships dimension supports students to initiate, maintain and manage positive social relationships with a diverse range of people in a range of contexts. Students learn about and practise the social conventions which underpin relationships and learn how to act in socially responsible ways. Strategies for understanding, managing and resolving conflict are also an important focus.

Working in teams
In the Working in teams dimension students develop the knowledge, skills and behaviours to cooperate with others to contribute to the achievement of group goals. The focus is not only task achievement, but also on contributing to, and reflecting on, the learning that occurs through being part of a team.

Structure of the domain
The Interpersonal Development domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, indicators and, where applicable, a set of standards organised by dimension. In Interpersonal Development, standards for assessing and reporting on student achievement apply from Stage A, although at this stage they are not organised by dimension.

(VCAA  www.vcoa.vic.edu.au)
### Strand: Physical, Personal and Social Learning

#### Domain: Interpersonal Development

#### Stage D: Building Independence

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<th>Learning Focus</th>
<th>Standards</th>
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| As students work towards the achievement of Stage D standards in Interpersonal Development, they interact with their peers, teachers and other adults in a range of familiar contexts. They are learning how to be socially perceptive and develop their independence in social contexts. In supported group learning activities they interact with others in a variety of situations, learn to express and communicate their feelings, needs and choices in increasingly appropriate ways. They begin to use contextual cues to guide behaviour in familiar social environments. With teacher support they learn to negotiate with others when working or playing in groups, and begin to show concern and offer comfort to others in distress. Students are developing social sensitivity. They respond to others in group situations, playing or working in a small group cooperatively, for example, taking turns appropriately. Students are supported to learn and apply the rules of personal space. They carry out routine activities in a familiar context. Students begin to independently offer assistance, share, initiate activities and regulate their emotional expression. They are also developing and sustaining friendships. Students are learning the basic rules of respect for another person, using property safely, cooperation and that some words and actions hurt. With support, students learn some self-help and helping-others skills. They are learning to behave appropriately in different familiar social settings and adhere to class practices. | At Stage D, students attend to and care for personal and others' possessions. They can communicate a concern and use peer behaviour as a cue for own behaviour. Students actively seek a consistent friendship group or person during recreation and class group work and can identify own 'friends' when asked. They will contribute to a class group, initiate a preferred activity and offer assistance to others. | Students:  
- name self, family members and classmates from a photograph  
- identify people associated with particular events and routines  
- identify some characteristics of self and others  
- implement some of the rules related to personal space  
- implement some self-help skills  
- attempt to help others  
- demonstrate some basic rules of cooperation  
- demonstrate an understanding that negative words and actions are hurtful  
- demonstrate an understanding that their behaviour can impact on others  
- regulate own behaviour and emotional expression in familiar contexts  
- adhere to class routines  
- attempt to cooperate with others when working or playing in groups  
- show an understanding of sharing with regard to personal belongings, class items and resources  
- follow the lead of others to request, handle property and offer compliments  
- explain the generalised cause of their own feelings, for example, "... makes me happy"  
- respond to questions or prompts that describe self, for example, ‘Are you a boy!’ |
Introduction

Learners are most successful when they are mindful of themselves as learners and thinkers within a learning community. The Personal Learning domain focuses on providing students with the knowledge, skills and behaviours to be successful, positive learners, both at school and throughout their lives. They are supported to develop the confidence and ability to be adaptive and take an active role in shaping their own futures in a world of constant change.

Students can learn many things by will and effort, particularly if they see that the learning is relevant; however, the learning of students is enhanced when they are supported to develop intentional strategies that promote learning. They need to understand what it means to learn, who they are as learners and how emotions affect learning. They also need to develop skills in planning, monitoring and revising their work, and reflecting on and modifying their learning practices.

Consequently, as students progress through school they need to be encouraged and supported to take greater responsibility for their own learning, their participation in learning activities and the quality of their learning outcomes. They need to develop a sense of themselves as learners and build up the knowledge and skills to manage their own learning and emotions. As they do this, they move from being supported learners to autonomous learners.

Students learn to seek and use feedback from their teachers to develop their content knowledge and understanding. They also learn to seek and use feedback from their peers and draw on other members of the community who may provide feedback, knowledge and advice about skills that support their learning. They need to develop the capacity to reflect on their learning in systematic ways.

This domain supports the development of autonomous learners, with a positive sense of themselves as learners, by providing all learners with the knowledge, skills and behaviours to:

- develop an understanding of their strengths and potential
- seek and respond appropriately to feedback from their teachers, peers and other members of the community
- develop skills of goal setting and time and resource management
- increasingly manage their own learning and growth by monitoring their learning, and setting and reflecting on their learning goals
- learn to understand and to manage their own emotions
- develop resilience and dispositions which support learning
- recognise and enact learning principles within and beyond the school
- prepare for lifelong learning.

Personal Learning
The achievement of these outcomes requires the creation of a school and classroom culture where all students are respected and valued as individuals with the capacity to learn and think, and where self-regulated effort in learning is promoted.

**Dimensions**

Standards in the Personal Learning domain are organised in two dimensions:

- The individual learner
- Managing personal learning.

**The individual learner**

The *individual learner* dimension focuses on students developing knowledge about their personal characteristics and capabilities, and those they need to develop to support their approaches to and reflections about learning. Students explore and practise skills and behaviours that support learning. They develop the capacity to monitor their own learning, identifying learning strengths and areas requiring improvement. They seek and use teacher feedback to develop their content knowledge and understanding. They explore the ways in which personal values affect learning and recognise the need to develop ethical frameworks for operating fairly within the classroom and recognising and respecting individual differences of class members.

Students recognise their learning preferences and needs and respect that these may differ from those of others. They develop confidence in making informed decisions about their learning.

**Managing personal learning**

The *Managing personal learning* dimension focuses on the knowledge, skills and behaviours required to enable successful management of personal learning. Students develop skills in goal setting and time and resource management and focus on task achievement. They increasingly develop the skills to work independently, becoming autonomous learners. Students develop strategies to manage their emotions and develop positive attitudes towards learning.

(VCAA www.vcaa.vic.edu.au)

**Structure of the domain**

The Personal Learning domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards (where appropriate) and indicators. In Personal Learning, standards for assessing and reporting on student achievement apply from Level 3.
**Strand: Physical, Personal and Social Learning**

**Domain: Personal Learning**

**Stage D: Building Independence**

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<th>Learning Focus</th>
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<tr>
<td>As students work towards the achievement of Level 3 standards in Personal Learning, they experience diverse approaches and responses to learning. With teacher support, they make links with their existing experiences and develop the view that learning is exploratory, fun and rewarding. Students are building their independence. They are learning to use and respond to language and developing their memory skills for recall, naming, sorting, choosing and matching. In group learning experiences, with teacher support, students participate and interact with others in a variety of situations. They are learning to differentiate emotional responses and are becoming aware of the causes of their emotions. They are learning to express and communicate their feelings, needs and choices in increasingly appropriate ways. They are also learning to regulate facial, body and vocal expressions of emotions. They may explain generalised causes of own emotions and show concern and offer comfort to others in distress. Students show a readiness and willingness to be taught how to do some things not yet learned or tried. They learn to make choices about what learning activity they might like to do from a range of options. Students are supported to select appropriate resources for a familiar activity and will complete a task with support. They are developing the verbal, visual and auditory memory skills required to complete tasks and respond to their environment. The students are learning to name or label familiar people, objects and places. They are beginning to answer simple questions that involve recalling, naming, sorting, choosing, matching and making a preference. Students show increasing independence and self-sufficiency in selecting and carrying out simple, familiar activities. Students learn to recall personal experiences and facts about a topic of interest through the use of questions and prompts from teachers. They use cues and prompts from others to work out the next step in a familiar routine and to focus back on the activity after distractions (both internal and external). Students seek evaluative feedback from others by showing completed or partially completed work to others for praise, and may also display positive emotion at completion of tasks.</td>
<td>In Personal Learning, standards for assessing and reporting on student achievement are introduced at Level 3. The learning focus statements for Stage A to Level 2 provide advice about learning experiences that will assist students to work towards the achievement of the standards at Level 3. Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 3 standards. Students may:  • self-select activities from offered options  • independently carry out simple, familiar activities  • respond to questions related to learning tasks  • make choices about what learning activity they might like to do from three options  • attempt to use different implements, materials and tools with support  • name familiar places  • recall personal experiences when supported through guided questioning  • name familiar people  • name and respond to questions about self, for example, age and gender  • follow prompts to focus back on an activity and ignore distractions  • use cues from others to work out the next movement in a familiar routine  • independently follow a one-step instruction  • match visually similar objects, for example, shapes, pictures or symbols.</td>
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Introduction

The Civics and Citizenship domain provides students with knowledge, skills and opportunities to understand and practise what it means to be a citizen in a democracy. Citizens require knowledge and understanding of civic institutions and the skills and willingness to actively participate in society. They need knowledge of political and legal systems and processes and the history that underpins them in order to achieve civic understanding. They need to understand their rights and responsibilities as citizens, and democratic values and principles, such as democratic decision making, representative and accountable government, freedom of speech, equality before the law, social justice and equality. This domain facilitates the practice of citizenship skills, the exploration and development of values and dispositions to support citizenship and the empowerment of informed decision making. Teaching of civics engages students in active interaction with the community.

In a world where people, environments, economics and politics are inextricably linked, and where dislocation and change is accelerating, a strong sense of personal identity developed through participation in communities is a sound basis from which to connect with the world. Civics and Citizenship education strengthens understanding and valuing of the self. It teaches why citizens need a sense of personal identity within their own community and how they can contribute to local, national and global communities. Through Civics and Citizenship students develop an appreciation for the uniqueness and diversity of Australia's multicultural society and the efforts of individuals and groups to achieve political rights and equality. They value what it means to be an Australian and explore Australia's role in the global community. They consider human rights and social justice issues at local, national and global levels.

In Civics and Citizenship students investigate how, in a democratic tradition, informed and diverse contributions and participation by citizens are important. They learn about, contest and enact the values that are important to be an engaged citizen within a community. They are provided with opportunities to investigate and participate in activities that support sustainable practices, social justice and underpin the future wellbeing of societies from a local to a global level. Civics and Citizenship provides a vehicle for students to challenge their own and others' views about Australian society and to formally participate in and practise activities and behaviours that involve democratic decision making.

Dimensions

Standards in the Civics and Citizenship domain are organised in two dimensions:

- Civic knowledge and understanding
- Community engagement.
Civic knowledge and understanding
The Civic knowledge and understanding dimension focuses on the principles and practices that underpin civic institutions and civic life in communities and societies. Students explore concepts of democracy and the key features of Australian and other democracies. They develop knowledge and understanding of the origins and key features of the Australian political, government and legal systems. They develop understanding of the origins, uniqueness and diversity of Australia’s multicultural society. They learn about the principles and values that underpin Australian democracy, such as equality before the law, freedom of speech, democratic representation, accountability of government, social justice and respect for others. They explore the elements of sustainability in local, national and global contexts. They learn about the contribution democracy has made to Australia’s history and national identity and Australia’s place in the world.

Community engagement
The Community engagement dimension focuses on the development of skills and behaviours students need to interact with the community and to engage with organisations and groups. Students participate in processes associated with citizenship, such as decision making, voting and leadership, using their knowledge of rules and laws of governance, and concepts such as human rights and social justice. They think critically about their own values, rights and responsibilities and those of organisations and groups across a range of settings, and explore the diversity in society.

Students explore and consider different perspectives and articulate and justify their own opinions on local, national and global issues. They refine their own opinions, values and allegiances. They apply their knowledge and skills in a range of community-based activities.

Structure of the domain
The Civics and Citizenship domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards (where appropriate) and indicators. In Civics and Citizenship, standards for assessing and reporting on student achievement apply from Level 3.
**Strand: Physical, Personal and Social Learning**

**Domain: Civics and Citizenship**

**Stage D: Building Independence**

<table>
<thead>
<tr>
<th>Learning Focus</th>
<th>Standards</th>
<th>Indicators</th>
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| Students begin to demonstrate expected school behaviours. With support, students follow simple rules at school and in class and develop knowledge and understanding of the boundaries set and the behavioural expectations within and outside of the school. Students follow gesture and verbal prompts. They learn to combine and sequence key words to communicate and are able to follow simple directions. They engage in small-group activities in the classroom and, with support, contribute to group and class discussions and work cooperatively. Students learn about the behaviours expected in different settings. They start to demonstrate an understanding of fairness, behaviours that are hurtful to others and behavioural expectations associated with different places in the community. Students participate in various community events and with the assistance of concrete objects and pictures begin to recall and recount significant experiences and interests. | In Civics and Citizenship, standards for assessing and reporting on student achievement are introduced at Level 3. The learning focus statements for Stage A to Level 2 provide advice about learning experiences that will assist students to work towards the achievement of the standards at Level 3. | Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 3 standards. Students may:  
• engage in small-group activities in the classroom  
• contribute to group and class discussions  
• contribute to school assemblies  
• work cooperatively with others in group work  
• demonstrate concern for others  
• offer to assist others  
• identify some examples of being fair  
• share resources  
• demonstrate an understanding of the behavioural expectations associated with visiting a variety of places in the community  
• identify some basic rules and the reasons for having rules  
• respond appropriately to a variety of members of the school community  
• identify some responsibilities associated with the roles of significant people in the school and community  
• take responsibility for certain jobs in the classroom  
• make decisions in the classroom by voting on a number of options  
• contribute to decision making about class rules. |
Discipline-based Learning

The domains within the Discipline-based Learning strand form a body of knowledge with associated ways of seeing the world and distinct methods of exploring, imagining and constructing that world.

Broadly in line with academic literature and consistent with practice in many schools, the VELS identify The Arts, the Humanities, English and Languages Other Than English, Mathematics and Science as the disciplines for the curriculum over the stages of learning from Prep to Year 10.

Within the Discipline-based Learning strand the learning domains are:
- The Arts
- English
- The Humanities – Economics
- The Humanities – Geography
- The Humanities – History
- Languages Other Than English (LOTE) starts at Level 1 of VELS
- Mathematics
- Science.

Students who develop a deep understanding of the concepts contained in the discipline-based domains are able to apply their knowledge in many different ways. The degree to which they are able to transfer their knowledge depends largely on the degree to which students have achieved mastery over Physical, Personal and Social and Interdisciplinary learning.

Research suggests that students develop deeper understanding of discipline-based concepts when they are encouraged to reflect on their learning, take personal responsibility for it and relate it to their own world. These approaches are explicitly defined in the Physical, Personal and Social Learning domains such as physical education and personal learning.

Students are better able to develop, demonstrate and use discipline-based knowledge and skills when they can employ interdisciplinary knowledge, skills and behaviours described in the domains of Communication; Design, Creativity and Technology; Information and Communications Technology (ICT); and Thinking Processes.

Definitions of the following underlined terms are provided in relevant VCAA Domain documents.

(VCAA  www.vcae.vic.edu.au)
The Arts

Introduction

The Arts are unique, expressive, creative and communicative forms that engage students in critical and creative thinking and help them understand themselves and the world. In every society the Arts play a pivotal role socially, economically and culturally. The Arts encourage the development of skills and the exploration of technologies, forms and processes through single and multimodal forms. They fuel the exploration of ideas that cross the gamut of human emotions and moods through holistic learning, using cognitive, emotional, sensory, aesthetic, kinaesthetic and physical fields.

The Arts domain encompasses a diverse and ever-changing range of disciplines and forms that can be used to structure teaching and learning programs. The domain allows students to create and critically explore visual culture, performances in contemporary and traditional genres, and works that involve the fusion of traditional forms with digital media. Schools use the arts disciplines of Art, Dance, Drama, Media, Music and Visual Communication to plan programs. These programs reflect the cultural diversity of students and school communities and the vast growth in ICT that has made arts forms increasingly visible. They recognise the multicultural world saturated with imagery, sounds and performances that students inhabit. Engagement in the Arts involves the inspired and passionate exploration of ideas and the resultant products and performances. By their very nature, the Arts nurture cultural understanding, invention, new directions and new technology. Imagination and creativity, pivotal to the Arts, are essential to our wellbeing because we create much of our world in order to enhance our experiences and understandings of the diverse perspectives that constitute our cultural heritage. For students, interaction through the Arts brings contact with the Indigenous cultures of Australia and the cultures of our nearest neighbours.

Learning in the Arts allows students to communicate their perceptions, observations and understanding of structures, functions and concepts drawn from other areas of the curriculum. The Arts are a vehicle for confronting and exploring new ideas. Through learning in the Arts, students prepare for their roles in a post-industrial economy that depends on innovative ideas, creative use of technologies and the development of new and blended forms. Arts learning expects ethical conduct in the creating, making, presenting and responding to art works; for example, adherence to agreed approaches by individuals in a collaborative performance or acknowledgement of the use of other artists’ products.

(VCAA www.vcaa.vic.edu.au)
Learning in the Arts is sequential and students should have continuous experience in the different arts disciplines they undertake at a particular level. At Stages A to D and Levels 1, 2 and 3 all students should experience learning in Performing Arts (Dance, Drama and Music) and Visual Arts (Art, including two-dimensional and three-dimensional, and Media) disciplines and forms.

The arts disciplines may be offered by schools individually and/or in combination; for example, in a cross-disciplinary manner or using new arts forms that combine traditional arts disciplines. At Levels 4 and 5, the study of a range of arts disciplines broadens and deepens students’ understanding of the Arts as an area of human activity and provides increased opportunities for personal expression and communication. All students should have continuous experience in at least two arts disciplines at each of these levels. At Level 6, learning programs should provide opportunities for students to continue sequential development of learning in the arts disciplines they have undertaken at Levels 4 and 5. Opportunities should also be provided for students to explore personal interests and develop skills, knowledge and understanding relevant to specific arts forms and disciplines in increasingly sophisticated ways.

At all stages and levels, learning programs in the arts disciplines should provide opportunities for students to experience a range of traditional, contemporary (including digital) and new media/multidisciplinary forms and genres.

Dimensions
Standards in the Arts domain are organised in two dimensions:

- Creating and making
- Exploring and responding.

Standards for the Exploring and responding dimension are introduced from Level 3.

The frames of reference – interpreting, responding, performing, presenting, ideas, skills, techniques, processes, context, aesthetics and criticism – are integral to both dimensions, as Exploring and responding draws on students’ experiences as creators, makers, performers and/or audience.

Advice will be published for each arts discipline to accompany the standards.

(VCAA www.vcoa.vic.edu.au)
Creating and making

The *Creating and making* dimension focuses on ideas, skills, techniques, processes, performances and presentations. It includes engagement in concepts that emerge from a range of starting points and stimuli. Students explore experiences, ideas, feelings and understandings through making, interpreting, performing, creating and presenting. Creating and making arts works involves imagination and experimentation; planning; the application of arts elements, principles and/or conventions; skills, techniques and processes; media, materials, equipment and technologies; reflection; and refinement. Individually and collaboratively, students explore their own works and works by other artists working in different historic and cultural contexts.

Exploring and responding

The *Exploring and responding* dimension focuses on context, interpreting and responding, criticism and aesthetics. It involves students analysing and developing understanding about their own and other people's work and expressing personal and informed judgments of arts works. Involvement in evaluating meaning, ideas and/or content in finished products is integral to engagement in the Arts.

Exploration of, and response to, expressive qualities of arts works is informed by critical analysis of the use of elements, content and techniques and discussion about the nature, content and formal, aesthetic and/or kinaesthetic qualities of arts works. Exploring the qualities of arts works involves use of arts language and also draws on research into the purposes and functions for which the works are created and audiences to whom they are presented. This involves students developing an understanding of social, cultural, political, economic and historic contexts and constructs, and developing a consideration of ways that arts works reflect, construct, reinforce and challenge personal, societal and cultural values and beliefs.

(VCAA www.vcaa.vic.edu.au)

Structure of the domain

The Arts domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards (where appropriate) and indicators. In The Arts, standards for assessing and reporting on student achievement apply from Stage A.
Strand: Discipline-based Learning  
Domain: The Arts  
Stage D: Building Independence

<table>
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<tr>
<th>Learning Focus</th>
<th>Standards</th>
<th>Indicators</th>
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</table>
| All students should experience learning in Performing Arts (Dance, Drama and Music) and Visual Arts (Art: two-dimensional and three-dimensional, and Media) disciplines and forms. Learning and teaching programs at this level involve these arts disciplines individually (for example, Music) or in combination (for example, Dance and Drama, or Media and Visual Arts – Art: two-dimensional and three-dimensional). As students work towards the achievement of Stage D standards in the Arts, with prompts to complete tasks they create and make performing and visual art works. Students are provided with a variety of learning experiences that encourage them to express and communicate experiences, observations, ideas and feelings about themselves and their world. Students explore different ways of using performing and visual arts elements, principles and/or conventions, skills, techniques and processes, media, materials and technologies. For example, students could:  
• in Art, use a variety of basic tools and materials to create visual art works, constructions and sculptures  
• in Dance, participate in simple dance activity and perform a simple dance  
• in Drama, participate in simple drama activity and use gesture, sound and facial expressions to communicate a character's feelings  
• in Media, use basic ICT software graphics programs with support  
• in Music, learn to copy rhythms and basic music patterns and respond to changes in rhythm and tempo when moving to music. As part of their arts making, the teacher directs class discussions so that students learn, discuss and express opinions about the available ways to create and make art works. They are guided to explore the basic features of their own and others' art works, identifying the main materials used, what features they like best and characteristics of their art works. | Creating and making  
At Stage D, students make and share visual and performing art works that show emerging art knowledge and ability to create art works to communicate ideas, concepts, observations, feelings and/or experiences. They use materials, such as paste, cloth, wood, ceramics, beads and clay to create two-dimensional and three-dimensional art works. Students use a variety of media equipment and create a visual and sound picture card or poster using a basic ICT graphics program with the intention to meet an audience need. Students listen to and imitate simply musical patterns, for example by clapping, singing and playing a musical instrument. They adapt to changes to rhythm and tempo in music. Students use gesture, sound and facial expressions while acting. They demonstrate acceptable audience behaviour when in the classroom and when attending school functions. In the Arts, standards for the Exploring and responding dimension are introduced at Level 3. | Students:  
• use a variety of materials and tools, such as needle and thread, hammer and nails  
• use colour and/or shape to communicate moods or feelings  
• create two-dimensional art works  
• create three-dimensional art works  
• create art works that have a social purpose  
• mix colours to make secondary colours  
• move to music, changing rhythm and tempo as the music changes  
• explore and use the range of movement types, for example, light/strong movements  
• imitate and repeat movements in pairs and in groups to perform a simple dance to music  
• use gesture, sound and/or facial expressions to communicate a character's feelings at different points in a familiar story  
• discuss basic features of their own and others' arts work  
• express what features they like best in their own or others' arts work  
• identify the main materials used in visual art works  
• describe some of the characteristics of their arts works. |
Introduction

In the English domain, texts and language constitute the central and essential concepts. The concept of texts focuses equally on creating and analysing texts, understanding and interpreting texts, and moving beyond interpretation to reflection and critical analysis. The concept of language includes the use of language and the development of linguistic competence, and the development of knowledge about language.

Students learn to appreciate, enjoy and use language and develop a sense of its richness and its power to evoke feelings, to form and convey ideas, to inform, to discuss, to persuade, to entertain and to argue.

The English domain is centred on the conscious and deliberate study of language in the variety of texts and contexts in which it is spoken, read, viewed and written. It is concerned with a wide range of written and spoken texts in print and electronic forms, including literary texts such as novels, short stories, poetry, plays and non-fiction; film and other multimodal texts; media texts; information, commercial and workplace texts; everyday texts; and personal writing.

The study of English involves students in reading, viewing, listening to, writing, creating, comparing, researching and talking about a range of text types from the simple to the complex, from texts dealing with concrete and straightforward information to those dealing with increasingly complex and abstract issues and ideas. English teachers encourage students to explore the meaning of texts and how meaning is conveyed. They introduce critical approaches to the ideas and thinking contained in texts and support students in the development of critical understanding about the ways writers and speakers control language to influence their listeners, readers and viewers.

Students develop an understanding of the way purpose, audience and situation influence the structures and features of language and learn to apply their knowledge in their reading, writing, viewing, speaking and listening. They come to understand that different kinds of texts are appropriate for different occasions and learn to appreciate the variety of English usage in different times and places. They also learn about the ways language shapes and reflects attitudes in different times and places. Students are provided with opportunities to use language effectively in a range of contexts, from informal to formal.

Students learn terminology or metalanguage to describe and discuss particular structures and features of language produced in a variety of contexts. They learn to control language by applying their understanding of the grammatical structures of Standard Australian English, by learning to spell accurately and use punctuation effectively, as well as by imitating competent writers and speakers.

(VCAA www.vcaa.vic.edu.au)
Understanding texts and recognising how language works within them is necessary for success at school and beyond for an active, informed and fulfilling life in modern Australian society and the global community. By understanding and working with texts, students acquire the knowledge, skills and personal qualities that enable them to read, view and listen critically and to think, speak and write clearly and confidently.

**Dimensions**

Standards in the English domain are organised in three dimensions:

- Reading
- Writing
- Speaking and listening.

The learning in these dimensions is interrelated. For example, speaking and listening contribute to the development of students’ reading responses. Writing contributes to communication about texts read or viewed and to reflection and learning. To help support student progress in all three dimensions, learning contexts are diverse and include situations that are informal, formal, planned and spontaneous.

**Reading**

The *Reading* dimension involves students understanding, interpreting, critically analysing, reflecting upon and enjoying written and visual, print and non-print texts. It encompasses reading and viewing a wide range of texts and media, including literary texts such as novels, short stories, poetry and plays, as well as popular fiction and non-fiction works, newspapers and magazines, illustrations, posters and charts, film and television and the texts associated with ICT. Reading involves active engagement with texts and the development of knowledge about the relationship between them and the contexts in which they are created. It also involves the development of knowledge about a range of strategies for reading.

**Writing**

The *Writing* dimension involves students in the active process of conceiving, planning, composing, editing and publishing a range of texts, including writing for print and electronic media and performance. Writing involves using appropriate language for particular purposes or occasions, both formal and informal, to express and represent ideas, issues, arguments, events, experience, character, emotion and information and to reflect on such ideas. It involves the development of knowledge about strategies for writing and the conventions of Standard Australian English. Students develop a metalanguage to discuss language conventions and use.

*(VCAA www.vcaa.vic.edu.au)*
Speaking and listening
This dimension refers to the various formal and informal ways oral language is used to convey and receive meaning. It involves the development and demonstration of knowledge about the appropriate oral language for particular audiences and occasions, including body language and voice. It also involves the development of active-listening strategies and an understanding of the conventions of different spoken texts, including everyday communication, group discussion, formal presentations and speeches, storytelling and negotiating.

Learners of English as a Second Language
Many students in Victorian schools learn English as a Second Language (ESL). They are of all ages and at all stages of learning English and have varying educational backgrounds in their first languages. While the broad objectives of English programs will ultimately be the same for all students, those learning English as a Second Language need time, support and exposure to English before being expected to reach the standards described in the English domain, and will come to this achievement via a range of pathways.

Standards have been developed to assist teachers to devise effective learning and assessment programs for ESL students. The document includes an overview of the broad stages of English language development, with learning focus statements and standards for each stage.

National Literacy Benchmarks
National Literacy Benchmarks are used for reporting achievement in three aspects of literacy – reading, writing and spelling – at Years 3, 5 and 7. The benchmarks define nationally agreed minimum acceptable standards for literacy at these years.

Full details of the National Literacy Benchmarks are available in Literacy Benchmarks, 5 and 7, Writing, Spelling and Reading, Curriculum Corporation, 2000 at www.curriculum.edu.au/projects/numbench.php

The benchmarks describe minimum standards. For this reason, the Year 3 benchmarks relate to Level 2 English standards, the Year 5 benchmarks relate to Level 3 English standards and the Year 7 benchmarks relate to Level 4 English standards. Links to the literacy benchmarks are located in the English standards.

(VCAA www.vcaa.vic.edu.au)

Structure of the domain
The English domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards and indicators organised by dimension. In English, standards for assessing and reporting on student achievement apply from Stage A.
Strand: Discipline-based Learning
Domain: English
Stage D: Building Independence

Learning Focus

As students work towards the achievement of Stage D standards in English, they are building their independence in their application and understanding of speaking, listening, reading and writing. Students are beginning to independently draw on their own experience from home, school and in the community when speaking, listening, reading and writing. They are learning to use pictures, letters and numbers to communicate, and recognise and use social rules of communication.

Students explore many forms of communication and different ways to use language. They learn to identify spaces, letters and words in text and that words and stories have consistent meaning. Students show an interest in the activity of reading and will choose familiar or favourite reading material. They use visual cues to recognise a small number of words in their environment. Students learn to combine and sequence key words and pictures to communicate and follow simple directions. They are beginning to seek clarification on word meaning and the correct use of words. Students are exposed to individual letters of the alphabet and are taught their letter names and common sounds.

Students use a range of tools, such as computer, pictures and pencils to record their experiences. They are beginning to understand how writing should look, that it has a consistent meaning and moves from left to right on a page. Students attempt to trace over letters, lines and patterns and begin to copy letters and numbers. They learn to combine up to three key words or images to communicate ideas. Students select and sequence pictures and key words to describe personally significant events and/or experiences.

Students are becoming competent speakers. They are learning the social rules of communication, exploring ways of conveying information and building their receptive and expressive vocabulary. Students are beginning to recall and recount significant experiences and interests when supported with concrete objects and pictures. They are developing the ability to acknowledge and answer a person. Students are able to combine and sequence key words (‘words’ equates to spoken words, picture symbols, word cards, words delivered by a communication device and signed words) when communicating.

Students learn to listen and follow simple instructions. They freely initiate greetings to fellow students, teachers and significant others. Students are learning to use basic social rules of communication, including taking turns in conversation, and acknowledging and answering questions. They learn effective ways to seek and gain attention and comfort.
### Standards

#### Reading
At Stage D, students read aloud and point to individual picture symbols of familiar objects, activities or concepts. They sequence pictures and words to make a key word picture or simple sentence, follow a simple pictorial timetable and can sequence a small collection of picture symbols using left to right ordering. Students select their own reading material by looking at the picture on the cover; model the teacher by tracking text page by page, left to right, top to bottom; follow or point to a line of text as it is being read; and sit and look at books or other reading material. They use illustrations to retell a story or message in their own words, and answer simple questions about a story. Students recognise the connection between print and the spoken word, identifying spaces, letters and/or words in text, and reading familiar words and signage using partial cues and illustration. Students sound and say most letters of the alphabet.

#### Writing
At Stage D, students use a preferred hand for writing and drawing, hold and use a pencil to trace over lines, shapes and patterns with some accuracy, colour within a clearly defined area, copy or write some familiar letters with beginning accuracy, copy their first name or copy-type their first name. They select and sequence pictures and key words to describe a personally significant event or experience, contribute key words to teacher-constructed texts to describe pictures they have selected, retell a picture story about a favourite topic using key words to describe each picture. Students understand that what is said can be written, indicate words using spaces and clusters of letters, ‘read’ back own attempt at writing, and demonstrate knowledge of some rules associated with writing, such as working left to right, top to bottom, spacing. They seek clarification on how to write a word.

### Indicators

#### Students:
- make associations between pictures and spoken words
- read aloud a simple picture sentence
- look for and match some simple words in text
- follow a simple sequence of pictures
- display reading behaviours
- differentiate between pictures and text.

#### Students:
- ask to write or draw
- use a pencil to mark a pathway between two lines
- find a picture in a magazine to represent an item to be used in a picture story book
- write a few letters of the alphabet with accuracy
- are aware that there is a right and wrong way to write a word
- may mix shapes, letters and numbers when writing.
## Standards

**Speaking and listening**

At Stage D, students use spoken language to acknowledge and answer a person who communicates with them, giving up to three-word responses; make eye contact; show some understanding of turn taking; use appropriate volume; and articulate clearly. They participate in communication with others by expressing likes, dislikes and ideas; sequence key words, signs or symbols to describe a favourite object, completed piece of work or to make a request; and communicate needs and give reasons. Students can use simple phrases and simple sentences and sequence two key ideas. They respond to questions and sequence key words to describe or predict what is happening in a picture, movie or book. They listen to and respond to sentences when interacting with others, and ask questions at appropriate intervals to show an interest in what the speaker is saying. Students follow simple, routine instructions that contain up to three key words, and follow simple instructions given by an interactive computer software program.

## Indicators

**Students:**
- use a variety of social conventions to engage the listener
- learn the meaning of new words and phrases and use them in context
- demonstrate an understanding of language sequencing by using key words to make phrases and simple sentences
- attend and respond to sequenced sentences when interacting with others
- contribute to small-group discussions using simple sentences
- ask questions about daily activities using words such as ‘what’, ‘who’, ‘when’, ‘why’ and ‘how’
- use familiar phrases that request the speaker to clarify meaning
- repeat an instruction to indicate understanding.
- sit and listen to a simple story for short periods of time in a small-group situation.
- demonstrate vocabulary knowledge by using and responding to a variety of words related to interests and personal experiences
- identify links between events in a story and those in their own life
- in a structured or unstructured play situation, use simple role plays and dress-up clothes, to imitate a familiar person, TV or movie character.
The Humanities

Introduction

The Humanities in Prep to Year 10 involve the study of human societies and environments, people and their cultures in the past and the present. The Humanities provide a framework for developing in students the key ideas and concepts that enable them to understand the way in which people and societies have organised their world under particular conditions and made meaning of it.

The Humanities take as their subject matter human behaviour. They provide unique ways to understand how and why groups of people have settled where they have, organised their societies, developed means of generating and distributing wealth, developed codes, laws and belief systems, related to other groups of people and interacted with their physical environment.

The Humanities encourage use of research skills and inquiry processes. Students learn to plan an investigation and ask key questions. They question and analyse a range of data and sources, including artefacts, photographs, maps, stories, special events, interviews, site visits and electronic media. They form conclusions supported by evidence and present information in a variety of ways.

Structure of the Humanities

The Humanities discipline is organised into four domains:
- The Humanities – (Stages A–D and Levels 1–3)
- The Humanities – History (Levels 4–6)
- The Humanities – Geography (Levels 4–6)
- The Humanities – Economics (Levels 4–6)

Dimensions

Standards in the Humanities are organised in two dimensions:
- Humanities knowledge and understanding
- Humanities skills.

Humanities knowledge and understanding

The Humanities knowledge and understanding dimension focuses on key humanities knowledge and concepts. Students learn about their immediate and local community and environment and are introduced to the history and geography of their country and the diversity of culture and environment. Through structured activities they learn the concepts of time – chronology and sequencing, change and continuity – and spatial concepts of location, distance, scale and distribution.

(VCAA www.vcoa.vic.edu.au)
Stage D: Building Independence

Humanities skills

The *Humanities skills* dimension focuses on the development of basic inquiry skills, including observation, the collection of various types of evidence, asking and answering questions about evidence and presenting information in a variety of ways.

(VCAA www.vcaa.vic.edu.au)

Structure of the domain

During Stages A to D and Levels 1 to 3, students are introduced to basic concepts related to history, geography and economics under a general umbrella of ‘The Humanities’. Each stage includes a learning focus statement, indicators and standards introduced from Level 3. Standards that focus on historical and geographical knowledge and understanding are introduced at Level 3. Specific standards for Economics, Geography and History are introduced at Level 4.
## Strand: Discipline-based Learning

## Domain: The Humanities

### Stage D: Building Independence

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<th>Learning Focus</th>
<th>Standards</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>As students work towards the achievement of Level 3 standards in the Humanities, they draw on their own experience to help them understand the world around them. Through supported activities they explore the community, become familiar with the location of significant community facilities and some of the features and resources of their community. Students learn the functions of significant community facilities and people and begin to identify and participate in basic processes that enable them to use public transport. Students continue to develop spatial awareness through structured experience and exploration of their immediate environment and local community. They learn to navigate confidently within familiar environments, identify personally significant buildings and, using pictures and symbols, label and follow a simple map of the school or classroom. Students explore the concept of time and change through activities such as examining photos and exploring their local community. They begin to understand chronology by identifying different age groups and to develop an understanding of past and present by identifying pictures of new and old artefacts. Through the use of calendars, activity stripes and timetables they develop an understanding of timelines and begin to select and sequence daily activities. Students begin to use vocabulary of time, such as ‘today’, ‘tomorrow’, ‘yesterday’ to describe and recall significant events in their lives. Students participate in activities that help them to develop an awareness of Australian and other cultures. They learn about cultures and history through engaging in guided inquiry learning activities and participating in significant cultural events. Students anticipate significant cultural events by marking days on a calendar and planning celebration activities. Students develop their environmental awareness through participating in activities such as wearing protection from the sun, recycling and conservation. Through structured experiences they develop an understanding of how changes in the weather can affect the whole community.</td>
<td>In the Humanities, standards for assessing and reporting on student achievement are introduced at Level 3. Specific standards for Economics, Geography and History are introduced at Level 4. The learning focus statements for Stage A to Level 2 provide advice about learning experiences that will assist students to work towards the achievement of the Humanities standards at Level 3 (which focus on historical and geographical knowledge and skills) and the Economics standards at Level 4.</td>
<td>Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 3 standards. Students may: * anticipate significant cultural events by marking days on a calendar * contribute to significant cultural events by planning some celebration activities * navigate confidently within familiar environments * use pictures and symbols, label and follow a simple map of the school or classroom * identify the functions of significant community facilities * identify significant people in the community * begin to use public transport. * begin to understand chronology by identifying different age groups * select and sequence daily activities to create a timeline * use vocabulary of time, such as ‘today’, ‘tomorrow’, ‘yesterday’ to describe and recall significant events in their lives * show an understanding of past and present by identifying pictures of new and old artefacts * identify some conservation activities.</td>
</tr>
</tbody>
</table>
Mathematics

Introduction

Mathematics is a human endeavour that has developed by practice and theory from the dawn of civilisation to the present day. Many societies and cultures have contributed to the growth of mathematics, often in times of scientific, technological, artistic and philosophical change and development. Complementary to this broad perspective of mathematics are the various mathematical practices that take place day to day in communities around the world.

While the usefulness of mathematics for modelling and problem solving is well known, mathematics also has a fundamental role in enabling cultural, social and technological advances, and empowering individuals as critical citizens in contemporary society and for the future. Number, space and measurement, and chance and data, are common aspects of most people’s mathematical experience in everyday personal, study and work situations. Equally important are the essential roles that mathematical structure and working mathematically play in people’s understanding of the natural and human worlds.

Mathematics can be described in terms of its objects, what they are and how they came to be; its established body of knowledge and why this is held to be true; its effective application in science, technology and other domains; and the practice and activities of mathematicians past and present. Aims for essential learning in school mathematics are for students to:

- demonstrate useful mathematical and numeracy skills for successful general employment and functioning in society
- solve practical problems with mathematics, especially industry and work-based problems
- develop specialist knowledge in mathematics that provides for further study in the discipline
- see mathematical connections and be able to apply mathematical concepts, skills and processes in posing and solving mathematical problems
- be confident in one’s personal knowledge of mathematics, to feel able both to apply it and to acquire new knowledge and skills when needed
- be empowered through knowledge of mathematics as a numerate citizen, able to apply this knowledge critically in societal and political contexts
- develop understanding of the role of mathematics in life, society and work; the role of mathematics in history; and mathematics as a discipline – its big ideas, history, aesthetics and philosophy.

(VCAA  www.vcaa.vic.edu.au)
Mathematical knowledge includes knowledge of concepts, objects, definitions and structures. A small collection of mathematical ideas, objects and structures, and relationships between these, is taken as undefined and given in a context. New mathematical objects, structures and relationships are developed from these, moving from simple to more complex and sophisticated ideas and practices. The motivation for accepting certain things as given building blocks for mathematical knowledge may be initially related to intuitive understanding of particular ideas and objects experienced with respect to the natural or human worlds. These and their subsequent developments are not empirical knowledge, but abstract mathematical entities.

Whether mathematical knowledge is viewed as being essentially mind dependent or mind independent, discovered or constructed, its abstract nature gives rise to the applicability of mathematics in a wide range of contexts, as mathematical objects, structures and relationships do not depend on a particular context for their existence, but are interpreted to model key features of these contexts. This abstraction poses a challenge to the teacher and student alike, and both will need to draw on knowledge of the world and link this to mathematical knowledge and its application in various situations.

Mathematical reasoning and thinking underpins all aspects of school mathematics, including problem posing, problem solving, investigation and modelling. It encompasses the development of algorithms for computation, formulation of problems, making and testing conjectures, and the development of abstractions for further investigation.

Computation and proof are essential and complementary aspects of mathematics that enable students to develop thinking skills directed toward explaining, understanding and using mathematical concepts, structures and objects. They provide a framework for the development of mathematical skills and techniques exemplified in the use of algorithms for computation and for the development of general case arguments.

Dimensions

Standards in the Mathematics domain are organised in five dimensions:

- Number
- Space
- Measurement, chance and data
- Working mathematically
- Structure.

Number

The *Number* dimension focuses on developing students’ understanding of counting, magnitude and order. The natural (counting) numbers with zero extend to positive and negative signed whole numbers (integers) and through part–whole relations and
proportions of whole numbers to the rational numbers (fractions and finite decimals or infinite recurring decimals).

Proportions of lengths involving sides and/or diagonals of right-angled triangles and rectangles and arcs of a circle lead to the introduction of certain irrational real numbers such as the square root of 2, the golden ratio phi and fractions or multiples of pi.

Principal operations for computation with number include various algorithms for addition (aggregation), subtraction (disaggregation) and the related operations of multiplication, division and exponentiation carried out mentally, by hand using written algorithms, and using calculators, spreadsheets or other numeric processors for calculation.

**Space**

The Space dimension focuses on developing students' understanding of shape and location. These are connected through forms of representation of two- and three-dimensional objects and the ways in which the shapes of these objects and their ideal representations can be moved or combined through transformations. Students learn about key spatial concepts, including continuity, edge, surface, region, boundary, connectedness, symmetry, invariance, congruence and similarity.

Principal operations for computation with space include identification and representation, construction and transformation by hand using drawing instruments, and also by using dynamic geometry technology.

**Measurement, chance and data**

The Measurement, chance and data dimension focuses on developing students' understanding of unit, 'measure' and error, chance and likelihood and inference. Measure is based on the notion of unit (informal, formal and standard) and relates number and natural language to measuring characteristics or attributes of objects and/or events. Various technologies are used to measure, and all measurement involves error.

Students learn important common measures relating to money, length, mass, time and temperature, and probability – the measure of the chance or likelihood of an event. Other measures include area, volume and capacity, weight, angle, and derived rates such as density, concentration and speed.

Principal operations for computation with measurement include the use of formulas for evaluating measures, the use of technology such as data loggers for direct and indirect measurement and related technologies for the subsequent analysis of data, and estimation of measures using comparison with prior knowledge and experience, and spatial and numerical manipulations.
Structure

The *Structure* dimension focuses on developing students’ understanding of set, logic, function and algebra. It is fundamental to the concise and precise nature of mathematics and the generality of its results. Key elements of mathematical structure found in each of the dimensions of Mathematics are membership, operation, closure, identity, inverse, and the commutative, associative and distributive properties, as well as other notions such as recursion and periodic behaviour.

While each of these can be considered in its own right, it is in their natural combination as applied to elements of number, space, function, algebra and logic, with their characteristic operations, that they give rise to the mathematical systems and structures that are embodied in each of these dimensions.

Principal operations for computation with structure include mental, by hand and technology-assisted calculation and symbolic manipulation by calculators, spreadsheets or computer algebra systems, with sets, logic, functions and algebra.

Working mathematically

*Working mathematically* focuses on developing students’ sense of mathematical inquiry: problem posing and problem solving, modelling and investigation. It involves students in the application of principled reasoning in mathematics, in natural and symbolic language, through the mathematical processes of conjecture, formulation, solution and communication; and also engages them in the aesthetic aspects of mathematics.

In this dimension the nature, purpose and scope of individual work is connected to that of the broader mathematical community, and the historical heritage of mathematics through the discourse of working mathematically.

Mental, by hand and technology-assisted methods provide complementary approaches to working mathematically.

Relationships between the dimensions

*Number* is related to the other dimensions through the aspects of counting, magnitude and order. It has logical and natural connections with *Measurement, chance and data*, and *Space*. Number systems provide the basis for the development of algebraic relationships in *Structure* and the contexts and explorations used in *Working mathematically*.

*Space* is related to the *Number and Measurement, chance and data* dimensions through the aspects of shape and location. The properties of patterns, transformations and symmetry provide links to *Structure and Working mathematically*.

*(VCAA  www.vcoa.vic.edu.au)*
Measurement, chance and data is related to the Number and Space dimensions through the aspects of units, error, approximation, likelihood, angle, and the properties of two- and three-dimensional shapes. The application of measurement formulas and functions provides a link to Structure. A varied collection of practical contexts for generating and testing conjectures provides links to Working mathematically.

Structure is related to the Number, Space and Measurement, chance and data dimensions through the use of algorithms, patterns and functions. It is linked to Working mathematically through the key elements of mathematical language, concepts and relationships used in modelling and investigations.

Working mathematically is related to the Number, Space and Measurement, chance and data dimensions through the exploration of algorithms, patterns and functions, shapes and dimensions. It provides the processes for the development of inferences and deductions and for the exploration and proof of conjectures related to the Structure dimension.

National Numeracy Benchmarks

National Numeracy Benchmarks are used for reporting achievement in three aspects of numeracy – ‘Number sense’, ‘Spatial sense’ and ‘Measurement and data sense’ – at Years 3, 5 and 7. The benchmarks define nationally agreed minimum acceptable standards for numeracy at these years.


The benchmarks describe minimum standards. For this reason, the Year 3 benchmarks relate to Level 2 Mathematics standards, the Year 5 benchmarks relate to Level 3 Mathematics standards and the Year 7 benchmarks relate to Level 4 Mathematics standards. Links to the numeracy benchmarks are located in the Mathematics standards.

Structure of the domain

The Mathematics domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards (where appropriate) and indicators organised by dimension. In Mathematics, standards for assessing and reporting on student achievement apply from Stage A. Standards for Structure are introduced from Level 3.
Strand: Discipline-based Learning
Domain: Mathematics
Stage D: Building Independence

Learning Focus

As students work towards the achievement of Stage D standards in Mathematics, they manipulate and play with objects to develop links between their immediate environment, everyday language and mathematical activity.

In *Number*, students are developing a notion of counting and an awareness of number and quantity. They join in rote counting to 10, can point to and count up to 10 objects and begin to recognise numerals from 1 to 10. Number names are becoming more meaningful as students learn that each represents a constant number or amount. Students respond appropriately to key vocabulary and questions, for example, ‘How many?’ and they begin to recognise differences in quantity, for example, ‘more’ or ‘less’, ‘bigger’ or ‘smaller’. Using concrete materials, they explore the concepts of ‘add one’ and ‘take one away’ and they undertake simple addition using calculators.

In *Space*, students learn to recognise and name basic two- and three-dimensional shapes and use everyday location language to explain where an object is. They search for objects not found in their usual place and respond to words, signs and symbols that describe positions in space. Students follow simple directions to move themselves or objects from one place to another. They begin to investigate the inside and outside shape of objects.

In *Measurement, chance and data*, students compare, directly, two lengths or heights where the difference is marked and they indicate ‘the long one’ or ‘the tall one’. They show an awareness of time through their developing familiarity with the days of the week and significant times in their daily routine. Students explore time; they learn the purpose of a clock and its features. They learn to use the language of chance such as ‘sometimes’, ‘always’ and ‘never’ to describe the likelihood of events and explain some simple information in a class-created simple pictograph.

While *Working mathematically*, students begin to investigate and make patterns and collections of objects based on their understanding of mathematical terms, such as: ‘same’, ‘like’, and ‘different’. They use concrete objects to assist them with their understanding of simple mathematical problems and investigate ways to use maths to describe familiar events in their lives, for example, ‘How many people in my family?’
### Standards

#### Number

At Stage D, students count numbers one to 10 and participate in familiar number games, stories and rhymes. They recognise and point to numerals in and around the classroom, for example, numbers on a clock face. Students can indicate when groups of less than 10 objects are the same or different in number and that two collections have the ‘same’ quantity by matching items one to one. They can find the first and last object in a sequence and place objects into sets to make ‘more’ and take objects from a group to make ‘less’.

#### Space

At Stage D, students demonstrate an understanding of two- and three-dimensional shapes by matching basic geometric objects to pictures of that object, identifying basic three-dimensional shapes in the classroom and sorting shapes into like groups. They demonstrate an understanding of ‘straight’ and ‘curved’ lines, show an understanding of ‘location’ and spatial concepts by responding to instructions to position items.

#### Measurement, chance and data

At Stage D, students identify and describe the basic characteristics of a range of objects, for example, heights of students, cup measures in cooking. They can follow a class pictorial schedule and mark off each passing day on a calendar. Students can identify a clock and describe at least one of its features. They play a variety of chance games such as ‘Bingo’ or ‘Snakes and ladders’ and demonstrate an understanding that they will not always win.

### Indicators

#### Number

- sort objects into two equal groups
- rote count up to 10
- hold up one to 10 fingers in response to a cue
- describe groups of objects (up to five) in terms of ‘bigger’, ‘smaller’ or the ‘same’
- indicate that two collections have the ‘same’ quantity by matching items one to one
- find the number before and the number after numbers from one to five
- recognise number sequences in everyday life, such as house numbers and birthdays
- distribute objects equally to each person in a group and count the objects left over.

#### Space

- complete basic inset puzzle
- identify basic two-dimensional shapes such as a circle, square and triangle from a picture maze of shapes
- identify familiar shapes hidden within a picture
- trace around a solid shape
- colour within clearly defined outlines
- use malleable materials to mould the shape of different geometric objects and compare the shape to the shape of the mould.

#### Measurement, chance and data

- demonstrate an understanding that characteristics can be changed by manipulating familiar objects to lengthening or shortening them
- use a calendar to plot special occasions such as birthdays, school holidays and camps
- name some days of the week and/or months of the year
- sequence symbol cards on a schedule or timetable
- participate in the preparation of the daily pictorial timetable using “removable” stickers, and anticipate events that ‘will happen today’
- demonstrate an understanding of chance and predictability by choosing what ‘might happen’ from two presented options.

#### Working mathematically

- use a histogram to create visual images of maths at work in the classroom
- show beginning understanding of symmetry by adding the missing eye to a face or putting together pictures of two sides of a face or object
- estimate which group of objects is the largest group and check the estimation by pairing the objects from each group and observing the group with objects left over
- use a calculator to add two numbers together
- join up a series of dots to create shapes
- use a ruler with beginning accuracy to draw a line.

In Mathematics, standards for the Structure dimension are introduced at Level 3.
Science

Introduction

To be human is to be curious about the world we live in, to wonder why it is that way, and to ask about our place in it. A fundamental goal for science education is to stimulate, respond to and nourish such curiosity, wonder and questioning. Science provides us with one view of the world – a view that changes as our knowledge and understanding of science evolves.

Science is a human process, influenced by and influencing social values. Science has a long and fascinating history of human attempts to appreciate, understand, control and manage our world. Scientists use techniques of scientific investigation to create an understanding of the world. The resulting cumulative knowledge is part of our human heritage.

Science is dynamic and progressive. Our society is being continually confronted, challenged and redirected by ideas born from people’s curiosity, imagination and dreams about what might be possible. The work of scientists such as Newton, Einstein, Curie, Darwin, Florey, Macfarlane Burnet and Oliphant began as ‘why’ and ‘what if’. Their work challenged and subsequently changed accepted opinions in the areas of motion and gravity, radioactivity, evolution, medicine, immunology, structure of the nucleus of the atom, and nuclear energy. This and other accepted science knowledge continues to fuel the dreams of a new generation of scientists as they explore the expanding frontiers of science.

Science has had, and will continue to have, successes and setbacks as technologies that provide people with an improved quality of life are developed and implemented.

It is becoming increasingly important that students understand these challenges and redirections, and the implications of these for their own life choices, the environment and the community (local and global) in which they live. Building students’ science capability is critical to help them develop the skills and understanding necessary to meet these challenges and make responsible, informed choices.

Science extends our understanding beyond what affects us to include what we can’t see, feel, hear or touch but can only imagine. Science capability is multidimensional, consisting of dispositional facets (interest and curiosity), operational facets (creativity and problem solving) and cognitive facets (reasoning and critical thinking). The extent to which we as citizens understand and appreciate these interactions will shape our future.

A set of values inform and govern how scientists operate, including respect for the environment (living and non-living) and the opinions and ideas of others, honesty in collecting and presenting data and evidence, and acknowledgement of the work of others. These values are an integral part of a science curriculum that explores and encourages debate about the relationship between science, society and technology.

(VCAA www.vcaa.vic.edu.au)
A major goal of science education is to develop citizens who are capable of engaging in informed debate about science and its applications. Increasing emphasis will be placed on the role of science and the work of Australian and other scientists in addressing issues of sustainability at a local and global level. Science education provides opportunities for students to develop the skills and understanding appropriate to service and good citizenship. It also encourages students to articulate science values and accept the ethical principles embedded in science research. While only some students directly pursue a career in science and scientific research, all students need to appreciate the significance of science for the long-term future of our society.

Dimensions
Standards in the Science domain are organised in two dimensions:

- Science knowledge and understanding
- Science at work.

These two dimensions include the traditional science disciplines of biology, chemistry, earth science, environmental science, health sciences, neuroscience, physics and space sciences and the emerging sciences including biotechnology, green chemistry, nanotechnology and synchrotron science. The dimensions build students’ understanding of how science knowledge in the disciplines has been constructed through time and is applied in practical contexts.

The development of Science knowledge and understanding necessarily involves conceptual and experiential understanding of Science at work, and understanding of the ways the concepts, theories and models of science are used throughout the society in which students live.

Science at work involves students learning the processes of science through the ways they undertake and reflect on their own investigations and those of others.

The two dimensions are interrelated in the ways science affects the broader society in which the students live. Students’ own experience of science assists them to develop an understanding of these interactions. The two dimensions are also interrelated in ways that are central to both pedagogy and content.

(VCAA  www.vcaa.vic.edu.au)
Science knowledge and understanding

The Science knowledge and understanding dimension focuses on building student understanding of the overarching conceptual ideas of science. These include understanding:

- the nature of the similarities between, and the diversity of, living things and their sustainable relationships with each other and their environment
- concepts related to matter – its properties and uses, and the production of different substances through chemical change
- concepts of energy and force as a way of explaining physical phenomena
- the place of the Earth in time and space and the interactions between the Earth and its atmosphere
- how scale is important in relating structure to function at microscopic and macroscopic levels.

These understandings enable students to build on their curiosity and answer their own questions about themselves and their interactions with the world, while at the same time allowing them to think through contemporary challenges and issues. Through this, students come to understand how science relates to society and the environment.

Science at work

The Science at work dimension focuses on students experiencing and researching how people work with and through science. Students learn to be curious and to use scientific understanding and processes to find answers to their questions. They design and pursue investigations ethically and safely; generate, validate and critique evidence; analyse and interpret ideas and link them with existing understanding; work and reason with scientific models and communicate their findings and ideas to others. They identify and practise the underlying values, skills and attributes of science.

Through their investigations, they gain insight into science as a human activity and the relationship between science, technology and society both now and in the future. They explore how science is used in multiple contexts throughout their lives and its pervasiveness throughout the workplace.

(VCAA  www.vcaa.vic.edu.au)
Safety

Students will be exposed to potentially hazardous materials and practices when undertaking scientific activities and investigations. Beginning with their first year at school, students are made aware of safe practices and are encouraged to act responsibly when conducting investigations. As students progress through their schooling they develop skills in the safe use of scientific apparatus, including heating and electrical equipment, the safe handling of living and non-living organic materials and the correct use and disposal of chemicals.

Standards and practices should be consistent with legal requirements, including Occupational Health and Safety (OH&S). Material Safety Data Sheets (MSDS) provide information about the safe handling of hazardous substances used at the workplace. A Scientific Procedures Premises Licence (SPPL) is required when animals are used to teach science. If keeping animals, then the Prevention of Cruelty to Animals Act 1986 and the National Statement on Ethical Conduct in Research Involving Humans – National Health and Medical Research Council (NHMRC) 2001 also apply.

Structure of the domain

The Science domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards (where appropriate) and indicators. In Science, standards for assessing and reporting on student achievement apply from Level 3.
## Strand: Discipline-based Learning
### Domain: Science
### Stage D: Building Independence

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<th><strong>Learning Focus</strong></th>
<th><strong>Standards</strong></th>
<th><strong>Indicators</strong></th>
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| As students work towards the achievement of Level 3 standards in Science, they actively join in scientific investigations directed by the teacher and begin to demonstrate some initiative in familiar environments. Students understand some simple, scientific vocabulary and engage in experimentation with a range of equipment. Students’ investigations are directed towards the world around them and build on knowledge related to weather, day, night, the Earth, living things, non-living things, energy and force. They begin to describe their activities and observations, using both general and science-specific language, for example, ‘sun’, ‘soft’, ‘hill’, ‘hard’ and ‘hot’. Through their investigations, students identify the characteristics of weather, seasons, day, night and their effect on the environment, such as shadows, storms, cold, floods and drought. They demonstrate an understanding of the language associated with the natural environment by using words to name common objects and some common features of the Earth and sky, for example, ‘river’, ‘clouds’. Students actively observe, explore and manipulate a variety of objects from the environment around them and begin to sort them into like groups and use familiar words to describe their properties, for example, ‘colour’, ‘size’ or ‘texture’. They begin to identify the type of forces that can have an effect on objects and types of energy we use in everyday life, such as ‘electricity for appliances’, ‘petrol for cars’ and ‘human energy’. Students observe the life cycle of living things and record observations using pictures and words. They display an understanding of the requirements of living things by tending to their needs, such as watering plants and feeding pets. Students begin to describe the environments in which different animals live. | In Science, standards for assessing and reporting on student achievement are introduced at Level 3. The learning focus statements for Stage A and Level 2 provide advice about learning experiences that will assist students to work towards the achievement of the standards at Level 3. | Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 3 standards. Students may:  
• use a variety of words to describe the weather and the seasons  
• demonstrate an understanding of the words related to the concept of temperature, such as warm, hot and cold  
• identify different activities associated with the weather  
• identify some common features of the Earth, for example, river, hill, mountain, ocean, forest  
• identify features of the sky, for example, stars, clouds, sun, moon  
• sort and/or describe objects by properties, such as colour, shape, size, texture, smell, taste  
• use pictures and words to make observations about the life cycle of living things  
• identify some properties of living things  
• begin to sort living and non-living things into like groups and name some characteristics  
• match familiar animals to the environment they live in. |
Interdisciplinary Learning

The Interdisciplinary Learning strand identifies a range of knowledge, skills and behaviours which cross disciplinary boundaries and are essential to ensuring that students are prepared as active learners and problem solvers for success at school and beyond. This strand focuses on ways of thinking, communicating, conceiving and realising ideas and information. It assists students to develop the capacity to design, create and evaluate processes as a way of developing creativity and innovation.

Within the Interdisciplinary Learning strand the learning domains are:

**Communication**
Communication helps to construct all learning and is central to the capacity to demonstrate and convey what one has learned in different contexts and to different people. This domain assists students to understand that language and discourse differ in different disciplines and that there is a need to learn the particular literacies involved in each.

**Design, Creativity and Technology**
Students develop the knowledge, skills and behaviours related to investigating and designing, using appropriate planning processes and design briefs; creating and developing ideas, applying information and seeking and testing innovative alternatives; producing, including the selection and safe use of appropriate tools, equipment, materials and/or processes to meet the requirements of design briefs; analysing and evaluating both processes and products, including, where relevant, any broader environmental, social, cultural and economic factors.

**Information and Communications Technology**
The knowledge, skills and behaviours in this domain enable students to use information and communications technology (ICT) to access, process, manage and present information; model and control events; construct new understandings; and communicate with others. Students use ICT and strategies to monitor learning patterns, to process data to create solutions and information products that demonstrate understanding, and to share their work with others in ethical, legal and respectful ways.

**Thinking Processes**
This domain encompasses a range of cognitive, affective and metacognitive knowledge, skills and behaviours that are essential for effective functioning in society both within and beyond school. The study of thinking enables students to acquire strategies for thinking related to enquiry, processing information, reasoning, problem solving, evaluation and reflection.

Definitions of the following underlined terms are provided in relevant VCAA Domain documents.

(VCAA www.vcaa.vic.edu.au)
Communication

Introduction
Communication is central to the capacity to construct meaning and to convey information and understanding to others in a range of ways and in a variety of settings. Successful communication requires students to be familiar with the forms, language and conventions used in different contexts and employ them to communicate effectively.

The Communication domain focuses on developing students who communicate clearly and confidently in a range of contexts both within and beyond school. It aims to assist students to develop awareness that language and discourse differ across the curriculum and that there is a need to learn literacies involved in each subject they undertake. To communicate successfully, students need to develop the knowledge, skills and behaviours that empower them to respond to, make meaning of, and deconstruct a range of communication forms. They also need to develop the knowledge, skills and behaviours to effectively present information, ideas and opinions in a range of forms, including verbal, written, graphic, multimedia and performance, appropriate to their context, purpose and audience.

Dimensions
Standards in the Communication domain are organised in two dimensions:

- Listening, viewing and responding
- Presenting.

Listening, viewing and responding
Effective communication demands that students develop the ability to listen, view and respond to communication forms with respect to content and context. The Listening, viewing and responding dimension focuses on developing student understanding of communication conventions, strategies to assist them to make meaning of communication forms and the ability to deconstruct and respond to a diversity of forms. This involves developing familiarity with forms, language and conventions used in different contexts across the curriculum.

Presenting
The ability to present information and learning in a coherent and appropriate manner is critical for all learners. The Presenting dimension involves students gaining the knowledge, skills and behaviours to understand context, purpose and audience; select and use appropriate structure and organisation to convey meaning; and reflect on the style and content of the presentations they make.

Structure of the domain
The Communication domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards (where appropriate) and set of indicators. In Communication, standards for assessing and reporting on student achievement apply from Level 4.

(VCAA www.vcaa.vic.edu.au)
Strand: Interdisciplinary Learning
Domain: Communication
Stage D: Building Independence

Learning Focus
As students work towards the achievement of Level 4 standards in Communication, they actively participate in group speaking and listening learning activities, are able to follow simple instructions and communicate using up to three key words. Students demonstrate some attentive listening behaviours and respond appropriately, waiting until the speaker has finished talking before responding.

Students greet fellow students and teachers and will contribute some relevant comments to a conversation or discussion. With the assistance of concrete objects and pictures, students begin to recall and recount significant experiences and interests. They use communication conventions such as making eye contact, using appropriate body language when communicating with familiar and unfamiliar people, listening whilst others are speaking, and taking turns when interacting in small groups. Students start to modify their speech and behaviours to suit the situation.

Students attend and respond to a variety of communication methods, such as multimedia, drama, plays and interactive programs. They use and explore different methods and purposes of communication by participating in a variety of class activities, for example, make a shopping list or tell a story.

Standards
In Communication, standards for assessing and reporting on student achievement are introduced at Level 4. The learning focus statements for Stage A to Level 3 provide advice about learning experiences that will assist students to work towards the achievement of the standards at level 4.

Indicators
Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 3 standards.

Students may:
- make eye contact when communicating
- use appropriate body language when communicating
- listen whilst others are speaking
- give a simple response when the speaker has finished
- take turns when interacting in small groups
- ask questions to verify meaning
- modify their speech and behaviours to suit the situation, such as lowering their voice in a library
- respond to a variety of communication methods, such as: video and TV, drama and role plays during school concerts, photos and picture symbols, and/or interactive computer programs
- make a shopping list
- perform simple role plays
- tell a simple story, using pictures and words
- interact with simple computer software programs
- make a request
- present an idea or simple report to the class
- use mime and drama to role play a familiar character or activity.
Introduction

The domain of Design, Creativity and Technology emphasises engagement in designing, creating and evaluating processes, products and technological systems using a range of materials as a way of developing creativity and innovation. Creativity in this domain can be described as applying imagination and lateral and critical thinking throughout design and development processes. Innovation is an outcome of the broad exploration of ideas, materials or ingredients, and technical processes that can occur when individuals are involved in investigating, designing, producing, analysing and evaluating their own and others’ products and/or systems.

Design is a vital step in transforming ideas into creative, practical and commercial realities by optimising the value of products and systems. Design and its application involve planning and organising production, and evaluating products in a real context. Contexts may relate to, for example, what we grow, eat, wear, build, make, our health and safety, and how we travel and spend our leisure time. Designers consider problems, needs, wants and opportunities and respond to them by developing a range of ideas, which are developed into utilitarian products or systems.

Development of capability in this domain includes the ability to use, manage, assess and understand design, creativity, technology, and their relationship to innovation. In more detail, this involves students:

- posing problems and actively identifying needs, wants, opportunities and areas for improvement
- gathering information and building knowledge about the nature of needs, wants, opportunities and areas for improvement and the best routes to take towards designing a solution
- developing and using design and technology skills, knowledge and processes, including proposing, experimenting, learning from results and synthesising, to create new and/or improved products and/or systems
- using tools, equipment, materials or ingredients and systems components safely and creatively to make quality products and/or systems
- understanding that design, creativity and technology lead to innovation
- assessing the outcomes of design and technology processes, and the resulting products and technological systems in relation to environmental, social and economic factors.

(VCAA www.vcaa.vic.edu.au)
This domain involves experiential, practical and applied knowledge as well as theoretical understanding. It requires students to be autonomous and creative problem solvers, as individuals and as members of a team. Students combine an understanding of design, functionality, aesthetics, social, cultural, economic and environmental issues, and industrial practices with practical skills. As they do so, they reflect on and evaluate past and present design and technology, its uses and effects.

The Design, Creativity and Technology domain focuses on development of students’ skills in managing and manipulating materials and resources using a range of tools, equipment and machines to make functional physical products or systems. These materials include food, wood, metal, timber, plastics, textiles, ceramics, plants and soil or growing media and components such as wheels and axles, pulleys and belts, gears, switches, lights, motors, connecting wires, batteries and printed circuit boards.

Dimensions
Standards in the Design, Creativity and Technology domain are organised in three dimensions:

- Investigating and designing
- Producing
- Analysing and evaluating.

Activities associated with the three dimensions are linked and may be applied sequentially, where students move directly from investigating to designing, producing and evaluating. Or, alternatively, students may move between the dimensions as they solve a problem. For example, to assist their decision making whilst designing a product or system, students may evaluate the potential impact on the environment of the intended use of materials or ingredients, components or processes required to make the product or system. Additionally, after evaluating a product they have made, students may return to the Investigating and designing and Producing dimensions to improve the product. In this way, students may work in a non-sequential manner through the dimensions in this domain. In order for students to demonstrate knowledge, skills and behaviours in this domain a ‘design and make’, project-based learning approach must be taken, focusing on meeting the problem, need/s or requirements defined in a design brief.

Investigating and designing
In the Investigating and designing dimension, students identify ideas, problems, needs, wants and opportunities. A design brief can be a starting point or it can be developed to clearly define the idea, problem, need, want or opportunity and requirements for a solution. Students undertake research and investigation to identify the human, material, equipment and/or energy resources available to meet the idea, problem, need, want or opportunity.

(VCAA  www.vcoa.vic.edu.au)
Students combine practical and design skills with knowledge, skills and behaviours from other domains to select and record creative methods of generating and depicting design possibilities and options. They devise a plan to outline the processes involved in making a product, and select and justify the option that best meets the requirements of the design brief.

**Producing**
The *Producing* dimension involves students in the management of the production phase and includes the appropriate selection and safe manipulation and use of tools, equipment, materials or ingredients and components to carry out processes appropriate to the materials or ingredients or assembly of systems components to produce a quality product or technological system.

Students explore, share and use both traditional and more innovative techniques. They reflect upon their progress and alter plans as appropriate. Progress and changes to plans are reflected upon and altered as appropriate.

**Analysing and evaluating**
In the *Analysing and evaluating* dimension, students compare the outcomes of design and production activities with earlier design work and planned intentions. Following the application of testing, improvements, modifications and alternative approaches are considered.

This dimension also involves students in describing, analysing and evaluating the impact and value of both their own and others’ technological products, technological systems, processes and innovations (past, present and predicted future) on the individual, society and culture, the environment and the economy. This includes consideration of sustainability issues.

*(VCAA www.vcoa.vic.edu.au)*

**Structure of the domain**
The Design, Creativity and Technology domain is organised into four stages (Stage A to D, working towards Level 3) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, indicators and from Level 3 a set of standards organised by dimension. In Design, Creativity and Technology, standards for assessing and reporting on student achievement apply from Level 3.
### Strand: Interdisciplinary Learning
### Domain: Design, Creativity and Technology
### Stage D: Building Independence

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<th>Learning Focus</th>
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<tr>
<td>As students work towards the achievement of Level 3 standards in Design, Creativity and Technology, they investigate everyday, familiar products, name them and begin to describe their characteristics and purpose. Students are actively involved in group learning activities and begin to demonstrate initiative in familiar environments. They will follow simple, clear gesture and verbal prompts. Students can select and use a variety of basic everyday appliances and products. They use basic tools and a variety of materials to investigate and create simple, functional constructions. Some of the tools and materials used include scissors, sticky tape, wood, cloth and cardboard. Students think about and identify some safety rules associated with the use of tools. They actively use recycled materials in project work. Students independently, or in collaboration with peers or adults, use a model as a template to copy and make a simple object and begin to identify materials they will need to make a simple construction. Students start to use terminology to describe the materials, ingredients and tools used to construct and create simple inventions. They are supported to present and describe their work to others in terms of appearance and functionality.</td>
<td>In Design, Creativity and Technology, standards for assessing and reporting on student achievement are introduced at Level 3. The learning focus statements for Stage A and Level 2 provide advice about learning experiences that will assist students to work towards the achievement of the standards at Level 3. Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 3 standards. Students may:  - identify a variety of basic materials used to make familiar products  - name and sort familiar products by obvious characteristics  - identify the purpose of everyday implements and use them appropriately  - identify the purpose of everyday appliances and products in the home and at school  - use a model as a template to copy and make a simple object  - identify materials they will need to make a simple construction  - use a selection of basic everyday appliances and products  - make simple functional constructions from familiar materials  - use a variety of basic tools to create and construct simple products  - identify some safety rules associated with the use of tools  - identify some objects that can be recycled  - present and describe their work to others in terms of appearance and functionality  - combine and sequence key words to describe their creations.</td>
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Introduction

Information and communications technology (ICT) is the hardware and software that enables data to be digitally processed, stored and communicated. ICT can be used to access, process, manage and present information; model and control events; construct new understanding; and communicate with others.

Information and Communications Technology, as an interdisciplinary domain, focuses on providing students with the tools to transform their learning and to enrich their learning environment. The knowledge, skills and behaviours identified for this domain enable students to:

- develop new thinking and learning skills that produce creative and innovative insights
- develop more productive ways of working and solving problems individually and collaboratively
- create information products that demonstrate their understanding of concepts, issues, relationships and processes
- express themselves in contemporary and socially relevant ways
- communicate locally and globally to solve problems and to share knowledge
- understand the implications of the use of ICT and their social and ethical responsibilities as users of ICT.

Learning in this domain enables students to focus on the task to be accomplished rather than on the technology they are using to do the work. Through the selection and application of appropriate equipment, techniques and procedures, they process data and information skilfully to create information products in forms that are meaningful for themselves and their audience. These products effectively demonstrate their knowledge and understanding of the concepts, issues, relationships and processes that are the subject of the task.

Students are provided with tools and strategies to monitor learning patterns and problem-solving strategies. This provides a sound foundation for transforming personal learning. They gain an understanding of Internet protocols and strategies for exchanging information, which enables them to share and challenge their own and other people’s ideas and solutions with a global audience.

Dimensions

Standards in the Information and Communications Technology domain are organised in three dimensions:

- ICT for visualising thinking
- ICT for creating
- ICT for communicating.

(VCAA  www.vcaa.vic.edu.au)
ICT for visualising thinking

In the ICT for visualising thinking dimension students use ICT tools to assist their thinking processes and reflect on the thinking strategies they use to develop understanding.

ICT provides a rich and flexible learner-centred environment in which students can experiment and take risks when developing new understanding. Its extensive capabilities allow students, by visually coding and representing their thinking, to clarify thoughts, and to identify patterns and form relationships between new and existing knowledge.

ICT tools that facilitate visual thinking are ones that allow ideas and information in all areas of the curriculum to be easily and quickly drafted, filtered, reorganised, refined and systematically assessed in order to make meaning for students.

Students use linguistic and non-linguistic representations, such as graphic organisers, ICT-generated simulations and models and ICT-controlled models to help structure their thinking processes and assist in constructing knowledge.

Using ICT, students record their decisions and actions when solving problems and clarifying thoughts. They monitor the changes in their thinking and evaluate their own and others’ thinking strategies. Students review these records to assess their suitability for new situations.

ICT for creating

The ICT for creating dimension focuses on students using ICT tools for creating solutions to problems and for creating information products. Through the selection and application of appropriate equipment, techniques and procedures, students learn to:

- process data and information to create solutions to problems and information products that demonstrate their knowledge and understanding of the concepts, issues, relationships and processes related to all areas of the curriculum
- manage their files to secure their contents and enable efficient retrieval
- plan and monitor the progress of extended tasks.

Students learn to use ICT efficiently to capture, validate and manipulate data for required purposes. In order to improve the appearance and functionality of information products and solutions, they apply commonly accepted conventions. They examine the ethical and legal implications of using ICT in a range of settings such as the home, school and workplace. Students evaluate the usefulness of ICT for solving different types of problems and reflect on the effectiveness of their own use of ICT.

(VCAA www.vcaa.vic.edu.au)
ICT for communicating

The *ICT for communicating* dimension focuses on students using ICT to:

- present ideas and understandings to audiences
- communicate with known and unknown audiences
- support knowledge building among teams.

Students use ICT to support oral presentations to live local audiences and to present ideas and understandings to unknown, remote audiences. They use ICT to communicate with others, both known and unknown, with the purpose of seeking and discussing alternative views, acquiring expert opinions, sharing knowledge and expressing ideas. Students also locate information from a range of online and multimedia resources to support their own learning.

ICT supports knowledge building among teams and enables team members to collaborate, enquire, interact and integrate prior knowledge with new understanding.

Protocols for receiving, transferring and publishing ideas and information are needed to promote communication that respects intended audiences.

*(VCAA www.vcoa.vic.edu.au)*

Structure of the domain

The ICT domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, indicators and, where applicable, a set of standards organised by dimension. In ICT, standards for assessing and reporting on student achievement apply from Level 2. Standards are organised by dimensions from Level 3.
## Strand: Interdisciplinary Learning

### Domain: Information and Communications Technology

### Stage D: Building Independence

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| As students work towards the achievement of Level 2 standards in ICT, they learn some of the multiple functions of a computer, such as a CD drive and USB port, and start to use a computer mouse competently. Students demonstrate an understanding of basic ICT language and the safe use of common basic ICT equipment. They learn to use a keyboard or concept keyboard to select letters and/or images for their own name. Students identify and use a range of function keys and icons to operate familiar software programs and begin to use visual and speech or sound cues to navigate through familiar programs. With assistance, students learn to use ICT communication aids to interact with other pupils and adults, for example, they pick out shapes, symbols or characters on a communication aid or keyboard and, with support, link them to communicate simple ideas. With assistance, students work with various programs and devices. Students learn to recognise elements and functions of familiar ICT equipment and simple words or symbols associated with using the equipment. For example: on/off, play, eject, cut, paste, copy and shut down. | In the ICT domain, standards for assessing and reporting on student achievement are introduced at Level 2. The learning focus statement for Stage A to Level 1 provides advice learning experiences that will assist students to work towards the achievement of the standards at Level 2. | Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 2 standards. Students may:  
- use some of the functions of a computer  
- use a computer mouse competently  
- use a range of function keys and icons to operate familiar software programs  
- use visual and speech or sound cues to navigate through a familiar program  
- demonstrate an understanding of basic ICT language  
- demonstrate an understanding of simple rules regarding the safe use of a computer  
- work with simple text and pictures to produce a product to share their ideas. |
Thinking Processes

Introduction

Our world and the world of the future demand that all students are supported to become effective and skilful thinkers. Thinking validates existing knowledge and enables individuals to create new knowledge and to build ideas and make connections between them. It entails reasoning and inquiry together with processing and evaluating information. It enables the exploration of perceptions and possibilities. It also involves the capacity to plan, monitor and evaluate one’s own thinking and to refine and transform ideas and beliefs.

The Thinking Processes domain encompasses a range of cognitive, affective and metacognitive knowledge, skills and behaviours, which are essential for students to function effectively in society, both within and beyond school.

An explicit focus on thinking and the teaching of thinking skills aims to develop students’ thinking to a qualitatively higher level. Students need to be supported to move beyond the lower-order cognitive skills of recall and comprehension to the development of higher-order processes required for creative problem solving, decision making and conceptualising. In addition, they need to develop metacognition – the capacity to reflect on and manage their own thinking. This can only happen if the school and classroom culture values and promotes thinking and if students are provided with sufficient time to think, reflect and engage in sustained discussion, deliberation and inquiry. Students need challenging tasks that stimulate, encourage and support skilful and effective thinking.

A focus on the development of thinking competencies within specific areas of the curriculum, and across it, not only serves as a core integrative function, it also has the potential to provide continuity in approaches to learning from Prep to Year 10, and to emphasise the view that such knowledge, skills and behaviours are important to lifelong learning. To emphasise this, teachers model skilful and effective thinking and make their own thinking explicit as part of their everyday practice.

Thinking skills can be defined in a variety of ways. Many different taxonomies and models for teaching thinking have been developed. Each classification scheme has its strengths and weaknesses. However, whatever the system or systems being used, all seek to improve the quality of student thinking.

Dimensions

Standards in the Thinking Processes domain are organised in three dimensions:

- Reasoning, processing and inquiry
- Creativity
- Reflection, evaluation and metacognition

(VCAA www.vcoa.vic.edu.au)
Reasoning, processing and inquiry
The *Reasoning, processing and inquiry* dimension encompasses the knowledge, skills and behaviours required to enable students to inquire into the world around them, and to use critical thinking to analyse and evaluate information they encounter. Students learn to assemble and question information and develop opinions based on informed judgments. They also develop the capacity to transform information into coherent knowledge structures.

Creativity
The capacity to think creatively is a central component of being able to solve problems and be innovative. In the *Creativity* dimension, students learn to seek innovative alternatives and use their imagination to generate possibilities. They learn to take risks with their thinking and make new connections.

Reflection, evaluation and metacognition
Learning is enhanced when individuals develop the capacity to reflect on and refine their existing ideas and beliefs. In the *Reflection, evaluation and metacognition* dimension, students learn to reflect on what they know and develop awareness that there is more to know. They learn to question their perspectives and those of others. They evaluate the validity of their own and others’ ideas. They also develop their metacognitive skills in planning, monitoring and evaluating their own thinking processes and strategies.

(VCAA www.vcaa.vic.edu.au)

Structure of the domain
The Thinking Processes domain is organised into four stages (Stage A to D, working towards Level 1) and six VELS levels (Level 1 to 6). Each stage includes a learning focus statement, a set of standards (where appropriate) and indicators organised by dimension. In Thinking Processes, standards for assessing and reporting on student achievement apply from Level 3.
## Strand: Interdisciplinary Learning

### Domain: Thinking Processes

#### Stage D: Building Independence

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<td>As students work towards the achievement of Level 3 standards in Thinking Processes, they explore a wide variety of familiar contexts. With encouragement and support, they wonder, question and become adventurous in their thinking about these contexts. Students practise using all of their senses to develop skills in making observations, that they learn to share and record. Students explore objects and materials and learn to describe some of the features of familiar objects and consistently sort materials according to given criteria when the contrast is obvious. They classify objects by attending to their similarities and differences and responding to teacher prompts, such as 'Does it go in this category because of the colour or size?'. Students use basic thinking strategies, such as past experience, to respond to and solve everyday problems and to predict and prepare for a variety of everyday phenomena. They begin to use reasoning skills to describe how an object might work, or to explain why a particular tool or material is the most appropriate for a particular purpose, for example, sticky tape to join paper, nails to join wood. In group activities, students use simple enquiry processes to solve simple problems associated with different events. They use basic thinking strategies to simplify tasks into small steps, so that they are easier to complete, and can follow simple directions. Students are able to combine up to three key words to communicate.</td>
<td>In Thinking Processes, standards for assessing and reporting on student achievement are introduced at Level 3. The learning focus statements for Stage A to Level 2 provide advice about learning experiences that will assist students to work towards the achievement of the standards at Level 3. Although there are no standards at this stage, students should be given opportunities to demonstrate their progress towards Level 3 standards. Students may:  • use past experience to respond to and solve everyday problems, for example, 'It is circle time, so I need to get my chair'  • begin to think and act for themselves  • classify objects by attending to their similarities and differences  • explain why a particular tool or material is the most appropriate for a particular purpose, for example, sticky tape to join paper  • describe how an object might work, for example, 'This car has got big wheels so that it can go over rocks'  • use past experience to predict and prepare for a variety of everyday phenomena, for example, 'If it is sunny, I need to wear a hat'  • simplify tasks into small steps so that they are easier to complete, for example, unpacking a bag one item at a time, rather than managing everything at once  • combine up to three words to communicate either verbally or using visual prompts, for example, 'I want …'  • use simple enquiry processes to solve simple problems associated with different events, for example, designing and making an Easter hat.</td>
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Glossary

Auslan is a form of sign language. It is the language of the Deaf community of Australia. For more information visit http://www.auslan.org.au

Augmentative communication consists of supplementary or additional aid/s that assist and/or enhance an individual's ability to communicate. Augmentative communication can be technical (for example switches, communication boards, sound picture boards, speech output) and non-technical (for example signs, gestures, symbols, images).

To identify the most appropriate communication aids to enhance independent communication, individual assessment of communication abilities and requirements is essential.

Coactive assistance is a method of assisting a student that involves physical support. The process involves assisting a student to move body parts so that he or she can experience the movements associated with the task, get started on an activity or know how it feels to be doing a particular activity, for example operating equipment or exploring an object.

Direct instruction is a teaching strategy that involves high levels of teacher direction. This strategy is used to develop step-by-step skills, provide students with information or actively involve them in knowledge construction.

Explicit teaching is focused on teaching specific learning outcomes. It occurs in a highly structured learning environment and involves directing students' attention towards specific learning.

Gestural prompts are physical actions including pointing, touching, hand squeeze, eye blinking, eye contact, miming, facial expression, Makaton® key word signing and Auslan® used to cue a student.

Makaton® is a communication approach that integrates keyword sign or gesture to support the communication of people who are unable to speak or have difficulties speaking. A useful site is http://www.makaton.org/about/parents.htm

PECS stands for Picture Exchange Communication System. This is a specific program that teaches children to interact with others by exchanging pictures, symbols, photographs, or real objects for desired items. For more information visit http://www.pecsaus.com

Prompts are additional supports or cues used to assist a student to complete or perform a task or activity such as gestures, verbal or visual cues.

Verbal prompts are keywords or simple phrases that the child has learnt that assist him/her to recall or cue them to perform a particular task.

Visual prompts are objects, images, Compic, Boardmaker, photographs, drawings or parts of objects the child has learnt that are used to cue him/her to perform a particular task or activity.

Word equates to spoken words, picture symbols, word cards, words delivered by a communication device and signed words.
Stage D: Building Independence