

# ***Curriculum Framework for Kindergarten to Year 12 Education in Western Australia***

Western Australia. Curriculum Council, 1998

## **Overview of the document**

325 page document which sets out the principles, rationale and framework for the new outcomes-focused curriculum direction for all K-12 education in Western Australia. The document begins with an explanation of the Key Features and Structure of the Curriculum Framework. It then outlines the seven Key Principles underpinning the curriculum framework, the thirteen Overarching Learning Outcome Statements, and the overall Scope of the Curriculum Framework. The document is designed for use in conjunction with the 'Outcomes and Standards Framework Overview - Student Outcome Statements' (1998) published by the Education Department of Western Australia.

## **Keywords**

Outcomes-based education; Curriculum Framework; Learning Area Statements; outcomes-focused education; Scope of the Curriculum; Assessment Learning Area Outcomes; the Eight Key Learning Areas; key principles; the Overarching Statement; Levels 1-8; Foundation Outcome Statements; assessment and reporting of outcomes; planning and teaching for an outcomes-approach; inclusivity and diversity; student-centred approaches; links between learning areas; developmental phases; integrated curriculum approaches; whole-school planning.

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## **Summary of Contents**

### **BACKGROUND**

- Sets out the purpose of the Curriculum Framework and notes that it:
  - Sets out what all students should know, understand, value and be able to do as a result of K-12 schooling programs in Western Australia.
  - Provides a structure around which educational programs can be built.

- It is neither a curriculum nor a syllabus, but a framework identifying common learning outcomes for all students.
- Notes the following in regards to the Framework's Outcomes Focus:
  - The focus on outcomes represents a major shift in school curriculum toward a framework that emphasises the desired results of schooling.
  - "The Curriculum Framework establishes learning outcome for all students, regardless of who they are, which school they attend, where they are from, or what approach their school takes to help them achieve those outcomes." (p. 6)
  - Schools/teachers will use the framework to develop their own learning and teaching programs appropriate to their contexts.
- Notes that the establishment of a Curriculum Framework for all students was the key recommendation arising from 'The Review of School Curriculum Development Procedures and Processes in Western Australia' (1995).
- Notes the following in regards to Post-Compulsory Schooling:
  - Students studying post-compulsory subjects (which still operate via syllabuses) will achieve, to varying degrees, the outcomes set out in the Curriculum Framework.
  - The relationship between the Curriculum Framework and subjects provided in Years 11 and 12 will be set out in the 'Curriculum Council Syllabus Manuals' as they are reviewed for publication.
- Notes that professional development and curriculum support materials for teachers and schools are considered essential for the Curriculum Framework concept to work.
- Notes that the Overarching Statement provides an overview of the five clusters of core shared values.
- Notes that the Curriculum Framework is for all students and discusses why it is an 'inclusive framework'. Emphasises the idea that the framework:
  - Provides a wide and empowering set of outcomes.
  - Recognises and values the different knowledges young people bring to schools.
  - Takes into account the diversity among children and young adults in terms of gender, languages, culture, learning capacity, socioeconomic background and geographical location.
- Discusses the timeline and notes that the Curriculum Framework will be implemented in all Western Australian schools, starting in 1999 and reaching full implementation by 2004.

### **OVERARCHING STATEMENT**

- States that "The Overarching Statement provides an overview of curriculum for Western Australian schools. It describes the principles underpinning curriculum. It sets out the overarching outcomes to which all learning areas contribute. It outlines the scope of the curriculum and teaching, learning and assessment strategies which help to ensure that students achieve outcomes." (p. 11)
- Argues that the Curriculum Framework "reflects contemporary thinking about what students need to learn in order to lead successful and rewarding lives in the twenty-first century". (p. 13)
- Discusses the following key features of the Curriculum Framework:
  - A focus on outcomes: An outcomes approach means identifying what students should achieve and focusing on ensuring that they do achieve. The outcomes describe what students should know, understand, value and be able to do as a result of their curriculum experiences, form a common core of achievement

- and provide clarity of focus for students, parents, teacher and the general community.
- The K-12 approach: The K-12 approach adopted by the Curriculum Framework provides a picture of the total span of students' schooling and "encourages a development and integrated approach to curriculum planning, teaching and learning". It provides a basis for continuity and consistency. (p. 14)
  - Notes the following in relation to the structure of the Curriculum Framework:
    - The Curriculum Framework consists of the Overarching Statement and eight Learning Area Statements.
    - The Overarching Statement outlines the seven key principles that underpin the Curriculum Framework and describes the Overarching learning outcomes to which all learning areas contribute.
    - The eight learning areas individually and collectively contribute to the achievement of the overarching learning outcomes. The eight learning areas include: The Arts; English; Health and Physical Education; LOTE; Mathematics; Science; Society and Environment; and Technology and Enterprise. The statements provide a structure for defining learning outcomes.
  - Notes that the Curriculum Framework is underpinned by the following seven key principles that guide schools in whole-school planning and curriculum development:
    1. An encompassing view of curriculum.
    2. An explicit acknowledgement of five core values: a pursuit of knowledge and a commitment to achievement of potential; self acceptance and respect of self; respect and concern for others and their rights; social and civic responsibility; and environmental responsibility.
    3. Inclusivity.
    4. Flexibility.
    5. Integration, breadth and balance.
    6. A developmental approach.
    7. Collaboration and partnerships.
  - Outlines the following Overarching Learning Outcomes:
    1. "Students use language to understand, develop and communicate ideas and information, and interact with others." (p. 20)
    2. "Students select, integrate and apply numerical and spatial concepts and techniques." (p. 21)
    3. "Students recognise when and what information is needed, locate and obtain it from a range of sources and evaluate, use and share it with others." (p. 21)
    4. "Students select, use and adapt technologies." (p. 22)
    5. "Students describe and reason about patterns, structures and relationships in order to understand, interpret, justify and make predictions." (p. 22)
    6. "Students visualise consequences, think laterally, recognise opportunity and potential and are prepared to test options." (p. 23)
    7. "Students understand and appreciate the physical, biological and technological world and have the knowledge and skills and values to make decisions in relation to it." (p. 23)
    8. "Students understand their cultural, geographic and historical contexts and have the knowledge, skills and values necessary for active participation in life in Australia." (p. 24)
    9. "Students interact with people and cultures other than their own and are equipped to contribute to the global community." (p. 24)

10. “Students participate in creative activity of their own and understand and engage with the artistic, cultural and intellectual work of others.” (p. 25)
  11. “Students value and implement practices that promote personal growth and well being.” (p. 25)
  12. “Students are self-motivated and confident in their approach to learning and are able to work individually and collaboratively.” (p. 26)
  13. “Students recognise that everyone has the right to feel valued and be safe, and, in this regard, understand their rights and obligations and behave responsibly.” (p. 26)
- Discusses the scope of the Curriculum and notes that “While eight learning areas have been identified, knowledge, skills, understandings, values and attitudes should be integrated across all learning areas. Students should be given frequent opportunities to see the connections between different areas of knowledge and endeavour.” (p. 27)
  - Discusses the eight Key Learning Areas.
  - States that “Different learning areas contribute to the overarching learning outcomes in different ways. Each establishes outcomes specific to that area and shows how these link to the overarching learning outcomes. Schools will use the Learning Area Statements as guides to the construction of a comprehensive, broad and balanced curriculum, rather than using them to divide up the curriculum, create artificial boundaries or fragment the curriculum.” (p. 28)
  - Overviews the phases of development based around the concept of “the maturing child” and focuses on the ways that learning might progress at four overlapping phases of development. Recognises that each student is developing and achieving in different ways, at different stages and at different rates. Provides a description for what makes each of the following learning stages distinct:
    - Early Childhood (typically Kindergarten to Year 3)
    - Middle Childhood (typically Years 3 to 7)
    - Early Adolescence (typically Years 7 to 10)
    - Late Adolescence/Early Adulthood (typically Years 10 to 12)
  - Describes the principles which should guide learning, teaching and assessment for students to achieve the outcomes in the Framework. Notes that “The focus is on the provision of a school and classroom environment which is intellectually, socially and physically supportive of learning. These principles assist whole-school planning and individual classroom practice. It will be essential, therefore, to ensure that there is a shared understanding of them within particular school communities and a collaborative effort to implement these principles in ways appropriate to individual schools.” (p. 33)
  - Outlines the following seven basic principles about learning and teaching and notes that these are “based on what we value and our beliefs about the learning environment schools should provide and contemporary research and professional knowledge about how learning can be supported” (p. 33) and should lead to school and classroom practices that are effective in helping students to achieve the outcomes in the Curriculum Framework:
    1. “Opportunity to learn”: “Learning experiences should enable students to observe and practise the actual processes, products, skills and values which are expected of them.” (p. 33)
    2. “Connection and challenge”: “Learning experiences should connect with students’ existing knowledge, skills and values while extending and challenging their current ways of thinking and acting.” (p. 34)
    3. “Action and reflection”: “Learning experiences should be meaningful and

- encourage both action and reflection on the part of the learner.” (p. 34)
4. “Motivation and purpose”: “Learning experiences should be motivating and their purpose clear to the student.” (p. 35)
  5. “Inclusivity and difference”: “Learning experiences should respect and accommodate differences between learners.” (p. 35)
  6. “Independence and collaboration”: “Learning experiences should encourage students to learn both independently and from and with others.” (p. 36)
  7. “Supportive environment”: “The school and classroom setting should be safe and conducive to effective learning.” (p. 36)
- Discusses assessment and notes that:
    - The purpose of assessment is to enhance learning and enable the credible reporting of students’ achievement to other teachers, parents and the wider community.
    - Assessment practices have a powerful impact on learning and teaching and issues such as what evidence to collect, how to collect it and how to interpret it need to be addressed and debated widely within the school community.
    - Assessment is likely to enhance learning when the criteria are valid and explicit and when the assessment activities are themselves educative.
  - Outlines the following five criteria for valid and effective assessment:
    - Valid: “Assessment should provide valid information on the actual ideas, processes, products and values expected of students.” (p. 37)
    - Educative: “Assessment should make a positive contribution to student learning.” (p. 38)
    - Explicit: “Assessment criteria should be explicit so that the basis for judgements is clear and public.” (p. 38)
    - Fair: “Assessment should be demonstrably fair to all students and not discriminate on grounds that are irrelevant to the achievement of the outcome.” (p. 38)
    - Comprehensive: “Judgements on student progress should be based on multiple kinds and sources of evidence.” (p. 39)
  - Discusses links across the Curriculum “to show teachers and administrators how to make connections that take into account the holistic nature of the curriculum and provide students with learning opportunities which integrate similar knowledge, skills and values across learning areas.” States that “It may be appropriate to consider only direct links if this table is being used for whole-school monitoring purposes.” (p. 41)
  - Presents an extended table that illustrates the ‘direct’ and ‘indirect’ links between the 13 Overarching Learning Outcomes and the Learning Area Outcomes in each of the eight Learning Areas. (pp. 41-47)

#### **LEARNING AREA STATEMENT**

- This section is organised into the eight Key Learning Areas. Each Learning Area section includes discussion of a ‘Definition and Rationale’ for the Learning Area Statement, the Key Learning Outcomes, the Scope of the Curriculum (including developmental phases), Learning, Teaching and Assessment in the area and Links Across the Curriculum (to other learning areas).

#### **The Arts**

- Defines the Arts Learning Area Statement as follows: “In The Arts students develop creative skills, critical appreciation and knowledge of artistic techniques and technologies in dance, drama, media, music, visual arts and combinations of arts

forms. The Arts develop students' sense of personal and cultural identity and equip them for lifelong involvement in the appreciation of the arts." (p. 49)

- Provides a definition and rationale for the Arts as a Key Learning Area and provides an overview of: the arts and the life of the community; the arts and communication; the arts and values; the arts, creativity and satisfaction; and the arts and life skills.
- Details the following Arts four learning outcomes:
  1. Arts Ideas: "Students generate arts works that communicate ideas." (p. 53)
  2. Arts Skills and Processes: "Students use the skills, techniques, processes, conventions and technologies of the arts." (p. 54)
  3. Arts Responses: "Students use their aesthetic understanding to respond to, reflect on and evaluate the arts." (p. 56)
  4. Arts in Society: "Students understand the role of the arts in society." (p. 57)
- Discusses the scope of the Arts curriculum. Describes the elements, processes and skills of dance, drama, media, music and visual arts which students will use to achieve the outcomes of The Arts Learning Area Statement and the scope of combinations of art forms. Goes on to outline in some detail the learning and curriculum that students might typically experience at the various Phases of Development (Early Childhood, Middle Childhood, Early Adolescence, Late Adolescence/Young Adulthood).
- Describes various ideas and strategies for Learning, Teaching and Assessment in the Arts, organised via the Overarching Statement principles of Learning and Teaching (Opportunity to learn; Connection and Challenge; Action and reflection; Motivation and purpose; Inclusivity and difference; Independence and collaboration; and Supportive environment) and Assessment (Valid; Educative; Explicit; Fair; and Comprehensive).
- Discusses links across the curriculum and makes connections between the outcomes in the Arts Learning Area Statement and those in the Overarching Statement and with the knowledge, skills and values in the other Learning Area Statements.

## **English**

- Defines the English Learning Area Statement as follows: "In English, students learn about the English language and how to use it effectively. The study of English plays a vital role in the development of literacy, enhances students' learning in all areas of the curriculum and provides them with the communication skills and critical understanding of language necessary for active participation in society." (p. 81)
- Provides a definition and rationale for English as a Key Learning Area, and then provides an overview of: the importance of language; modern literacy requirements; future literacy demands; functional literacy; and critical literacy.
- Details the following nine English Learning Outcomes:
  1. Understanding Language: "Students understand that the way language is used varies according to context." (p. 86)
  2. Attitudes, Values and Beliefs: "Students understand that language has an important effect on the ways in which they view themselves and the world in which they live." (p. 86)
  3. Conventions: "Students use the conventions of Standard Australian English with understanding and critical awareness." (p. 87)
  4. Processes and Strategies: "Students select from a repertoire of processes and strategies by reflecting on their understanding of the way language works for a variety of purposes in a range of contexts." (p. 88)
  5. Listening: "Students listen with purpose, understanding and critical awareness in a wide range of situations." (p. 89)

6. Speaking: “Students speak with purpose and effect in a wide range of contexts.” (p. 89)
  7. Viewing: “Students view a wide range of visual texts with purpose, understanding and critical awareness.” (p. 90)
  8. Reading: “Students read a wide range of texts with purpose, understanding and critical awareness.” (p. 91)
  9. Writing: “Students write for a range of purposes and in a range of forms using conventions appropriate to audience, purpose and context.” (p. 92)
- Discusses the scope of the English curriculum. Begins with an explanation of ‘texts’ as the basis of the English curriculum and then describes in some detail the curriculum that students might typically experience at various Phases of Development (Early Childhood, Middle Childhood, Early Adolescence, Late Adolescence/Young Adulthood). Each Phase of Development is organised via learning categories such as: Speaking; Talk and Social Interaction; Listening, Viewing and Reading; Writing; and Understanding Language.
  - Describes various ideas and strategies for Learning Teaching and Assessment in English, organised via the Overarching Statement principles of Learning and Teaching (Opportunity to learn; Connection and Challenge; Action and reflection; Motivation and purpose; Inclusivity and difference; Independence and collaboration; and Supportive environment) and Assessment (Valid; Educative; Explicit; Fair; and Comprehensive).
  - Discusses links across the curriculum and makes connections between the outcomes in the English Learning Area Statement and those in the Overarching Statement and with the knowledge, skills and values in the other Learning Area Statements. States that “Links between learning areas are fundamental to an outcomes-focused approach to education. Students are more likely to achieve desired outcomes when they see connections between their various learning experiences and can build on their experiences across learning areas. Making connections across learning areas helps students to appreciate the interconnected nature of human learning and knowledge.” (p. 108)

### **Health and Physical Education**

- Defines the Health and Physical Education Learning Area Statement as follows: “Health and Physical Education develops an understanding of health issues and the skills needed for confident participation in sport and recreational activities. It enables students to make responsible decisions about health and physical activity and to promote their own and others’ health and well-being.” (p. 113)
- Provides a definition and rationale for Health and Physical Education as a Key Learning Area, and cites numerous factors that affect the achievement and maintenance of a healthy and active lifestyle. These include: an increasingly complex and diverse society; students’ attitudes and values associated with leading a healthy lifestyle; movement skills in order to perform competently in physical activities; the contribution of sport to Australia’s national identity, as well as to an individual’s personal development; and students’ self-management skills.
- Details the following five Health and Physical Education Learning Outcomes:
  1. Knowledge and Understandings: “Students know and understand health and physical activity concepts that enable informed decisions for healthy, active lifestyles.” (p. 118)
  2. Attitudes and Values: “Students exhibit attitudes and values that promote personal, family and community health, and participation in physical activity.”

- (p. 118)
3. Skills for Physical Activity: “Students demonstrate the movement skills and strategies for confident participation in physical activity.” (p. 119)
  4. Self-management Skills: “Students demonstrate self-management skills which enable them to make informed decisions for healthy, active lifestyles.” (p. 120)
  5. Interpersonal Skills: “Students demonstrate the interpersonal skills necessary for effective relationships and healthy, active lifestyles.” (p. 121)
- Discusses the scope of the Health and Physical Education curriculum and describes in some detail the learning and curriculum that students might typically experience at various Phases of Development (Early Childhood, Middle Childhood, Early Adolescence, Late Adolescence/Young Adulthood), organised via the Learning Area Outcomes.
  - Describes various ideas and strategies for Learning Teaching and Assessment in Health and Physical Education, organised via the Overarching Statement principles of Learning and Teaching (Opportunity to learn; Connection and Challenge; Action and reflection; Motivation and purpose; Inclusivity and difference; Independence and collaboration; and Supportive environment) and Assessment (Valid; Educative; Explicit; Fair; and Comprehensive).
  - Discusses links across the curriculum and makes connections between the outcomes in the Health and Physical Education Learning Area Statement and those in the Overarching Statement and with the knowledge, skills and values in the other Learning Area Statements.

### **Languages Other Than English (LOTE)**

- Defines the Languages Other Than English (LOTE) Learning Area Statement as follows: “In Languages Other Than English, students communicate effectively in languages other than English and further develop their skills and understandings in English. They gain an understanding of other societies, the ability to interact with people and cultures other than their own, and practical skills which they can use in future social, cultural and vocational areas.” (p. 145)
- Provides a definition and rationale for LOTE as a Key Learning Area organised under the following headings: Language is the foundation of all human relationships; LOTE learning provides insights into other cultures; All students can learn a LOTE; LOTE learning provides opportunities to construct new knowledge and to develop thinking skills; Interaction and collaboration are encouraged through LOTE learning; LOTE learning builds self-esteem; LOTE learning supports literacy; and LOTE learning builds foundations for the future.
- Details the following six LOTE Learning Outcomes:
  1. Listening And Responding, and Speaking: “Students comprehend and communicate in the target language through listening and responding, and speaking.” (p. 150)
  2. Viewing, Reading and Responding: “Students view and read a variety of texts in the target language and respond appropriately.” (p. 150)
  3. Writing: “Students write a variety of texts in the target language.” (p. 151)
  4. Cultural Understandings: “Students develop sociolinguistic and sociocultural understandings and apply them to their use of the target language.” (p. 151)
  5. The System of the Target Language: “Students apply their knowledge of the system of the target language to assist them to make meaning and create text.” (p. 153)



6. Language Learning Strategies: “Students acquire a range of skills and strategies to support their ability to make meaning of and express themselves in the target language.” (p. 153)
- Discusses the scope of the LOTE curriculum and describes in some detail the learning and curriculum that students might typically experience at various Phases of Development (Early Childhood, Middle Childhood, Early Adolescence, Late Adolescence/Young Adulthood). It includes information on how children learn a second or subsequent language and the environment in which this learning best takes place and each phase is generally (but not always) organised via some of the Learning Area Outcomes.
  - Describes various ideas and strategies for Learning Teaching and Assessment in LOTE, organised via the Overarching Statement principles of Learning and Teaching (Opportunity to learn; Connection and Challenge; Action and reflection; Motivation and purpose; Inclusivity and difference; Independence and collaboration; and Supportive environment) and Assessment (Valid; Educative; Explicit; Fair; and Comprehensive).
  - Discusses links across the curriculum and makes connections between the outcomes in the LOTE Learning Area Statement and those in the Overarching Statement and with the knowledge, skills and values in the other Learning Area Statements.

## **Mathematics**

- Defines the Mathematics Learning Area Statement as follows: “In Mathematics, students use ideas about number, space and chance, and mathematical ways of representing patterns and relationships, to describe, interpret and reason about their social and physical world. Mathematics plays a key role in the development of students’ numeracy and assists learning across the curriculum.” (p. 177)
- Provides a definition and rationale for Mathematics as a Key Learning Area, and states that the Learning Area statement is based on the following three premises:
  - “All students are capable of learning the mathematical ideas and skills that underpin a wide range of everyday uses and can benefit from doing so.
  - All students have a right to learn mathematics in a way that enables them to see that mathematics itself makes sense, that they can make sense of mathematics, and that working mathematically can help them make sense of their world.
  - For students to become confident and capable users and learners of mathematics we will need common high standards and flexible curricula which respond to students’ non-standard learning needs.” (p. 178)
- Details nineteen Mathematics Learning Outcomes organised via seven strands as follows:
  - Appreciating Mathematics: “Students appreciate the role mathematics has had, and continues to have, in their own and other communities. In particular, they:
    1. “Show a disposition to use mathematics to assist with understanding new situations, solving problems and making decisions, showing initiative, flexibility and persistence when working mathematically and a positive attitude to their own continued involvement in learning and doing mathematics.” (p. 183)
    2. “Appreciate that mathematics has its origins in many cultures, and its forms reflect specific social and historical contexts, and understand its significance in explaining and influencing aspects of our lives.” (p. 183)
  - Working Mathematically: “Students use mathematical thinking processes and

skills in interpreting and dealing with mathematical and non-mathematical situations. In particular, they:

3. “Call on a repertoire of general problem solving techniques, appropriate technology and personal and collaborative management strategies when working mathematically.” (p. 184)
  4. “Choose mathematical ideas and tools to fit the constraints in a practical situation, interpret and make sense of the results within the context and evaluate the appropriateness of the methods used.” (p. 185)
  5. “Investigate, generalise and reason about patterns in number, space and data, explaining and justifying conclusions reached.” (p. 185)
- Number: “Students use numbers and operations and the relationships between them efficiently and flexibly. In particular, they:
    6. “Read, write and understand the meaning, order and relative magnitudes of numbers, moving flexibly between equivalent forms.” (p. 186)
    7. “Understand the meaning, use and connections between addition, multiplication, subtraction and division.” (p. 186)
    8. “Choose and use a repertoire of mental, paper and calculator computational strategies for each operation, meeting needed degrees of accuracy and judging the reasonableness of results.” (p. 187)
  - Measurement: “Students use direct and indirect measurement and estimation skills to describe, compare, evaluate, plan and construct. In particular, they:
    9. “Decide what needs to be measured and carry out measurements of length, capacity/volume, mass, area, time and angle to needed levels of accuracy.” (p. 187)
    10. “Select, interpret and combine measurements, measurement relationships and formulae to determine other measures indirectly.” (p. 188)
    11. “Make sensible direct and indirect estimates of quantities and are alert to the reasonableness of measurements and results.” (p. 188)
  - Chance and Data: “Students use their knowledge of chance and data handling processes in dealing with data and with situations in which uncertainty is involved. In particular, they:
    12. “Understand and use the everyday language of chance and make statements about how likely it is that an event will occur based on experience, experiments and analysis.” (p. 189)
    13. “Plan and undertake data collection and organise, summarise and represent data for effective and valid interpretation and communication.” (p. 189)
    14. “Locate, interpret, analyse and draw conclusions from data, taking into account data collection techniques and chance processes involved.” (p. 190)
  - Space: “Students describe and analyse mathematically the spatial features of objects, environments and movements. In particular, they:
    15. “Visualise, draw and model shapes, locations and arrangements and predict and show the effect of transformations on them.” (p. 190)
    16. “Reason about shapes, transformations and arrangements to solve problems and justify solutions.” (p. 191)
  - Algebra: “Students use algebraic symbols, diagrams and graphs to understand, to describe and to reason. In particular, they:
    17. “Recognise and describe the nature of the variation in situations, interpreting and using verbal, symbolic, tabular and graphical ways of representing variation.” (p. 192)

18. “Read, write and understand the meaning of symbolic expressions, moving flexibly between equivalent expressions.” (p. 192)
  19. “Write equations and inequalities to describe the constraints in situations and choose and use appropriate solution strategies, interpreting solutions in the original context.” (p. 193)
- Discusses the scope of the Mathematics curriculum and describes in some detail the learning and curriculum that students might typically experience at various Phases of Development (Early Childhood, Middle Childhood, Early Adolescence, Late Adolescence/Young Adulthood), organised via the seven Learning Area Outcomes.
  - Describes various ideas and strategies for Learning Teaching and Assessment in Mathematics, organised via the Overarching Statement principles of Learning and Teaching (Opportunity to learn; Connection and Challenge; Action and reflection; Motivation and purpose; Inclusivity and difference; Independence and collaboration; and Supportive environment) and Assessment (Valid; Educative; Explicit; Fair; and Comprehensive).
  - Discusses links across the curriculum and makes connections between the outcomes in the Mathematics Learning Area Statement and those in the Overarching Statement and with the knowledge, skills and values in the other Learning Area Statements.

## Science

- Defines the Science Learning Area Statement as follows: “In Science, students investigate, understand and describe the physical, biological and technological world and value the systems and processes that support life on our planet. Science helps students to become critical thinkers who use evidence to construct conclusions.” (p. 217)
- Provides a definition and rationale for Science as a Key Learning Area, and emphasises the following points: science is part of human experience and has relevance for everyone; learning about science enables students to explore the organisation and structure of the social, economic, political and technological world; and science education empowers students to be questioning, reflective and critical thinkers.
- Details nine learning outcomes for Science, organised into two parts as follows:
  - Working Scientifically:
    1. Investigating: “Students investigate to answer questions about the natural and technological world using reflection and analysis to prepare a plan; to collect, process and interpret data; to communicate conclusions; and to evaluate their plan, procedures and findings.” (p. 222)
    2. Communicating Scientifically: “Students communicate scientific understanding to different audiences for a range of purposes.” (p. 223)
    3. Science in Daily Life: “Students select and apply scientific knowledge, skills and understandings across a range of contexts in daily life.” (p. 223)
    4. Acting Responsibly: “Students make decisions that include ethical consideration of the impact of the processes and likely products of science on people and the environment.” (p. 224)
    5. Science in Society: “Students understand the nature of science as a human activity.” (p. 224)
  - Understanding Concepts:
    6. Earth and Beyond: “Students understand how the physical environment on Earth and its position in the universe impact on the way we live.” (p. 225)
    7. Energy and Change: “Students understand the scientific concept of energy

and explain that energy is vital to our existence and to our quality of life.” (p. 226)

8. Life and Living: “Students understand their own biology and that of other living things, and recognise the interdependence of life.” (p. 227)
  9. Natural and Processed Materials: “Students understand that the structure of materials determines their properties and that the processing of raw materials results in new materials with different properties and uses.” (p. 229)
- Discusses the scope of the Science curriculum and describes in some detail the learning and curriculum that students might typically experience at various Phases of Development (Early Childhood, Middle Childhood, Early Adolescence, Late Adolescence/Young Adulthood), organised via the two parts of Working in Science and Developing Conceptual Understanding.
  - Describes various ideas and strategies for Learning Teaching and Assessment in Science, organised via the Overarching Statement principles of Learning and Teaching (Opportunity to learn; Connection and Challenge; Action and reflection; Motivation and purpose; Inclusivity and difference; Independence and collaboration; and Supportive environment) and Assessment (Valid; Educative; Explicit; Fair; and Comprehensive).
  - Discusses links across the curriculum and makes connections between the outcomes in the Science Learning Area Statement and those in the Overarching Statement and with the knowledge, skills and values in the other Learning Area Statements.

### **Society and Environment**

- Defines the Society and Environment Learning Area Statement as follows: “The Society and Environment learning area develops students’ understanding of how individuals and groups live together and interact with their environment. Students develop a respect for cultural heritage and a commitment to social justice, democratic process and ecological sustainability.” (p. 249)
- Provides a definition and rationale for the Society and Environment as a Key Learning Area, and then provides an overview of: participating in a rapidly-changing world; acquiring knowledge, skills and values; connecting different perspectives; and aiming for civic responsibility and social competence.
- Details the following seven Society and Environment Learning Outcomes:
  1. Investigation, Communication and Participation: “Students investigate the ways people interact with each other and with their environments in order to make informed decisions and implement relevant social action.” (p. 254)
  2. Place and Space: “Students understand that the interaction people have with places in which they live is shaped by the location, patterns and processes associated with natural and built features.” (p. 254)
  3. Resources: “Students understand that people attempt to meet their needs and wants by making optimum use of limited resources in enterprising ways.” (p. 254)
  4. Culture: “Students understand that people form groups because of their shared understandings of the world, and, in turn, they are influenced by the particular culture so formed.” (p. 254)
  5. Time, Continuity and Change: “Students understand that peoples’ actions and values are shaped by their understanding and interpretation of the past.” (p. 254)
  6. Natural and Social Systems: “Students understand that systems provide order

to the dynamic natural and social relationships occurring in the world.” (p. 254)

7. Active Citizenship: “Students demonstrate active citizenship through their behaviours and practices in the school environment, in accordance with the principles and values associated with the democratic process, social justice and ecological sustainability.” (p. 254)
- Discusses the scope of the Society and Environment curriculum and describes in some detail the learning and curriculum that students might typically experience at various Phases of Development (Early Childhood, Middle Childhood, Early Adolescence, Late Adolescence/Young Adulthood), organised via the above seven Learning Area Outcomes.
  - Describes various ideas and strategies for Learning Teaching and Assessment in Society and Environment, organised via the Overarching Statement principles of Learning and Teaching (Opportunity to learn; Connection and Challenge; Action and reflection; Motivation and purpose; Inclusivity and difference; Independence and collaboration; and Supportive environment) and Assessment (Valid; Educative; Explicit; Fair; and Comprehensive).
  - Discusses links across the curriculum and makes connections between the outcomes in the Society and Environment Learning Area Statement and those in the Overarching Statement and with the knowledge, skills and values in the other Learning Area Statements.

### **Technology and Enterprise**

- Defines the Technology and Enterprise Learning Area Statement as follows: “In Technology and Enterprise, students apply knowledge, skills and resources in the development of practical solutions to problems. Through this process they learn to be innovative, adaptable and reflective as they select and use appropriate materials, information and systems to achieve worthwhile results.” (p. 289)
- Provides a definition and rationale for Technology and Enterprise as a Key Learning Area, and then provides an overview of: meeting the demands of a changing world; developing skills and experiencing systems and processes; being enterprising; and considering the social and environmental impact of solutions.
- Details seven Technology and Enterprise Learning Outcomes as follows:
  1. Technology Process: “Students apply a technology process to create or modify products, processes, systems, services or environments to meet human needs and realise opportunities.” (p. 294)
  2. Materials: “Students select and use materials that are appropriate to achieving solutions to technology challenges.” (p. 296)
  3. Information: “Students design, adapt, use and present information that is appropriate to achieving solutions to technology challenges.” (p. 296)
  4. Systems: “Students design, adapt and use systems that are appropriate to achieving solutions to technology challenges.” (p. 297)
  5. Enterprise: “Students pursue and realise opportunities through the development of innovative strategies designed to meet human needs.” (p. 298)
  6. Technology Skills: “Students apply organisational, operational and manipulative skills appropriate to using, developing and adapting technologies.” (p. 299)
  7. Technology in Society: “Students understand how cultural beliefs, values and ethical positions are interconnected in the development and use of technology and enterprise.” (p. 300)

- Discusses the scope of the Technology and Enterprise curriculum and describes in some detail the learning and curriculum that students might typically experience at various Phases of Development (Early Childhood, Middle Childhood, Early Adolescence, Late Adolescence/Young Adulthood), organised via four Learning Area Outcomes: Technology Process, Materials, Information, and Systems.
- Describes various ideas and strategies for Learning Teaching and Assessment in Technology and Enterprise, organised via the Overarching Statement principles of Learning and Teaching (Opportunity to learn; Connection and Challenge; Action and reflection; Motivation and purpose; Inclusivity and difference; Independence and collaboration; and Supportive environment) and Assessment (Valid; Educative; Explicit; Fair; and Comprehensive).
- Discusses links across the curriculum and makes connections between the outcomes in the Technology and Enterprise Learning Area Statement and those in the Overarching Statement and with the knowledge, skills and values in the other Learning Area Statements.