Victorian Curriculum Mapping Tool Years 3 and 4

The purpose of this mapping tool is to assist teachers in designing curriculum for Years 3 and 4 in Integrated Inquiry. The Achievement Standards on page 2 are directly from the Victorian Curriculum. Information on pages 3-6 has been adapted from The Victorian Curriculum and Australian Curriculum. This tool does not reflect the total content of the Victorian Curriculum.

In Integrated Inquiry the 3 'strands' of content and knowledge, inquiry and skills, and general capabilities interweave and should not be considered separate. There are many overlaps across the strands, which reflect the interconnectedness of the curriculum. By identifying these connections during the planning stage, teachers are better able to make connections for students during the learning.

Page 2: Outlines the Achievement Standards (content and skills) in those Learning areas that usually lend themselves to the formation of topics for Integrated Inquiry. Science, History, Geography, Civics and Citizenship, Economics and Business, Health (the Health component of Health and Physical Education), and Design Technologies

Page 3: Identifies key content (knowledge and understanding) that could be incorporated into Integrated Inquiry units as students work towards the Achievement Standards on page 2. ***This content is adapted from the Victorian Curriculum.*** Broad coverage of this content is the aim of a 2-year program, and some exploration of each Learning area each year. However, inquiries should not be limited to the content described here as student interests will take individual learners beyond the stated curriculum. It is also not the intent of this document to suggest that all the content described on this page is 'covered', teachers should use it as a framework to design curriculum that is relevant for their students.

Page 4: Identifies the skills required to inquire in the areas of: Science, History, Geography, Civics and Citizenship, Economics and Business, Health, and Design Technologies. ***This content is adapted from the Victorian and Australian Curriculum.*** There are several different inquiry processes including; research process, scientific process, design process, problem-solving process and field study process, and by following these processes students can be introduced explicitly to those skills.

Page 5: Outlines the inquiry processes mentioned on page 4. These incorporate many of the skills embedded in each of the learning areas. By following and articulating the appropriate inquiry process for any investigation to students, teachers are able to scaffold the learning of these skills.

Page 6: Outlines the general capabilities for this level. ***This content is adapted from the Victorian Curriculum.*** Integrated Inquiry provides great opportunities for developing: Critical and Creative Thinking, Personal and Social Capability, Ethical Capability, and Intercultural Capability, with students.

This mapping tool may be used to:

- Audit curriculum that has been covered
- Make connections during the planning process
- Forward plan for forthcoming units

HISTORY

By the end of Level 4, students explain how and why life changed in the past, and identify aspects of the past that remained the same. They describe the experiences and perspectives of an individual or group over time. They recognise the significance of events in bringing about change.

Students sequence events and people (their lifetime) in chronological order to identify key dates, causes and effects. They identify sources (written, physical, visual, oral), and locate information about the origin and content features to answer these questions. They describe perspectives of people from the past and recognise different points of view. Students create a narrative or description which explains continuity and change and cause and effect using historical terms

ECONOMICS AND BUSINESS

There is no learning focus or formal standard for Economics prior to level 5, however preliminary exploration of Economics and Business concepts could be included in other units.

CIVICS AND CITIZENSHIP

By the end of Level 4, students explain how decisions can be made democratically and the role of local government. They recognise the importance of rules and distinguish between rules and laws. They describe how people participate in their community as active citizens and factors that shape a person's identity and sense of belonging.

HEALTH

By the end of Level 4, students recognise strategies for managing change. They examine influences that strengthen identities. They investigate how emotional responses vary and understand how to interact positively with others in different situations including in physical activities. Students interpret health messages and discuss the influences on healthy and safe choices. They understand the benefits of being fit and physically active. They describe the connections they have to their community and how these can promote health and wellbeing.

Students apply strategies for working cooperatively and apply rules fairly. They select and demonstrate strategies that help them stay safe, healthy and active at home, at school and in the community. They refine fundamental movement skills and apply movement concepts and strategies in different physical activities and to solve movement challenges. They create and perform movement sequences using fundamental movement skills and the elements of movement.

GEOGRAPHY

By the end of Level 4, students identify and describe spatial characteristics, and the characteristics of places and environments at a range of scales. They identify and explain interconnections and identify and describe locations, including Australia's neighbouring countries and Africa and South America. They identify responses to a geographical challenge and the expected effects. They collect and record relevant geographical data and information and represent data and information in tables, simple graphs and maps of appropriate scale that conform to cartographic conventions. They interpret data and information, and use geographical terminology, to identify and to develop descriptions, explanations and conclusions.

Year 3/4 Achievement Standards

Through the teaching of integrated Inquiries students in Years 3 and 4 move towards the achievement of the following standards. Assessment gathered during the teaching allows teachers to make judgements against these standards.

DESIGN TECHNOLOGIES

By the end of Level 4 students explain how solutions are designed to best meet needs of the communities and their environments. They describe contributions of people in design and technologies occupations. Students describe how the features of technologies can be used to create designed solutions for each of the prescribed technologies contexts.

Students create designed solutions for each of the prescribed technologies contexts. They explain needs or opportunities and evaluate ideas and designed solutions against identified criteria for success, including sustainability considerations. They develop and expand design ideas and communicate these using models and drawings including annotations and symbols. Students plan and sequence major steps in design and production. They identify appropriate technologies and techniques and demonstrate safe work practices when creating designed solutions.

SCIENCE

By the end of Level 4, students describe situations where science understanding can influence their own and others' actions. They explain the effects of Earth's rotation on its axis. They distinguish between temperature and heat and use examples to illustrate how heat is produced and transferred. They explain how heat is involved in changes of state between solid and liquid. They link the physical properties of materials to their use. They discuss how natural and human processes cause changes to Earth's surface. They use contact and non-contact forces to describe interactions between objects. They group living things based on observable features and distinguish them from non-living things. They describe relationships that assist the survival of living things. They compare the key stages in the life cycle of a plant and an animal and relate life cycles to growth and survival.

Students describe how they use science investigations to identify patterns and relationships and to respond to questions. They follow instructions to identify questions that they can investigate about familiar contexts and make predictions based on prior knowledge. They discuss ways to conduct investigations and suggest why a test was fair or not. They safely use equipment to make and record formal measurements and observations. They use provided tables and column graphs to organise and identify patterns and trends in data. Students suggest explanations for observations and compare their findings with their predictions. They use formal and informal scientific language to communicate their observations, methods and findings.

CIVICS AND CITIZENSHIP

- Identify features of government and law and describe key democratic values
- Identify how and why decisions are made democratically in communities
- Explain the roles of local government and some familiar services provided at the local level
- Explain how and why people make rules
- Distinguish between rules and laws and discuss why rules and laws are important
- Investigate why and how people participate within communities and cultural and social groups
- Describe the different cultural, religious and/or social groups to which they and others in the community may belong

HEALTH AND P.E.

- Examine how success, challenge and failure strengthen personal identities
- Explore strategies to manage physical, social and emotional change
- Describe and apply strategies that can be used in situations that make them feel uncomfortable or unsafe
- Identify and practice strategies to promote health, safety and wellbeing
- Describe factors that can positively influence relationships and personal wellbeing
- Investigate how emotional responses vary in family situations and in friendship groups
- Discuss and interpret health information and messages in the media
- Describe strategies to make the classroom and playground healthy, safe and active spaces
- Participate in outdoor games and activities to examine how participation promotes a connection between the community, natural and built environments, and health and wellbeing

GEOGRAPHY

- Identify and describe the characteristics of places in different locations at a range of scales
- Identify and describe locations and spatial distributions and patterns
- Identify and explain the interconnections within places and between places
- Location of major countries of Africa and South America in relation to Australia and their major characteristics including the types of vegetation and native animals in at least two countries for both continents
- Location of Australia's neighbouring countries and the diverse characteristics of their places
- Representation of Australia as states and territories, and Australia's major natural and human characteristics
- The many Countries/Places of Aboriginal and Torres Strait Islander peoples throughout Australia, and the custodial responsibility they have for Country/Place, and how this influences views about sustainability
- Main climates of the world and the similarities and differences between the climates of different places
- Types of natural vegetation and the significance of vegetation to the environment
- The importance of environments to animals and people, and different views on how they can be protected
- The use and management of natural resources and waste, and different views on how to do this sustainably
- Similarities and differences in individuals' and groups' feelings and perceptions about places, and how they influence views about the protection of these places
- Similarities and differences between places in terms of their type of settlement, demographic characteristics and the lives of the people who live there

DESIGN AND TECHNOLOGIES

- Recognise the role of people in design and technologies occupations and explore factors, including sustainability, that impact on the design of solutions to meet community needs
- Investigate how forces and the properties of materials affect the behaviour of a designed solution
- Investigate food and fibre production used in modern or traditional societies
- Investigate food preparation techniques used in modern or traditional societies
- Investigate the suitability of materials, systems, components, tools and equipment for a range of purposes

Year 3/4 Content

Adapted from Vic Curric.

By exploring the explicit content in these areas students will be able to demonstrate their understanding of the content component of the achievement standards on page 2. The content explored in any Integrated Inquiry should not be limited to these descriptors as student interests can extend beyond these parameters

HISTORY

Key ideas: Community, Remembrance & Celebrations, First Contacts, Exploration, Perspective, Cause & Effect

- The significance of Country and Place to Aboriginal and Torres Strait Islander peoples who belong to a local area
- A significant example of change and a significant example of continuity over time in the local community, region or state/territory
- The role that people of diverse backgrounds have played in the development and character of the local community and/or other societies
- One significant narrative, myth or celebration from the past
- Significance of days and weeks celebrated or commemorated in Australia and the importance of symbols and emblems, including Australia Day, ANZAC Day, Harmony Week, National Reconciliation Week, NAIDOC Week and National Sorry Day
- Significance of celebrations and commemorations in other places around the world
- The diversity and longevity of Australia's first peoples and the significant ways Aboriginal and Torres Strait Islander peoples are connected to Country and Place (land, sea, waterways and skies) and the effects on their daily lives
- The journey(s) of a significant world navigator, explorer or trader up to the late eighteenth century, including their contacts with and effects on other societies
- Stories of the First Fleet, including causes and reasons for the journey, who travelled to Australia, and their experiences and perspectives following arrival
- The nature of contact between Aboriginal and Torres Strait Islander peoples and others, for example, the Macassans and the Europeans, and the effects of these interactions

SCIENCE

- Science knowledge helps people to understand the effects of their actions
- Living things can be grouped on the basis of observable features and can be distinguished from non-living things
- Different living things have different life cycles and depend on each other and the environment to survive
- A change of state between solid and liquid can be caused by adding or removing heat
- Natural and processed materials have a range of physical properties; these properties can influence their use
- Earth's rotation on its axis causes regular changes, including night and day
- Earth's surface changes over time as a result of natural processes and human activity
- Heat can be produced in many ways and can move from one object to another; a change in the temperature of an object is related to the gain or loss of heat by the object
- Forces can be exerted by one object on another through direct contact or from a distance

ECONOMICS

There is no learning focus or formal standard for Economics prior to level 5, however preliminary exploration of Economics and Business concepts could be included in other units.

- economic thinking, by making observations about their world and their interactions with it.
- identify needs and wants
- develop an understanding of resource allocation (scarcity) when making everyday decisions about spending money or how they use their time.
- explore the reasons why people work, jobs in their local community, and the types of work undertaken by their family and friends.
- use some Economics and Business vocabulary in everyday life and school situations, such as money, banking, choice, buying, selling, goods, services and work

Science Inquiry Skills

Questioning and predicting
- Identify questions that can be investigated scientifically (with guidance)
- Predict what might happen in a scientific investigation based on prior knowledge

Planning and conducting
- Suggest ways to plan and conduct investigations to find answers to questions including consideration of the elements of fair tests
- Safely use appropriate materials, tools, equipment and technologies

Recording and processing
- Use formal measurements in the collection and recording of observations
- Use a range of methods including tables and column graphs to represent data and to identify patterns and trends

Analysing and evaluating
- Compare results with predictions, suggesting possible reasons for findings
- Reflect on an investigations, including whether a test was fair or not

Communicating
- Represent and communicate observations, ideas and findings to show patterns and relationships using formal and informal scientific language

Design Technologies Processes and Production Skills

Investigate:
- Critique needs or opportunities for designing
- Explore and test a variety of materials, components, tools, equipment and the techniques needed to create designed solutions

Generate and Design:
- Generate, develop, and communicate design ideas using appropriate technical terms and graphical representation techniques

Produce
- Select and use materials, components, tools and equipment using safe work practices to produce designed solutions

Evaluate:
- Evaluate design ideas, processes and solutions based on criteria for success, developed with guidance including care for the environment and communities

Plan and Manage:
- Plan a sequence of production steps when making designed solutions

Year 3/4 Skills

Adapted from Victorian and Australian Curriculum

By developing the explicit skills in these areas students will be able to engage fully in inquiries that draw from each learning context.

Skills are an important component of the achievement standards on page 2.

The specific learning area skills can be explicitly taught and learned by using the appropriate inquiry process for the investigation that are described on page 5.

These include the: Research Process, Scientific Process, Problem-solving Process, Field Study Process, and Design Process

Civics Inquiry Skills

Questioning
- Develop questions to investigate issues and events

Researching
- Record information from a range of resources

Analysing
- Use information and facts to develop a point of view

Evaluating and reflecting
- Reflect on personal roles and actions as a citizen in the school and the local area
- Work in groups to develop possible solutions

Communicating
- Present civics and citizenship ideas and viewpoints using civics and citizenship terms

Geography Inquiry and Skills

Questioning
- Pose geographical questions to investigate places, environments, the interconnection between living things and the environment, and sustainability

Researching
- Collect and record relevant geographical data and information from the field and other sources including maps and tables
- Record, collate and represent data and the location of places by constructing tables and simple graphs

Analysing
- Interpret maps and other data using geographical terminology, including simple grid references and compass direction
- Draw simple conclusions based on analysis of geographical information or data

Evaluating and reflecting
- Reflect on learning to propose possible individual or shared action in relation to places environments and spaces investigated

Communicating
- Present findings in a range of communication forms, for example, written, oral, digital, graphic, tabular, and visual, using geographical terminology
- Represent characteristics of places on maps of appropriate scale incorporating appropriate features such as title, symbols, compass points etc.

Historical Skills

Questioning
- Pose historical questions to investigate places, people and events, change and continuity

Researching
- Identify features of primary sources when describing the significance of people, places and events
- Be discerning in the selection of sources for researching, including identifying the origin and purpose of the source
- Record information from a range of historical resources
- Sequence significant events using a variety of methods including narratives and timelines

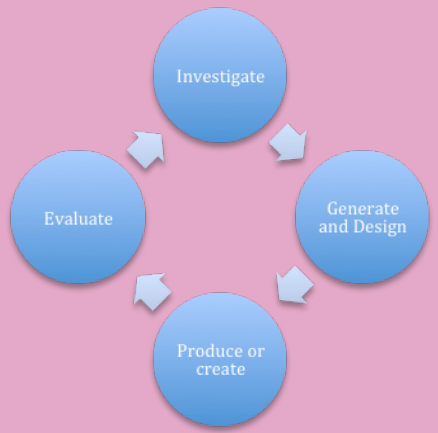
Analysing
- Identify and analyse perspectives of people from the past
- Identify and determine significance of events and traditions
- Identify continuity and change over time in local community, region or state
- Identify and analyse the causes and effects of historical events

Evaluating and reflecting
- Reflect on learning and propose possible individual or shared action in relation to people, places and events investigated

Communicating
- Present findings in a range of communication forms, for example, written, oral, digital, and visual, using historical terminology
- Present and describe a point of view or perspective
- Explain the cause and effects of historical events

ARTS AND DESIGN PROCESS

Technologies, Media, Arts



Inquiry Processes

There are many different types of processes people can use in order to inquire. Different questions, and different learning areas require particular inquiry processes.
By explicitly teaching these processes for relevant inquiries, students can develop life-long inquiry skills that are embedded in the Victorian Curriculum. Students will also develop the specific Learning area skills required to attain the Victorian Achievement Standards described on page 2.

FIELD STUDY

Environmental, Earth and Health Sciences, Geography

Questioning and planning

Collecting and recording
- By observing, interviewing or using a range of sources

Interpreting, analyzing and concluding

Communicating

Reflecting and responding

SCIENTIFIC INQUIRY

Science

Questioning

Hypothesising

Planning and conducting
- Guided investigations
- Conducting fair tests

Recording
- Observing, collecting and recording data

Analysing and Evaluating (and reposing question)

Communicating

RESEARCH PROCESS

History, Civics, Health, Humanities

Identifying an area of interest to research

Posing questions
- Developing questions to guide the research

Selecting and using sources of information
- Finding appropriate resources
- Analyzing and synthesizing information including identifying points of view
- Recording key information

Reviewing
- Connecting information discovered to prior knowledge and questions posed
- Posing further questions and conducting research if necessary

Communicating
- Selecting appropriate methods for sharing findings
- Communicating new knowledge

PROBLEM SOLVING PROCESS

Action Based Learning

Define the problem

Brainstorm solutions

Choose the best solution

Make a plan

Follow the plan

Test and analyse solutions

CRITICAL AND CREATIVE THINKING

STANDARD

By the end of Level 4, students explain how to construct open and closed questions and use them for different purposes. Students select and apply techniques to generate a range of ideas that extend how problems are solved.
Students describe and structure arguments with clearly identified aims, premises and conclusions. They use and explain a range of strategies to develop their arguments. They identify the need to make distinctions and apply strategies to make these.
Students use concrete and pictorial models to facilitate thinking, including a range of visualisation strategies. They practice and apply an increased range of learning strategies, including visualisation, note-taking, peer instruction and incubation. Students select and apply a range of problem-solving strategies.

Questions and Possibility

- Pose open and closed questions for a variety of different purposes
- Explore and use tools for sorting facts and generating ideas

Reasoning

- Present a structured point of view
    - Aim, Reasons and Conclusion
- Use a range of strategies to analyse, develop and support a point of view including;
    - Distinctions between main ideas and supporting evidence
    - Language of reasoning
    - Range of sources as supporting evidence

Meta-Cognition

- Use a range of thinking tools, including visualising strategies
- Develop a bank of learning strategies and know when to apply these to learning situations
- Investigate problem solving strategies
- Select and use problem solving strategies

Year 3/4 General Capabilities

Many inquiry skills in the content areas (Science, History, Geography, Civics and Citizenship (3-6), Design Technologies, Economics and Business (5-6) are embedded in the General Capability: Critical and Creative Thinking.
Personal and Social Capability is developed through any Inquiry when students are given the opportunity, and taught the skills, to manage their own learning and work collaboratively with others.
Ethical Capability and Intercultural Capability describe values, attitudes and behaviours students will develop through deeper investigation and empathy and understandings of issues and opportunities presented in particular inquiries.

INTERCULTURAL CAPABILITY

STANDARD

By the end of Level 4, students are able to compare a range of cultural practices and explain their influence on people's relationships. They explain what they have learnt about themselves and others from intercultural experiences.
Students explain the role of cultural traditions in the development of various identities. They develop critical perspective on and respect for their own and others cultures.

Cultural Practices

- Compare cultural practices of self and others
- Explain how cultural practices can influence relationships
- Describe what they have learnt about themselves and others from intercultural experiences
- Develop respect and critical perspective for own and others cultures

Cultural Diversity

- Explain how cultural tradition can help to develop identity
- Identify how understanding between culturally diverse groups can be encouraged

PERSONAL AND SOCIAL CAPABILITY

STANDARD

By the end of Level 4, students explain the consequences of emotional responses in a range of social situations. They recognise personal strengths and challenges and identify skills they would like to develop. They suggest strategies for coping with difficult situations. They persist with tasks when faced with challenges and adapt their approach when first attempts are not successful.
Students discuss the value of diverse perspectives and through their interactions they demonstrate respect for a diverse range of people and groups. They describe factors that contribute to positive relationships with peers, other people at school and in the community. They explain characteristics of cooperative behaviours and they use criteria to identify evidence of this in group activities. They identify a range of conflict resolution strategies to negotiate positive outcomes to problems.

Self Awareness and Management

- Explore expression of emotions and their impacts on self and others
- Identify personal strengths and challenges
- Identify and set goals for further development of strength and challenge areas
- Identify dispositions that can assist with challenging situations eg. Persistence and adaptability
- Name and describe independent work skills

Social Awareness and Management

- Examine similarities and differences of diverse groups and individuals
- Describe factors that build positive relationships with others
- Work effectively in team situations
- Evaluate success of their team using criteria
- Identify causes of conflict in peer groups and suggest causes and resolutions

ETHICAL CAPABILITY

STANDARD

By the end of Level 4, students use concrete examples from a range of contexts to explain the contested meaning of concepts and significance of acts. They explain how to identify ethical considerations in problems. Students use examples to evaluate ethical actions in relation to their outcomes. They explain the role of personal values and dispositions in ethical decision-making and actions, recognising areas of contestability.

Understanding Concepts

- Explore concepts such as fairness and harm and how these can differ in given situations
- Explore how people can interpret others choices and behaviours in different ways and explain why
- Identify ethical considerations in a range of problems

Decision Making and Actions

- Explore how actions considered wrong can sometimes lead to good and vice versa
- Discuss how personal values and dispositions impact ethical decision-making and actions