

Victorian Curriculum Mapping Tool Years 5 and 6

The purpose of this mapping tool is to assist teachers in designing curriculum for Years 5 and 6 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 reflects the Achievement Standards and content in 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 6, students identify and describe change and continuity and explain the causes and effects of change on society. They compare the different experiences and perspectives of people in the past. They explain the significance of an individual and group.

Students sequence events and people (their lifetime) in chronological order, and represent time by creating timelines. They identify a range of sources and locate and compare information about the origin, content features and the purpose of historical sources. Students describe the historical context of these sources to describe perspectives of people from the past and recognise different points of view. Students develop texts, particularly narratives and descriptions of continuity and change. In developing these texts and organising and presenting their information, students create an explanation about a past event, person or group using sources of evidence and historical terms and concepts.

ECONOMICS AND BUSINESS

By the end of Level 6, students distinguish between needs and wants and recognise that choices need to be made when allocating resources. They recognise that consumer choices and financial decisions are influenced by a range of factors and describe the effects of these choices and decisions on themselves, their family, others, the economy and the natural, economic and business environments.

Students identify strategies that will assist in making informed consumer and financial decisions. They explain the purpose of business and recognise the different ways that businesses choose to provide goods and services. Students outline the many reasons why people work and describe the changing nature of work. They describe the nature of enterprising behaviours and capabilities and explain why these behaviours are important for individuals and businesses. Students outline the advantages and disadvantages of proposed actions in response to an economics and/or business issue or event and identify the possible effects of their decisions on themselves and others.

DESIGN TECHNOLOGIES

By the end of Level 6 students describe some competing considerations in the design of solutions taking into account sustainability. They describe how design and technologies contribute to meeting present and future needs. Students explain how the features of technologies impact on designed solutions for each of the prescribed technologies contexts.

Students create designed solutions for each of the prescribed technologies contexts, suitable for identified needs or opportunities. They suggest criteria for success, including sustainability considerations and use these to evaluate their ideas and designed solutions. They combine design ideas and communicate these to audiences using graphical representation techniques and technical terms. Students record project plans including production processes. They select and use appropriate technologies and techniques correctly and safely to produce designed solutions.

GEOGRAPHY

By the end of Level 6, students describe and explain spatial characteristics and characteristics of places from local to global scales. They describe and explain interconnections and their effects. They identify and describe locations including the major countries of Europe, North America and Asia. They identify and compare responses to a geographical challenge, describing the expected effects on different groups.

They ethically collect and record relevant geographical data and information and represent data and information in forms including diagrams, field sketches and large scale and small scale maps that conform to cartographic conventions.

They interpret geographical data and information, and use geographical terminology, to identify and develop descriptions, explanations and conclusions. They use digital and spatial technologies to represent and interpret data and information.

Year 5/6 Achievement Standards

Through the teaching of integrated Inquiries students in Years 5 and 6 move towards the achievement of the following standards. Assessment gathered during the teaching allows teachers to make judgements against these standards.

HEALTH

By the end of Level 6, students investigate developmental changes and transitions. They understand the influences people and places have on personal identities. They recognise the influence of emotions on behaviours and discuss factors that influence how people interact. They describe their own and others' contributions to health, physical activity, safety and wellbeing. They describe the key features of health-related fitness and the significance of physical activity participation to health and wellbeing. They examine how community wellbeing is supported by celebrating diversity and connecting to the natural and built environment.

Students demonstrate skills to work collaboratively and play fairly. They access and interpret health information. They explain and apply strategies to enhance their own and others' health, safety and wellbeing at home, at school and in the community.

SCIENCE

By the end of Level 6, students explain how scientific knowledge is used in decision making and develops from many people's contributions. They discuss how scientific understandings, discoveries and inventions affect peoples' lives. They compare the properties and behaviours of solids, liquids and gases. They compare observable changes to materials and classify these changes as reversible or irreversible. They explain everyday phenomena associated with the absorption, reflection and refraction of light. They compare different ways in which energy can be transformed from one form to another to generate electricity and evaluate their suitability for particular purposes. They construct electric circuits and distinguish between open and closed circuits. They explain how natural events cause rapid change to Earth's surface and use models to describe the key features of our Solar System. They analyse how structural and behavioural adaptations of living things enhance their survival, and predict and describe the effect of environmental changes on individual living things.

Students follow procedures to develop questions that they can investigate and design investigations into simple cause-and-effect relationships. When planning experimental methods, they identify and justify the variables they choose to change and measure in fair tests. They make predictions based on previous experiences or general rules. They identify and manage potential safety risks. They make and record accurate observations as tables, diagrams or descriptions. They organise data into tables and graphs to identify and analyse patterns and relationships. They compare patterns in data with their predictions when explaining their findings. They suggest where improvements to their experimental methods or research could improve the quality of their data. They refer to data when they report findings and use appropriate representations and simple reports to communicate their ideas, methods, findings and explanations.

CIVICS AND CITIZENSHIP

By the end of Level 6, students identify the values that underpin Australia's democracy and explain the importance of the electoral process. They describe the purpose of key institutions and levels of government in Australia's democracy. They explain the role of different people in Australia's legal system and the role of parliaments in creating law. They identify various ways people can participate effectively in groups to achieve shared goals. Students explain what it means to be an Australian citizen and how people can participate as global citizens. They analyse contemporary issues and use evidence to support a point of view about civics and citizenship issues. They identify possible solutions to an issue as part of a plan for action.

CIVICS AND CITIZENSHIP

- Values principles and institutions that underpin Australia's democratic forms of government and the influence of the Westminster system
- The roles and responsibilities of the three levels of government, including shared roles and responsibilities within Australia's federal system
- The key features of the Australian electoral process
- Roles and responsibilities of electors and representatives
- How state/territory and federal laws are initiated and passed through parliament
- How and why laws are enforced and roles and responsibilities of key people in law enforcement and the legal system
- Identify who can be an Australian citizen, rights and responsibilities and shared values of Australian citizenship, how citizens can participate in society
- Identify different points of view on a contemporary issue relating to democracy and citizenship
- Investigate how people with shared beliefs and values can work together to achieve their goals and plan for action
- Examine concept of global citizenship

HISTORY

Key ideas: The Australian Colonies, Australia as a Nation, Migration, Cause and effect of change throughout the 19th and 20th centuries

- Social, economic and political reasons for the establishment of British colonies in Australia after 1800
- The nature of convict or colonial presence (patterns of development, change to the environment, impact on Aboriginal and Torres Strait Islander peoples)
- The effects of a significant development or event on a colony
- Why people migrated (including from Europe and Asia), and their stories, experiences, contributions and perspectives
- The role that a significant individual or group (including Aboriginal and Torres Strait Islander peoples and migrants) played in shaping and changing a colony
- The significance of key figures and events that led to Australia's Federation
- The different experiences and perspectives of Australian democracy and citizenship, including the status and rights of Aboriginal and Torres Strait Islander peoples, migrants, women and children

HEALTH AND P.E.

- Explore how identities are influenced by people and places
- Investigate resources to manage changes associated with puberty
- Investigate community resources and strategies to seek help about health, safety and wellbeing
- Plan and practise strategies to promote health, safety and wellbeing
- Practise skills to establish and manage relationships
- Examine the influence of emotional responses on behaviour, relationships and health
- Recognise how media and important people influence personal attitudes, beliefs, decisions and behaviours
- Investigate the role of preventative health for individuals and communities
- Explore how participation in outdoor activities supports health and creates connections to the environment
- Investigate how celebrating similarities and differences can strengthen communities

Year 5/6 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

ECONOMICS

- Exploring the difference between needs and wants and why choices need to be made
- Exploring the concept of opportunity cost and examine why decisions about the ways resources are allocated to meet needs and wants in their community involve trade-offs
- Identify types of resources (natural, human, capital) and the way societies use them
- Identify influences on consumer choices
- Consider the effects of consumer and financial decisions on individuals, families, the community and the environment
- Investigate why businesses exist and how they produce and distribute goods and services
- Explore the nature and meaning of work, why individuals choose to participate in work, and the changing nature of work
- Investigate the importance of enterprising behaviours and capabilities

GEOGRAPHY

- The diverse characteristics of different places and environments both locally and globally
- The location of the major countries of Europe and North America in relation to Australia and the influence of people on the environmental characteristics of places in at least two countries from both continents
- The location of the major countries of the Asia region in relation to Australia and the geographical diversity within the region
- Differences in the economic, demographic and social characteristics between countries across the world
- The influence of people, including Aboriginal and Torres Strait Islander Peoples, on the environmental characteristics of Australian places
- The impact of bushfires or floods on environments and communities, and how people can respond
- Environmental and human influences on the location and characteristics of places and the management of spaces within them
- Factors that influence people's awareness and opinion of places
- Australia's connection with other countries and how these change people and places

DESIGN AND TECHNOLOGIES

- Investigate how people in design and technologies occupations address competing considerations, including sustainability, in the design of solutions for current and future use
- Investigate how forces or electrical energy can control movement, sound or light in a designed product or system
- Investigate how and why food and fibre are produced in managed environments
- Investigate the role of food preparation in maintaining good health and the importance of food safety and hygiene
- Investigate characteristics and properties of a range of materials, systems, components, tools and equipment and evaluate the impact of their use

SCIENCE

- Scientific understandings, discoveries and inventions are used to inform personal and community decisions and to solve problems that directly affect people's lives
- Living things have structural features and adaptations that help them to survive in their environment
- The growth and survival of living things are affected by the physical conditions of their environment
- Solids, liquids and gases have different observable properties and behave in different ways
- Changes to materials can be reversible, such as melting, freezing, evaporating; or irreversible, such as burning and rusting
- The Earth is part of a system of planets orbiting around a star (the sun)
- Sudden geological changes or extreme weather conditions can affect Earth's surface
- Light from a source forms shadows and can be absorbed, reflected and refracted
- Energy from a variety of sources can be used to generate electricity: electrical circuits enable this energy to be transferred to another place and then to be transformed into another form of energy

Science Inquiry Skills

Questioning and predicting

- Pose questions to clarify practical problems or inform a scientific investigation
- Form a hypothesis or predict what the findings of an investigation might be

Planning and conducting

- Plan (with guidance) an investigation to answer questions or solve problems
- Conduct fair tests identifying variables
- Accurately observe, measure and record data,
- Use equipment and materials safely, identifying potential risks

Recording and processing

- Represent and describe observations, patterns or relationships in data

Analysing and evaluating

- Compare data with predictions and use as evidence in developing explanations
- Suggest improvements to the methods used or pose new question to investigate further

Communicating

- Communicate ideas and explanations in a variety of ways

Economics and Business Inquiry Skills

Questioning

- Develop questions to guide an investigation of an economic or business issue or event

Researching

- Gather data and information from observation, print and online sources

Analysing

- Analyse data and information from observation, print and online sources
- Identify alternative responses to an issue or event, and consider the advantages and disadvantages of preferring one to others

Evaluating and Reflecting

- Reflect on the possible effects of decisions
- Use reasoning and interpretation to form conclusions and make decisions

Communicating

- Use enterprising behaviours and capabilities in small action projects and to demonstrate their learning
- Use Economic terms and concepts to communicate ideas

Year 5/6 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

Design Technologies Processes and Production Skills

Investigate:

- Identify needs or opportunities
- Investigate materials, components, tools, equipment and processes

Generate and Design:

- Negotiate and contribute to the development of a design brief (success criteria)
- Generate, and document design ideas as possible solutions
- Share, collaborate and communicate design ideas
- Make design decisions by considering possible outcomes including effectiveness of solution and resources

Produce:

- Create product by following design problem-solving and modifying when necessary
- Apply safe procedures using a variety of materials, components, tools, equipment and techniques

Evaluate:

- Evaluate design, process and product or service using criteria in design brief

Plan and Manage:

- Develop and manage project plans individually and collaboratively

Civics Inquiry Skills

Questioning

- Develop questions to investigate the society in which they live

Researching

- Gather a range of information to investigate the society in which they live

Analysing

- Use and evaluate a range of information to develop a point of view
- Work in groups to identify issues

Evaluating and reflecting

- Reflect on personal roles and actions as a citizen in the school and in the community
- Work in groups to develop possible solutions and a plan for action using decision making processes

Communicating

- Present civics and citizenship ideas and viewpoints for a particular purpose using civics and citizenship terms and concepts

Geography Inquiry and Skills

Questioning

- Develop geographical questions to investigate and plan an inquiry

Researching

- Collect relevant geographical data and information, using ethical protocols, from primary and secondary sources, for example, people, maps, plans, photographs, satellite images, statistical sources and reports
- Organise, record and represent information in different forms including diagrams, field sketches and large and small scale maps that conform to cartographic conventions including border, source, scale, legend, title and north point, using spatial technologies as appropriate

Analysing

- Interpret maps and other geographical data and other information using digital and spatial technologies as appropriate,
- Compare information and infer relationships
- Examine different viewpoints on a geographical issue

Evaluating and reflecting

- Evaluate evidence to draw conclusions
- Reflect on their learning to propose individual and collective action

Communicating

- Present findings, ideas, viewpoints and conclusions in a range of communication forms, for example, written, oral, graphic, tabular, visual and maps, using geographical terminology and digital technologies as appropriate

Historical Skills

Questioning

- Develop historical questions to investigate and plan an inquiry

Researching

- Identify and locate a range of relevant primary and secondary sources
- Organise, compare and record information from a range of sources
- Sequence information about people's lives, events and developments using a variety of methods including timelines

Analysing

- Examine primary and secondary sources to determine their origin and purpose
- Examine different viewpoints, perspectives, beliefs and values of people and groups in the past
- Identify patterns of continuity and change
- Identify causes and effects of events

Evaluating and reflecting

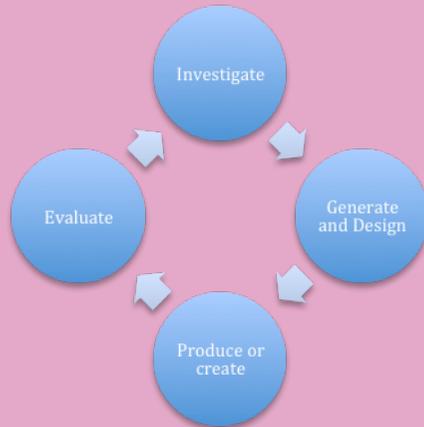
- Evaluate evidence to draw conclusions
- Reflect on their learning to generate a response or propose individual and collective action

Communicating

- Use historical terms and concepts
- Develop texts, particularly narratives and descriptions, which incorporate source materials
- Use a range of communication forms (oral, graphic, written) and digital technologies

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

INTERCULTURAL CAPABILITY

STANDARD

By the end of Level 6, students demonstrate an understanding how beliefs and practices can be influenced by culture and explain how intercultural experiences can influence beliefs and behaviours. Students identify the barriers to and means of reaching understandings within and between culturally diverse groups and the ways in which effective engagement with those groups is promoted or inhibited.

Cultural Practices

- Analyse how aspects of their own and others lifestyle, behaviour, attitudes and beliefs can be culturally influenced
- Explain how intercultural experiences can influence beliefs and behaviours, including developing a critical perspective on and respect for their own and others cultures

Cultural Diversity

- Explain what and how they have learnt from a wide range of intercultural interactions and experiences
- Learn about diverse cultural practices and beliefs and how they compare with their own. This includes religious beliefs, traditional celebrations, family relationships, gender roles, daily routines, leisure activities and language
- Identify factors that contribute to understanding in intercultural communication and discuss some strategies to avoid misunderstanding
- Explain different perspectives and point of view to expand their understanding of an issue
- Imagine and describe the situations of others in local, national and global contexts

CRITICAL AND CREATIVE THINKING

STANDARD

By the end of Level 6, students apply questioning as a tool to focus or expand thinking. They use appropriate techniques to copy, borrow and compare aspects of existing solutions in order to identify relationships and apply these to new situations. Students distinguish between valid and sound arguments and between deductive and inductive reasoning. They explain how reasons and evidence can be evaluated. They explain and apply basic techniques to construct valid arguments and test the strength of arguments. Students represent thinking processes using visual models and language. They practice and apply learning strategies, including constructing analogies, visualising ideas, summarising and paraphrasing information. Students disaggregate ideas and problems into smaller elements or ideas, develop criteria to assess and test thinking, and identify and seek out new relevant information as required.

Questions and Possibilities

- Apply questioning as a tool to focus or expand thinking
- Experiment with alternative ideas and actions
- Identify and form links and patterns from multiple information sources to generate creative ideas and possibilities

Reasoning

- Distinguish between valid and sound arguments and between deductive and inductive reasoning.
- Explain how reasons and evidence can be evaluated
- Explain and apply basic techniques to construct valid arguments and test the strength of arguments

Metacognition

- Represent thinking processes using visual models and language.
- Practice and apply learning strategies, including constructing analogies, visualising ideas, summarising and paraphrasing information
- Disaggregate ideas and problems into smaller elements or ideas
- Develop criteria to assess and test thinking
- Identify and seek out new relevant information as required.

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.

PERSONAL AND SOCIAL CAPABILITY

STANDARD

By the end of Level 6, students describe different ways to express emotions and the relationship between emotions and behaviour. They describe the influence that personal qualities and strengths have on achieving success. They undertake some extended tasks independently and describe task progress. They identify and describe personal attributes important in developing resilience.

Students recognise and appreciate the uniqueness of all people. They are able to explain how individual, social and cultural differences may increase vulnerability to stereotypes. They identify characteristics of respectful relationships. They contribute to groups and teams suggesting improvements for methods used in group projects and investigations. They identify causes and effects of conflict and explain different strategies to diffuse or resolve conflict situations.

Self-awareness and Management

- Describe different ways to express emotions and the relationship between emotions and behavior
- Describe the influence that personal qualities and strengths have on achieving success.
- Undertake some extended tasks independently and describe task progress.
- Identify and describe personal attributes important in developing resilience.

Social-awareness and Management

- Recognise and appreciate the uniqueness of all people
- Explain how individual, social and cultural differences may increase vulnerability to stereotypes
- Identify characteristics of respectful relationships
- Contribute to groups and teams suggesting improvements for methods used in group projects and investigations
- Identify causes and effects of conflict and explain different strategies to diffuse or resolve conflict situations.

ETHICAL CAPABILITY

STANDARD

By the end of Level 6, students evaluate the meaning of ethical concepts and analyse their value, identifying areas of contestability. They explain different ways to respond to ethical problems and identify issues related to these.

Students identify different ethical issues associated with a particular problem. They identify the basis of a range of ethical principles and explain the role and significance of conscience and reasoning in ethical decision-making.

Understanding Concepts

- Examine the contested meaning of concepts including truth and happiness and the extent to which these concepts are and should be valued
- Discuss how ethical principles can be used as the basis for action, considering the influence of cultural norms, religion, world views and philosophical thought on these principles
- Examine how problems may contain more than one ethical issue

Decision Making and Actions

- Explore the significance of 'means versus ends' by considering two ways to act when presented with a problem
- Discuss the role and significance of conscience and reasoning in ethical decision-making

