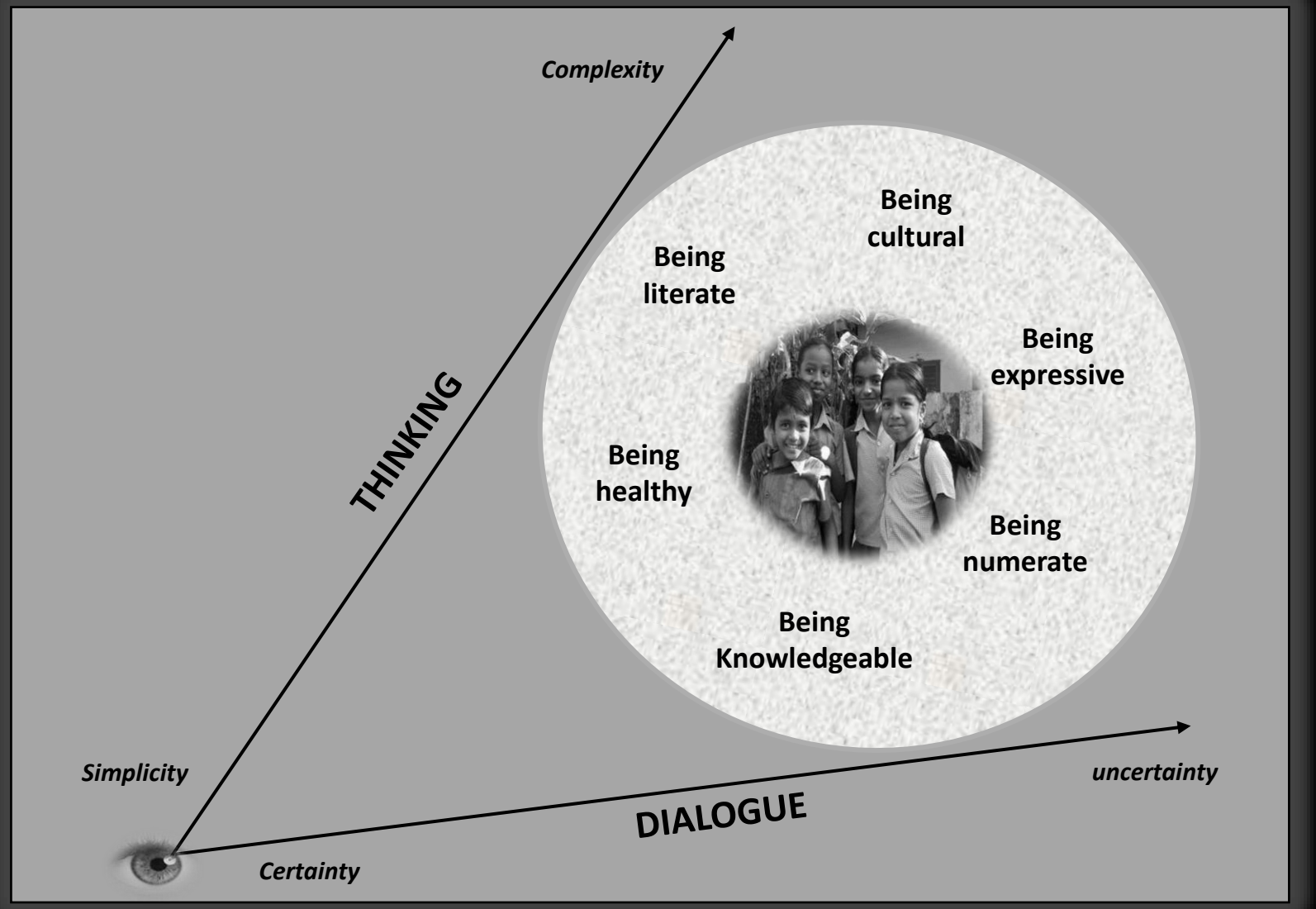
TALKING LEARNING
Sharing a language



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TALKING LEARNING GATEWAY
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Fields	Learners			
	Early	Transitional	Proficient	Accomplished
Being cultural	← F57, F58, F59 →			
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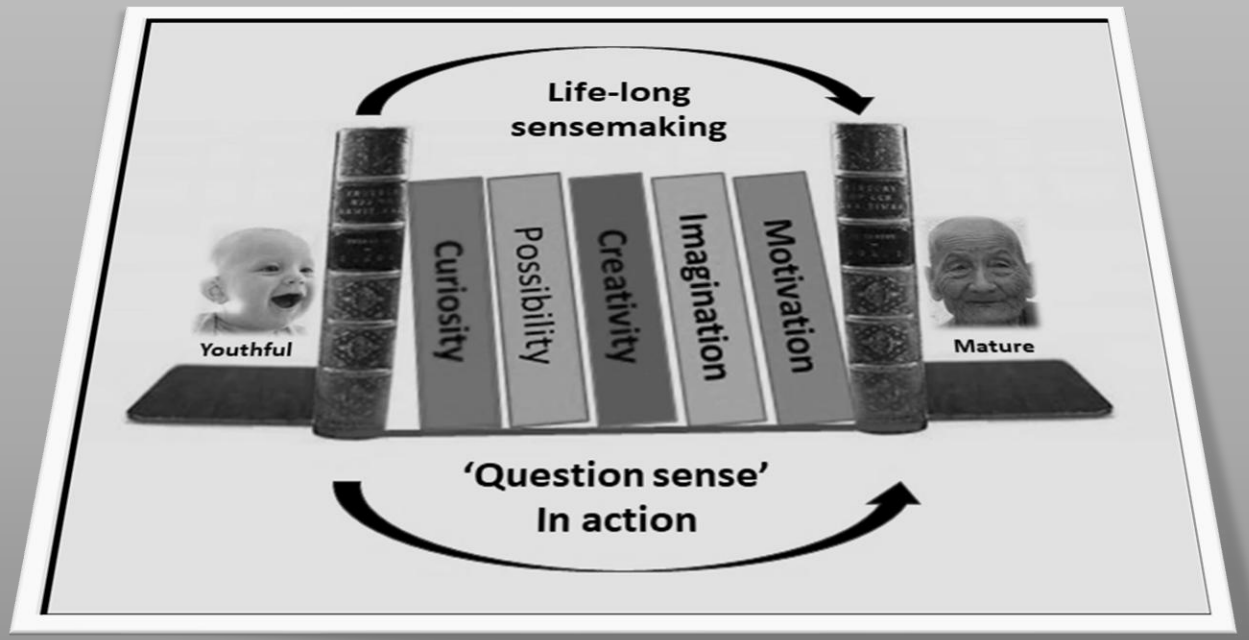
Being cultural

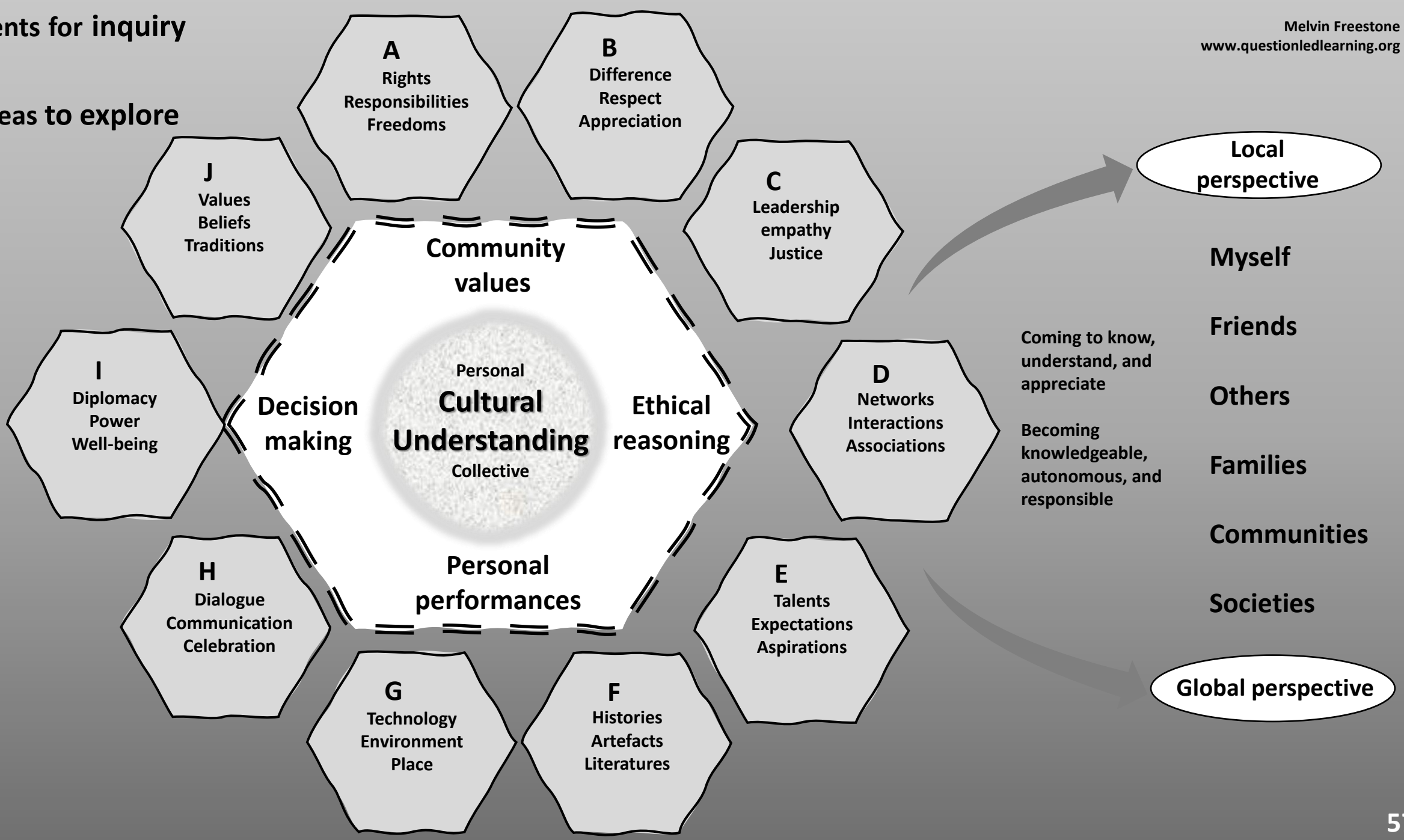


Develop a culture of curiosity and appreciation throughout life

Melvin Freestone
www.questionledlearning.org

Elements for inquiry

Big ideas to explore



Commentary

Being cultural
builds on and extends the approach adopted by the Australian Curriculum and Assessment Authority (ACARA)

ACARA model

Intercultural Understanding
The ACARA national curriculum

In the Australian Curriculum, learners develop intercultural understanding as they learn to value their own cultures, languages and beliefs, and those of others. They come to understand how personal, group and national identities are shaped, and the variable and changing nature of culture. Intercultural understanding involves learners learning about and engaging with diverse cultures in ways that recognise commonalities and differences, create connections with others and cultivate mutual respect.

Intercultural understanding is an essential part of living with others in the diverse world of the twenty-first century. It assists young people to become responsible local and global citizens, equipped through their education for living and working together in an interconnected world.

Intercultural understanding combines personal, interpersonal and social knowledge and skills. It involves learners learning to value and view critically their own cultural perspectives and practices and those of others through their interactions with people, texts and contexts across the curriculum.

Intercultural understanding encourages learners to make connections between their own worlds and the worlds of others, to build on shared interests and commonalities, and to negotiate or mediate difference. It develops learners' abilities to communicate and empathize with others and to analyze intercultural experiences critically. It offers opportunities for them to consider their own beliefs and attitudes in a new light, and so gain insight into themselves and others.

Intercultural understanding stimulates learners' interest in the lives of others. It cultivates values and dispositions such as curiosity, care, empathy, reciprocity, respect and responsibility, open-mindedness and critical awareness, and supports new and positive intercultural behaviours. Though all are significant in learning to live together, three dispositions – expressing empathy, demonstrating respect and taking responsibility – have been identified as critical to the development of Intercultural Understanding in the Australian Curriculum.

A former Secretary-General of the United nations, Kofi Annan, voiced a fundamental principle for living and working a complex and rapidly changing world
"The United Nations was created in the belief that dialogue can triumph over discord, that diversity is a universal virtue and that the peoples of the world are far more united by their common fate than they are divided by their separate identities."

Question-led cultural Inquiries

Needs-based

General inquiry
Focus on all 'Big ideas'

Focus fields A to J

Attitude-based inquiry
Big idea – Personal performance

Focus fields E, D & H

Dilemmas-based inquiry
Big idea – Ethical reasoning

Focus fields A, I & J

Action-based inquiry
Big idea – Decision-making

Focus fields C, A & E

Circumstance-based inquiry
Big idea – Community values

Focus fields B, F & G

For details of the letters A to J
See frame 57
(The selections are indicative and not intended to exclude other 'elements' or 'big ideas')

CONSIDER

- Local perspectives
- Myself
- Friends
- Others
- Families
- Communities
- Societies
- Global perspectives

What is OK to ask in one culture may not be appropriate in a different one

Question-led inquiry into action

#1 – Select generic generative questions (GGQs)

FORM	What is it like?
FUNCTION	How does it work?
CAUSATION	Why is it like it is?
CONNECTION	How is it connected to other things?
CHANGE	How is it changing?
PLACE	What is the role of place here?
RESPONSIBILITY	Who might be responsible?
CARE	How could people care for others?
ETHICAL	Where is the ethical reasoning?
AESTHETIC	How is aesthetic sense manifest?
THINKING	How is the thinking evolving?
INNOVATION	What might innovation add?

For details go to – Frame 16, 17, 18, 19

See previous Frame 59 for examples of a needs-based differentiation of inquiries

Select only 2 or 3 of the most relevant

2 – Conduct inquiries

Getting started	**Positioning performances** - *focus on prior learning, knowledge, experience, and the interests, and on aspects of challenges that need to be explored or considered.* **Opening performances** - *select a few relevant GGQs, together with the goals for inquiry associated with them, and develop shared understandings of what they mean.*
Moving forwards	**Designing performances** - *devise CQs, and PQs if necessary, for selected GGQs, prioritize and translate them into practicable inquiries that contain realistic tasks to enact them.* **Exploring performances** - *conduct investigations customised to the demands of the design tasks, the capabilities of individual participants, and their expressed interests.*
Drawing together	**Culminating performances** - *build on inquiries by extrapolating what has been discovered to different contexts and to new or emerging challenges, and so doing by diverse means.* **Reviewing performances** - *backtrack to the initial questions and goals for inquiry to determine what has been achieved or needs to be addressed, and where to next.*

Conduct the inquiry in 2 cycles

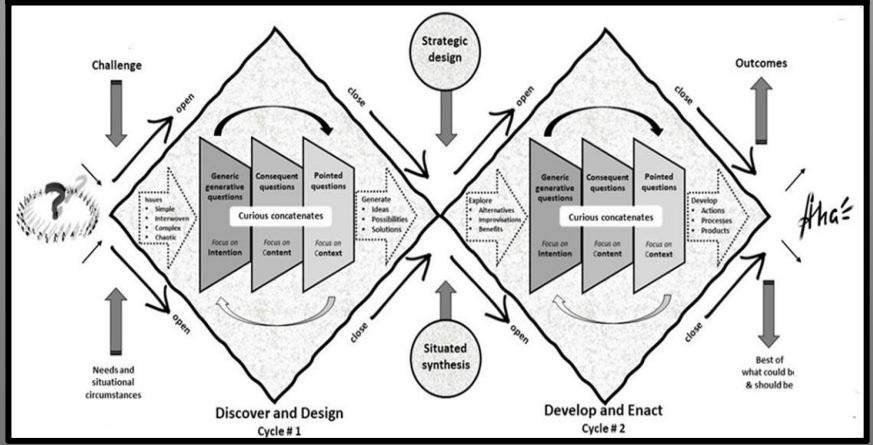
At times and in ways that are age and culturally appropriate, apply this three-phase process to inquiries into the

Elements **of cultural understanding that have been identified with *'big ideas'* in mind**

(See frame – 57)

For details go to – frame 25

3 – Engage in inventiveness



Being Literate

Three interconnected elements

- **Speaking and listening**
- **Reading and viewing**
- **Writing and representing**

Commentary

The detailed charts that follow provide a 'Learning Barometer' to aid question-led teaching and learning. They are NOT inquiries, just possibilities for learning. They complement the Australian Curriculum (ACARA).

Growth in Being Literate – a broad overview

The ACARA national curriculum

Beginning

Learners understand that spoken words connect us with others. They realise that the sounds of language are a symbolic way of representing ideas, objects and feelings.

Through speaking, listening and asking questions they realise that people share thoughts and feelings. They comprehend and create a small range of simply structured spoken and written texts for informative and literary purposes. They interact with family, peers and small groups using relatively straightforward expression of opinions and feelings.

They should experience fiction, non-fiction, poetry, film as well as multimodal and digital texts that deal with familiar and personal content and some imaginative content. These texts are relatively predictable and contain easy to follow sequences of events and a small number of characters who are simply represented.

Developing

Learners understand that spoken language varies according to purpose and audience. They read and view familiar and/or predictable texts, which have spoken language patterns, repeated words, phrases or sentences, and often include rhyme and rhythm. They enjoy a range of texts that are short, clearly structured, deal with familiar ideas or known topics often supported by photographs or illustrations.

They experiment with different forms of communication, often incorporating them to their classroom and play activities. They use drawing, computer graphics and written symbols to represent ideas. They create signs and write simple print-based materials and texts, using graphics and digital media to represent ideas and information in text forms. They become familiar with commonly used ICT resources, including computers, mobile phones and cameras, and enjoy films, stories, music and television programs.

They create a range of simple texts in print and electronic forms about topics of personal significance. They understand different types of text serve different purposes. They plan their writing and reread it to check that it makes sense. They begin to edit and proofread their own writing, using resources such as word walls and spell-checking software.

They speak and listen through conversation, discussion and informal presentations. They communicate in group situations, making comments, explaining how to do things, expressing opinions and asking questions.

Maturing

Learners reflect on what they hear and say in making judgements and forming opinions. They comprehend, create, evaluate and explicitly discuss a variety of written, spoken, visual and multimodal texts for literary, informative and persuasive purposes, including texts that involve several stages and phases.

They should read fiction, non-fiction, poetry, film and multimodal, media and digital texts which deal with less familiar subject matters in terms of historical, geographical or cultural context and impact... They scan for meaning and understand texts are written for specific audiences.

They write independently and with confidence. They think about the perspective of audiences and how that helps them communicate more effectively and appropriately.

Their interactions with others involve working in small and large discussion groups and offering opinions, and through these conversations recognising the importance of authenticity.

Question-led inquiry into action

The generic three-stage process helps to give inquiries purpose and coherence.

The structure and the questions often need to be refined, even transformed, as an inquiry progresses.

Apply to

Being literate

For details go to – frame 25

#1 – Select Generic Generative Questions (GGQs)

FORM	What is it like?
FUNCTION	How does it work?
CAUSATION	Why is it like it is?
CONNECTION	How is it connected to other things?
CHANGE	How is it changing?
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ETHICAL	Where is the ethical reasoning?
AESTHETIC	How is aesthetic sense manifest?
THINKING	How is the thinking evolving?
INNOVATION	What might innovation add?

For details go to – Frame 16, 17, 18, 19

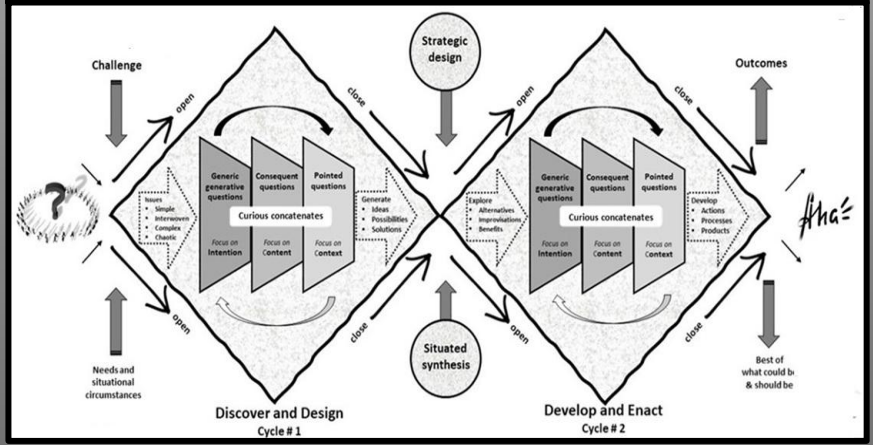
Select only 2 or 3 of the most relevant

2 – Conduct inquiries

Getting started	**Positioning performances** - *focus on the prior learning, knowledge, experience, and interests, and on the aspects of challenges that need to be explored or considered.* **Opening performances** - *select a few relevant GGQs, together with the goals for inquiry associated with them, and develop shared understandings of what they mean.*
Moving forwards	**Designing performances** - *devise CQs, and PQs if necessary, for selected GGQs and translate them into practicable inquiries that contain realistic tasks to enact them.* **Exploring performances** - *conduct investigations customised to the demands of the design tasks, the capabilities of individual participants, and their expressed interests.*
Drawing together	**Culminating performances** - *build on inquiries by extrapolating what has been discovered to different contexts and to new or emerging challenges, and so doing by diverse means.* **Reviewing performances** - *backtrack to the initial questions and goals for inquiry to determine what has been achieved or needs to be addressed, and where to next.*

Conduct the inquiry in 2 cycles

3 – Engage in inventiveness



Early learners
A learning barometer!

Question-led learning builds language knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

Melvin Freestone
www.questionledlearning.org

Speaking and listening

- Using gesture, actions and body language to express their thoughts and feelings.
- Listening and responding to the content of spoken texts that use everyday language and familiar vocabulary.
- Discussing ideas, events and details from texts listened to or viewed with peers, teachers and known adults.
- Talking about how texts convey meaning and can take many forms.
- Engaging in pair, small and large group discussions as part of undertaking shared tasks with others.
- Speaking clearly and adjusting the volume of speech to their audience and purpose.
- Using widening vocabulary and extended sentence patterns to share ideas and feelings in texts
- Recognising rhymes, syllables and single sounds in spoken words.
- Choosing, using and pronouncing words properly
- Talking about familiar topics and making presentations of a few connected sentences to tell others about them
- Asking simple questions in areas of personal interest to clarify meaning and seek more information and ideas.
- Discussing own paintings, drawings, models, toys and photographs with peers and known adults.
- Giving constructive feedback on work their peers have created or things that interest their peers.
- Listening and responding to a range of spoken texts in informal and some more formal situations.
- Remembering and following multi-step instructions and following prompts in multimodal texts.
- Using different interaction conventions such as asking questions, offering comments and constructive criticism.
- Reciting poems, rhymes and songs with meaning.
- Providing personal and constructive comments on visual material such as film, video, photographs and graphics.

Reading and viewing

- Using early reading strategies such as re-reading to maintain meaning.
- Navigating different types of print and visual and digital texts using basic concepts about print.
- Using meaning, visual, contextual and memory cues when participating in shared reading.
- Reading aloud texts with extended sentence patterns and responding to sentence boundary punctuation.
- Retelling the story in a print, multimodal or multimedia text giving details of events and characters.
- Recognising, naming and sounding letters, and combinations letters, in the context of particular words.
- Knowing the meaning of most high frequency sight words and using this knowledge to read new texts.
- Working out short regular words using context, grammatical and phonic knowledge.
- Revealing own feelings in response to print texts, visual texts, photographs and presentations.
- Predicting what might happen next in print and visual texts by making inferences about characters and events.
- Viewing multimodal texts, computer-based texts and educational games, and sharing opinions about them.
- Beginning to discuss different text forms such as how factual texts differ from imaginative texts.
- Showing understanding of how a multimodal or a visual text conveys meaning and influences behaviour.
- Participating in discussions about text content, plot, characters, feelings and setting, and retelling stories.
- Identifying words and images that represent people, things, actions, feelings and emotions.
- Using context, grammatical and phonic knowledge to predict and confirm when working out unfamiliar words.
- Making connections between personal experience and characters in story books and multimedia texts.

Writing and representing

- Developing handwriting skills using correct strokes for most lower case and upper case letters.
- Using left to right directionality, return sweep and spaces between words. capital letters and full stops.
- Using simple word processing functions and the keyboard for most letters when composing short texts.
- Talking about ideas they going to write about and seeking suggestions from peers and known adults.
- Writing short texts of a few sentences to retell events and experiences to a small range of audiences.
- Comprehending concepts about print such as letters, words, sentences and the incorporation of pictures and simple graphics such as arrows.
- Using sound-letter knowledge to spell common and unknown words, including a number of irregular words.
- Observing how their teacher writes 'stories' and making helpful suggestions when participating in shared writing.
- Describing events or factors in their writing and drawings to others and seeking suggestions.
- Creating simple multimodal texts with pictures and drawings placed in an appropriate order or sequence.
- Understanding the basic conventions of written texts such as sequence, pacing, directionality and audience.
- Creating short imaginative and information texts for a small range of purposes.
- Incorporating familiar ideas into their writing based on an understanding of simple text structures and features.
- Using lower case and upper-case letters appropriately in their print and multimodal texts.
- Using some recognised strategies, when prompted, to edit their work for meaning, spelling and punctuation.
- Choosing appropriate visual material to include in multimodal and multimedia texts they have created.
- Celebrating own written work and the work of others.

Transitional learners
A learning barometer!

Question-led learning builds language knowledge and skills
Indicative experiences are listed without any priority order

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Speaking and listening

- Talking about stories, writing, pictures, videos and models they behave created.
- Listening to a range of spoken and multimedia texts on familiar and learned topics.
- Retelling main ideas and talking about their thoughts, feelings and emotions related to them.
- Listening for details and instructions on what needs to be done and how it should done.
- Asking and answering questions, picking out main ideas and engaging in talk-based learning tasks.
- Speaking confidently to groups and adapting their language to suit their audience and purpose.
- Using every day talk and specific vocabulary to discuss ideas related to areas of personal interest.
- Designing and making oral presentations that contain some detail and use formal language.
- Presenting thoughts and feelings with conscious attention to voice, eye contact and gesture.
- Discussing how to interact differently with different people out of respect for them.
- Predicting likely endings and outcomes from listening to parts of a print or multimedia text.
- Contributing to group discussions, asking relevant questions, building on others' ideas and providing helpful feedback.
- Identifying and using turn-taking patterns in groups and pairs to explore and conference ideas and possible actions.
- Understanding the interactive nature of spoken language and explaining how this differs from written language.
- Speaking clearly and expressively with details in logical sequence as well as with appropriate eye contact, volume and pace to enhance meaning.
- Distinguishing differences in spoken language for use in informal and personal contexts from those suited for formal and public situations.

Reading and viewing

- Navigating texts using the title, table of contents, headings and subheadings, indexes and screen conventions
- Reading and viewing longer narrative and information texts, and extracting meaning from them.
- Discussing possible meanings and predicting likely events as they read a text and relating them to own experience.
- Reading texts with some complex language, ideas and vocabulary to find information on a range of topics.
- Making inferences about the actions and motivations of characters in texts they have read or are reading.
- Connecting texts they are reading to other texts they have read or those that have been read to them.
- Identifying most common irregular words in a range of different texts with explanations of how they are used.
- Using syllabification and morphemes to read simple multisyllabic words.
- Reading aloud with fluency and intonation, self-correcting based on the context, grammatical and phonic knowledge.
- Recognising and understanding the meaning high frequency sight words in the context of texts they have read.
- Viewing visual information and asking relevant questions to reveal possible meaning and make interpretations.
- Reading, viewing, navigating and responding to imaginative, informative and persuasive texts.
- Recognising differences between fiction and non-fiction, between literal and figurative language.
- Locating literal information and making inferences about it by referring to relevant print and visual information.
- Using word attack strategies, monitoring their own reading, and self-correcting to maintain meaning.
- Justifying predictions, interpretations and conclusions gleaned from reading print and multimedia texts.
- Making inferences about motives, causes, effects and consequences and responding to the viewpoints of others.
- Identifying simple literary and visual devices used by authors to generate meaning and create atmosphere.
- Observing bookmarking features for categorisation of texts.

Writing and representing

- Writing legibly with joined letters of consistent size and slope, and using word processing programs with growing efficiency.
- Creating imaginative and informative print and multimodal texts for different purposes and a widening range of audiences.
- Using sentences with correct tense and headings, boundary punctuation, capital letters, exclamation and question marks.
- Creating texts that display control over sentence structures with the appropriate use of, verbs, nouns and noun phrases.
- Discussing their choice of language structures and features in order to receive feedback and suggestions.
- Spelling accurately most common irregular words.
- Demonstrating an increasing ability to spell unknown words using sound-letter correspondence and visual knowledge.
- Reading and editing their work for meaning, spelling and punctuation.
- Incorporating visual material such as photographs and graphics into own writing to enhance meaning.
- Sequencing arrangements of visual material such photographs and diagrams to create descriptive texts with helpful captions.
- Creating texts that inform, narrate or persuade, giving reasons for their choice of text in terms of audience and purpose.
- Writing about familiar ideas, experiences, events and information with developed characters, ideas and events.
- Organising texts in paragraphs composed of logically grouped sentences dealing with one aspect of a topic.
- Understanding how detailed ideas can be expressed through the careful choice of verbs and adverbs and nouns and adjectives.
- Using simple punctuation correctly including apostrophes to mark contractions and commas to separate items in lists.
- Using a variety of spelling strategies to spell high frequency words correctly, including syllabication to spell complex words.
- Creating multimodal texts incorporating written, visual and sound language.
- Producing digital texts to convey ideas and feelings in ways that address the characteristics of particular audiences.
- Re-reading own writing to check accuracy and to improve meaning, purpose and appropriateness to their audience.

Proficient learners
A learning barometer!

Question-led learning builds language knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

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Speaking and listening

- Responding constructively to presentations, offering relevant challenges and suggestions on key points.
- Identifying key ideas and details in presentations with a concern for accuracy and a respect for their source.
- Summarising and presenting ideas for others in ways that stimulate interest and provide clarity.
- Using open questions to prompt speakers to provide more information and extend their ideas.
- Ordering ideas and information in appropriate sequences when giving oral presentations to particular audiences.
- Using appropriate strategies to ask for information or make requests or suggestions or justify arguments.
- Considering audience needs when planning, preparing and rehearsing informative or dramatic presentations.
- Employing variations in volume and pace, pausing for effect and waiting for audience reaction.
- Arguing sensitively and persuasively to advance or defend information, ideas, different viewpoints and perspectives.
- Critiquing the appeal of a visual text in terms its impact on them and its connection with their personal preferences.
- Listening appreciatively to live and recorded spoken and multimodal texts to identify key points and messages.
- Distinguishing between relevant and irrelevant detail as well as the difference between substance and padding.
- Talking openly about own feelings and emotions to public audiences and listening to what others have to say.
- Selecting relevant visual resources and procedures to support oral presentations for particular audiences.
- Talking to clarify ideas and arguments, to share and evaluate experiences, and to contribute to discussions.
- Adopting various roles in group discussions to maintain the flow of ideas and explore different points of view.
- Making informed statements and selecting specific details to sustain a point of view in an oral presentation.
- Experimenting with structures and features of spoken language to influence audiences and share points of view.
- Adjusting register, tone, volume, pace and gestures for audiences.

Reading and viewing

- Reading, viewing, navigating and responding to a broad range of literary, informative and persuasive texts in print and digital formats that present complex ideas and themes from different historical, geographical and cultural contexts.
- Identifying how the choice of text structures and language features meets the contextual needs and purposes of different texts and their authors.
- Drawing informed conclusions and making inferences based on literal and 'hidden meanings' implied in texts.
- Interpreting, critiquing and synthesising ideas and information in a text or a selection of texts by reference to evidence derived from them.
- Recognising and describing how language choices and techniques influence audiences and reflect the author's intentions.
- Identifying ways individual values and experiences shape own and others' interpretations of texts.
- Using a range of research strategies and resources to explore issues or synthesise ideas or reflect on feelings.
- Locating information on a topic from multiple sources by previewing, skimming and reading selectively.
- Determining the authenticity, reliability and relevance of material read in print and electronic media.
- Using appropriate strategies to synthesise and summarise information on a particular topic from several texts, and make valid generalisations about the topic.
- Assessing ways material read in print and electronic tests can be enhanced to better convey the author's message, story or point of view.
- Evaluating and comparing different perspectives presented in print and digital texts through analysis of the language and design elements used.
- Explaining how written information and visual images are integrated in texts to shape meaning.
- Evaluating the structures and language features of texts selected to influence and persuade audiences.
- Using evaluative library and online research processes to source and select specific information.
- Explaining how relevant personal experiences can add to the meaning of a film/movie or other forms of visual text.
- Recognising that different readers often make different interpretations of the same text in terms of emphasis, meaning and message.

Writing and representing

- Composing a variety of imaginative, informative and persuasive texts for different purposes and audiences.
- Selecting information and ideas from personal, literary and researched resources for a chosen audience.
- Developing coherent texts by varying sentences and paragraphs for specific effect and by using coordinating conjunctions and linking prepositions.
- Selecting precise vocabulary to express and develop ideas, to engage and persuade readers and to convey emotions.
- Writing well-structured and sequenced sentences that are grammatically correct, including punctuation that adds precision such as apostrophes and bullet points.
- Spelling a wide range of words accurately and using appropriate strategies to decode new words.
- Editing own writing to check for meaning, spelling, punctuation errors, omissions, repetitions, and syntax.
- Integrating the features of word processing functions fluently and accurately to achieve their purposes.
- Acknowledging all print and digital sources of information used or referred to in own texts.
- Creating multimodal and multimedia texts to inform, persuade, explain, speculate and entertain.
- Justifying opinions expressed in own writing with relevant supporting ideas and information.
- Drawing on literary elements and devices to compose imaginative print and digital texts for a given audience.
- Selecting text structures, language and grammatical features such as modality to influence audiences.
- Attempting to use complex sentences to add coherence and depth to their writing.
- Choosing subject-specific vocabulary and sentences to add clarity and coherence to their writing.
- Using brackets to enclose additional information, quotation marks for direct speech, titles and commas to mark clauses.
- Seeking and responding to feedback when planning, drafting, editing and proofreading own writing to enhance meaning and purpose.
- Referencing all sources of information according to recognised codes and conventions.

Accomplished learners
A learning barometer!

Question-led learning builds language knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

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Speaking and listening

- Listening to spoken and multimodal texts to identify key information and ideas, and the language choices used.
- Asking relevant questions to present accurate summaries and develop presentations for particular audiences.
- Examining how verbal and non-verbal communication elements in digital texts create meaning and influence audiences.
- Creating imaginative, informative and persuasive oral texts with awareness of the language and structural choices made and the reasons behind these choices.
- Explaining how spoken language can create imaginative worlds through which personal experiences can be described and social issues can be explored or explained.
- Interacting with others to report information, discuss ideas and issues, and interpret differing perspectives.
- Planning, revising and rehearsing oral presentations for accuracy, clarity and 'strength' of message.
- Giving others adequate time to say what they have to say without the pressure of intervention through an appreciation of the value of pause and 'silent' thinking.
- Creating a range of spoken texts for specific purposes and audiences to be presented in diverse formal and informal contexts, as well as delivered to small and large groups.
- Explaining the effectiveness of language and structural choices made to convey meaning and content.
- Using language effectively to express and develop ideas, to create identities and to position themselves and others as speakers and listeners.
- Interacting with others confidently to report information, discuss ideas and opinions, debate issues and evaluate differing perspectives and the value of what is being said.
- Using appropriate strategies and protocols for participating in discussions and negotiations, and for collaborating with others to reach shared decisions and actions.
- Planning and rehearsing oral presentations for accuracy, style, timing and mode of delivery

Assessing the impact of discussions and presentations on different audiences and the reasons those impacts

Reading and viewing

- Reading, viewing, navigating and responding to imaginative, informative and persuasive texts drawn from a range of contexts that cover a wide range of topics of personal, social, cultural and historical significance.
- Identifying the main ideas in texts, making inferences about characters, settings, events and issues, drawing on textual evidence to support judgments.
- Interpreting and integrating various viewpoints in a text about human experience and different cultures.
- Drawing conclusions and where appropriate challenging the main ideas, concepts, arguments and presentation styles used in particular printed and digital texts.
- Comparing structural and language features of texts written in different genres
- Explaining how authors influence readers and viewers by making strategic language and vocabulary choices.
- Identifying combinations of written, visual and auditory elements in digital texts and the reasons behind them.
- Explaining how the different elements in printed and electronic texts contribute to meaning and affect own responses and the responses of others.
- Collecting ideas and information from a range of sources including books, websites, search engines and databases… .
- Evaluating the authenticity, validity, relevance and background of printed and electronic material.
- Reading and interpreting literary works and classical literature for substance, style and cultural importance.
- Exploring different viewpoints about human experience by drawing on textual evidence to support their opinions.
- Comparing and contrasting structural and language features including vocabulary of significant literary texts.
- Explaining how structure, language and style are designed and used in different text genres to influence readers and viewers.
- Interpreting literal and non-literal language in print, multimodal and digital texts, and their effects on readers.
- Considering how combinations of written, visual, auditory and symbolic elements can make meaning, achieve author's purposes, and build relationships with audiences.

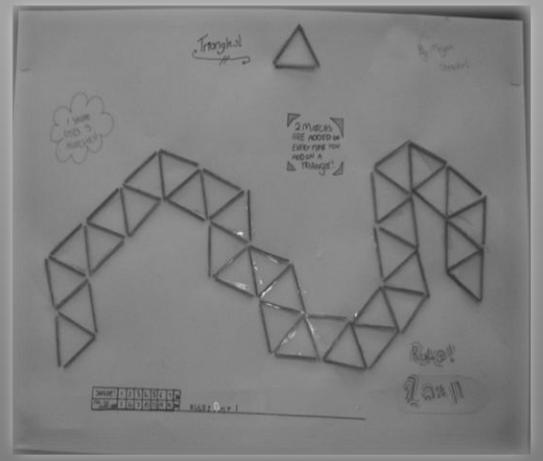
Writing and representing

- Creating well-structured and sequenced print and multimedia texts for imaginative, informative and persuasive purposes.
- Selecting genres that are appropriate for particular purposes and the audience for whom they are written.
- Creating imaginative texts and presenting points of view that sustain meaning, reasoning, interest and structure.
- Guiding readers through their texts using introductions, topic sentences in paragraphs, modality, verb groups and clauses.
- Choosing appropriate content and vocabulary to express and develop ideas as well as create interest and entertain.
- Using design and editing computer software and equipment to create effects in digital texts that address particular purposes and have specific impacts.
- Making texts flow through the use of sentence levels, paragraphs, headings structure and sequencing.
- Planning, drafting, editing and proofreading for appropriateness and accuracy of the language as well as clarity of the content and possibilities for improvement.
- Storying boarding the structure and sequence, language and graphics as well as the production process for the creation of multimedia texts.
- Exploring the characteristic features of different genres and how significant authors have employed them.
- Producing print and multimedia texts that challenge ideas, report events, reflect on human relationships, express opinions, and respond to the views of others… .
- Creating literary texts that select digital elements which are designed to produce special effects, meanings and atmosphere for specified audiences and contexts.
- Using a variety of sentence levels and clause combinations, supported by correct punctuation and appropriate sequencing to create clear and coherent texts.
- Using a range of spelling conventions to check accuracy and decipher the spelling of complex/technical words.
- Creating texts modelled on literature that has been read, particularly texts of cultural and historical importance.

Being Numerate

Four interconnected elements

- **Number**
- **Spatial awareness**
- **Measurement**
- **Chance and data**



Commentary

The detailed charts that follow provide a '<u>Learning Barometer</u>' to aid question-led teaching and learning. They are NOT inquiries, just possibilities for learning. They complement the Australian Curriculum (ACARA).

Growth in Being Numerate – a broad overview

The ACARA national curriculum

Beginning

Learners realise that people collect information to make sense of their world. They understand that mathematical language and ideas can be used to describe situations encountered through play and interaction with the environment. They understand information can be organised and structured to reveal relationships. They use mathematical language and ideas to describe situations encountered in their everyday lives.

They count and estimate numbers and sizes of objects they encounter in everyday experience. They begin to use mathematical vocabulary to talk about quantities and spatial relations, They talk about quantities and spatial relations sufficient to communicate their mathematical perceptions to others. They collect information from everyday events as well as from chance experiments and experience.

They are become increasingly precise in their mathematical thinking. They often explain their thinking by means of concrete materials such as making a model with construction materials as well as through oral descriptions and drawings. They organise data in different ways according to the nature of the information and their intention.

Developing

Learners are becoming more precise in their use mathematical language and ideas to describe situations encountered in their everyday lives. They count and estimate numbers and sizes of objects and use appropriate mathematical vocabulary to talk about quantities and spatial relations.

They are becoming more accurate in quantifying events, objects and relations and more proficient in calculating mentally. They recognise pattern in number and spatial arrangements. They explain their thinking through models as well as through oral descriptions and drawings.

Maturing

Learners study coherent, meaningful and purposeful mathematical concepts and practices that are relevant to their lives. They often require active experiences that allow them to construct key mathematical ideas. There is a trend to use models, pictures and symbols to represent these ideas.

They develop an understanding of whole numbers sufficient to build reasoning in fractions and decimals and develop their conceptual understanding of place value. With these understandings, they develop proportional reasoning and flexibility with number through mental computation skills.

They come to understand relationships between ratio, proportion and percentage, and how they apply to everyday situations, events and systems. In this sense an appreciation of number as a language for life is enhanced.

Question-led inquiry into action

#1 – Select generic generative questions (GGQs)

FORM	What is it like?
FUNCTION	How does it work?
CAUSATION	Why is it like it is?
CONNECTION	How is it connected to other things?
CHANGE	How is it changing?
PLACE	What is the role of place here?
RESPONSIBILITY	Who might be responsible?
CARE	How could people care for others?
ETHICAL	Where is the ethical reasoning?
AESTHETIC	How is aesthetic sense manifest?
THINKING	How is the thinking evolving?
INNOVATION	What might innovation add?

For details go to – Frame 16, 17, 18, 19

Select only 2 or 3 of the most relevant

2 – Conduct inquiries

Getting started	**Positioning performances** - *focus on prior learning, knowledge, experience, and interests, and on aspects of challenges that need to be explored or considered.* **Opening performances** - *select a few relevant GGQs, together with the goals for inquiry associated with them, and develop shared understandings of what they mean.*
Moving forwards	**Designing performances** - *devise CQs, and PQs if necessary, for selected GGQs, prioritize and translate them into practicable inquiries that contain realistic tasks to enact them.* **Exploring performances** - *conduct investigations customised to the demands of the design tasks, the capabilities of individual participants, and their expressed interests.*
Drawing together	**Culminating performances** - *build on inquiries by extrapolating what has been discovered to different contexts and to new or emerging challenges, and so doing by diverse means.* **Reviewing performances** - *backtrack to the initial questions and goals for inquiry to determine what has been achieved or needs to be addressed, and where to next.*

Conduct the inquiry in 2 cycles

The three-stage process helps to give inquiries purpose and coherence.

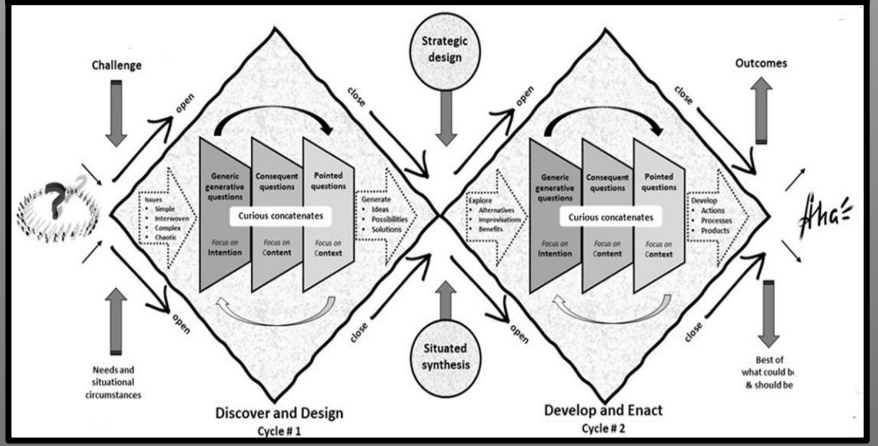
The structure and the questions often need to be refined, even transformed, as an inquiry progresses.

Apply to

Being numerate

For details go to – frame 25

3 – Engage in inventiveness



Early learners
A learning barometer!

Question-led learning builds mathematical knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

Melvin Freestone
www.questionledlearning.org

Number

- Understanding that for a set of objects the number name of the last object counted describes the quantity of the set.
- Identifying 1-to-1 correspondence among groups of objects.
- Counting forwards and backwards to 50 identifying the odd and even numbers.
- Describing number patterns such as odd and even, skip counting forwards and backwards in 2s, 5s and 10s to 100.
- Using mathematical language to compare quantities such as more, less, first, second, greater than, less than, equal to.
- Recognising zero as “nothing” or “none” when counting or adding and subtracting it from a number.
- Writing numerals up to ninety-nine and cardinal numbers up to 10, relating the numerals to the cardinal numbers
- Exploring sequences of positive whole numbers from zero to 100 and beyond using a 'number line' to aid sequencing.
- Identifying missing numbers, and before and after numbers, in sequences up to 100.
- Counting out quantities in combinations to 10s, 2s and 5s and recording the results with number symbols.
- Adding and subtracting two digit numbers by means of representations of 10s and 1s with and without regrouping.
- Adding and subtracting single digit numbers to and from numbers up to 20.
- Adding to and subtracting from numbers greater than 11 in 10s
- Recognising the relationship between addition and subtraction.
- Partitioning numbers to 10 and beyond and exchanging small quantities in ones and tens.
- Understanding that two-digit numbers are comprised of units of tens and ones.
- Distinguishing between 99 and 100 in terms of 10s.
- Counting forwards in 2s, 3s, 4s, 5s and 10s with and without the aid of objects.
- Using knowledge of the relationship between addition and subtraction to solve simple additive problems.
- Copying, continuing and describing patterns with objects and numbers to 100.
- Understanding one half as one of two equal parts and one quarter as one of four equal parts.

Spatial awareness

- Understanding shapes can be described by their properties.
- Describing the orientation of an object relative to itself and other objects
- Describing the position objects relative to each other in terms of more than one attribute or feature.
- Matching objects according the attributes of shape and size.
- Recognising how different shapes and objects can be fitted together.
- Recognising 2D shapes as being ‘flat’.
- Understanding relationships between 2D and 3D shapes.
- Understanding how 2D and 3D shapes can be put together or taken apart.
- Using directions to describe pathways and boundaries in their environment.
- Identifying the features of 2D shapes such as rectangle, square, triangle, circle...
- Identifying the features of 3D shapes such as cuboid, cylinder, cone, sphere.
- Tracing 2D outlines of 3D objects when viewed from different angles.
- Fitting different shapes together to make patterns and tessellations.
- Observing and describing the way shapes affect the movement of objects such as in rolling and sliding.
- Distinguishing straight and curved lines and relating them to the shape of objects.
- Drawing horizontal, vertical and slant lines free hand when representing objects and events.
- Following simple instructions and maps to find objects and places.

Measurement

- Understanding measurement involves comparing objects and events according to particular attributes.
- Using everyday language to describe measurements found by direct comparison
- Sorting objects according to their relative size, shape, corners, angles, slope and faces.
- Distinguishing between properties such as empty/full, hot/cold, heavy/light, long/short.
- Distinguishing relative distance such as near, far, thick, thin, tall, short, high, and low.
- Comparing objects by weight, size, capacity and internal volume.
- Estimating length using non-uniform informal units of measurement
- Using uniform formal units to measure length, distance and capacity to the nearest unit
- Describing events in time such as early, later, short and long duration.
- Reading time on analogue and digital clocks to the half-hour.
- Describing duration using months, weeks, days and hours, with calendars and clocks.
- Describing and comparing events in terms of relative time such as early, later, short and long duration.
- Estimating measurements of length, mass, capacity, temperature and money.
- Using measurements of objects to determine the 'best fit' in solving problems related to size and shape.

Chance and data

- Recognising some events in everyday life involve chance.
- Understanding that some events are more likely than others.
- Collecting data about themselves and familiar events and representing it in lists, tables and pictographs.
- Devising simple surveys to collect data.
- Identifying and recording different attributes in a collection of data.
- Organising and grouping data with assistance.
- Describing sequences and patterns in shapes and in numbers.
- Recognising patterns in everyday life such as in sounds. movement, objects and nature.
- Creating pictographs and using tally marks to record data observations and data patterns.
- Using data to tell mathematical stories as part of solving mathematical problems.
- Reading and making connections between lists, tables and pictographs.
- Searching for patterns in different ways numbers and quantities in data collections can be split.
- Identifying outcomes from familiar chance events using everyday language to describe them such as yes, no, maybe.
- Representing relationships between objects using tree and Venn diagrams.

Transitional learners
A learning barometer!

Question-led learning builds mathematical knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

Melvin Freestone
www.questionledlearning.org

Number

- Reasoning around number sequences that increase and decrease by 2s, 5s and 10s, from any starting point.
- Counting fluently larger collections up to 1000, with grouping and counting in hundreds and tens.
- Representing collections larger than 100 by partitioning them into 100s, 10s and 1s.
- Describing and connecting patterns in 7s, 8s and 9s.
- Using place value to partition and regroup numbers to 1000.
- Using a 'number line' to represent positive and negative whole numbers from zero.
- Understanding the relationship between positive and negative numbers with the aid of linear representations.
- Understanding the role of place value in addition and subtraction.
- Adding and subtracting two digit numbers and solving addition and subtraction problems.
- Constructing multiplication tables and multiples up to two digit numbers.
- Multiplying two digit numbers by one digit numbers and two digit numbers.
- Explaining the meaning of multiplication as repeated addition, and division as equal grouping.
- Knowing and using multiplication facts up to 10 X 10.
- Dividing a given number by another number by grouping, using multiplication facts and by repeated subtraction.
- Solving problems involving multiplication and division
- Recognising common uses of halves, quarters and thirds.
- Using concepts of place value to 1000 in standard algorithm problems for addition and subtraction.
- Using calculators to assist with additive and multiplication problems involving large numbers.
- Solving problems involving everyday uses of fractions as equal parts of regular shapes, collections and as numbers.
- Building connections between the number of parts and the size of fractions.

Solving everyday problems that involve quarter and half turns.

Spatial awareness

- Identifying, describing, representing and visualising the properties of shapes and objects.
- Using and/or constructing simple maps and plans to find places, give directions and identify key features.
- Describing and comparing features of 2D and 3D objects.
- Describing two dimensional shapes by their sides, corners, diagonals, radius, diameter, centre.
- Distinguishing between shapes that tile and do not tile, or tessellate.
- Predicting the effect of one step sliding, flipping and turning of shapes and objects.
- Rotating geometric shapes and objects with the aid of digital technology.
- Distinguishing between line, line segments and rays.
- Identifying half and quarter turns from any starting point.
- Describing and measuring angles, using formal language to categorise them such as acute, obtuse, right angle and 180^{o}
- Identifying simple symmetrical shapes and patterns.
- Representing visual patterns in drawings and diagrams.
- Drawing intuitively the plan, elevation and side view of simple objects.
- Measuring and drawing dimensions angles, triangles, squares and circles.
- Identifying different types of square and triangular shapes.
- Identifying symmetry of positions and directions in designs, plans, shapes and patterns.

Measurement

- Using standard metric units to measure and compare objects and their properties.
- Verifying estimates of length and mass by measuring a number of times in standard units to ensure consistency and accuracy.
- Determining the sum and difference between repeated measurements of length, mass and capacity of a given object.
- Understanding relationships between different standard units used to measure the same attributes.
- Understanding and using standard metric units such as centimetre, metre, kilogram, litre to measure length, mass and capacity.
- Understanding that measures can fall between two numbers – 3 ½ Kg or metres and so on.
- Converting between different divisions within metric units of measurement such as metres to centimetres.
- Measuring area and perimeter using standard units.
- Comparing the area and dimensions of regular and irregular shapes.
- Recognising concepts conservation of weight and volume irrespective of size and shape.
- Recording the time on analogue and digital clocks to the quarter hour.
- Expressing time as ‘am’ and ‘pm’ and as 24 hour time.
- Identifying the current date, name and order weeks and months, and seasons of the year on a calendar.
- Estimating the duration of events and the approximate time elapsed between events.

Chance and data

- Understanding data can be organised and structured in different ways.
- Describing events produced by simple chance devices.
- Recording data produced by simple chance devises and events.
- Devising surveys that investigate more than one issue or question.
- Using tallies with a range of multiples to record data from chance events and surveys.
- Representing data in pictographs, tables, bar and column graphs, and diagrams.
- Realising that likelihood and chance can be expressed numerically.
- Predicting likely and unlikely events from chance devices and events.
- Partitioning numbers in different ways to show relationships in a collection of data.
- Recognising that there is likely to be variation in results and expected outcomes of chance events.
- Drawing inferences from data and making predictions about what the data shows or means.
- Creating repeating patterns in different sequences and arrangements with regular and irregular shapes.
- Understanding different forms of graph of the same data can highlight particular aspects and lead to different interpretations.

Proficient learners
A learning barometer!

Question-led learning builds mathematical knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

Melvin Freestone
www.questionledlearning.org

Number

- Consolidating the sense of number up to 5 digits and exploring large numbers up to 8 digits.
- Exploring even/odd and prime/composite numbers and prime factorisation.
- Describing the place value system for whole numbers and applying it to two decimal places.
- Appreciating the role of place value in addition, subtraction and multiplication.
- Identifying whole numbers on a 'number line' as part of addition and subtraction tasks that involve positive and negative whole numbers
- Solving additive problems with fractions.
- Relating fractions to decimals and percentages, and making equivalence comparisons.
- Working with fractions and decimals to thousandths, applying place value to establish equivalences.
- Estimating the degree of closeness of a fraction to known fractions such as a quarter and a half.
- Relating percentage to parts of 100 and hundredths when solving everyday problems.
- Analysing patterns and creating rules for patterns from which predictions can be made.
- Using brackets and simplification of brackets for patterns of divisibility as a basis of factorisation.
- Conducting multiplication and division tasks that involve positive and negative whole numbers.
- Working with decimal numbers to thousands, including multiplying and dividing decimals by whole numbers.
- Solving problems involving rate and ratio with and without the aid of calculators.
- Understanding squares and cubes of whole numbers.
- Expanding numbers in squares, as well as reading and writing simple equations.

Spatial awareness

- Describing different transformations of objects and shapes, and their effects.
- Describing locations-routes-compass directions using coordinate maps
- Exploring rotation, translation, reflection, symmetry in 2D & 3D shapes.
- Understanding that lines and axes of reflective and rotational symmetry assist the construction of shapes.
- Comparing angles in terms of right, acute and obtuse angles, supplementary and complementary.
- Constructing the shapes of cubes, cylinders and cones with the aid of protractors and other line-based tools.
- Exploring different ways of calculating the perimeter and area of rectangles and the volume of regular prisms.
- Understanding patterns & relationships in square and triangular numbers.
- Visualising and solving problems relating to packing and stacking.
- Relating concepts of 2D shapes to linear and curved lines, line segment, ray, open and closed figures, interior and exterior, angles, sides, altitude, sector.
- Comparing with precision the linear dimensions, area, and volume of shapes and objects.
- Exploring different quadrilateral shapes such as trapezium, parallelogram, rectangle, square, and rhombus.
- Identifying a wide range of 3D shapes such as cubes, cylinders, spheres, cones, prisms, and pyramids.
- Using and creating maps and diagrams which show scale and direction and use standardised mapping symbols.

Measurement

- Understanding relationships between units for measurement such as metre, centimetre and millimetre; kilogram, gram and milligram; kilolitre, litre and millilitre.
- Devising and using efficient ways to calculate perimeter, area and volume.
- Reading and interpreting scales using whole numbers of metric units for length, capacity (volume), mass (weight) and temperature.
- Using whole numbers and decimals when converting between metric units for length, capacity and mass.
- Estimating mass of objects and capacity of liquids, and verifying by measuring in standard units.
- Reading analogue and digital clocks to the nearest hour and minute, distinguishing between 12-hour time and 24-hour time.
- Using addition and subtraction in finding time intervals and relative time taken.
- Creating and interpreting timetables and timelines, and calculating elapsed time.
- Visualising, translating and measuring the dimensions of 2D and 3D shapes and objects.
- Interpreting scales and legends on maps into 2D and 3D realities.
- Seeing how algebra can apply to measurement by means of formulas to measure perimeter, area and volume
- Using formulas for calculating perimeters and areas of rectangles and polygons and the volume of rectangular prisms.
- Measuring accurately angles, lines, pairs of lines, areas and volumes
- Relating angles to concepts of right, acute and obtuse.

Chance and data

- Understanding that a major purpose of a database is to answer questions and solve problems.
- Designing surveys to collect and record data for particular purposes and audiences.
- Using representations of single variable data to describe distributions including the use of average, median, mode and range.
- Collecting two-dimensional quantitative data and representing it in tabular form.
- Selecting appropriate graphs to display single variable data.
- Understanding scale represents different quantities in graphical representations.
- Identifying trends in data sets over time and/or changes due to conditions.
- Carrying out investigations and reporting the results as data and interpretations of data.
- Using ICT to represent graphical data in different ways and for different purposes.
- Drawing inferences about the relationships between variables, justifying the conclusions.
- Representing data through appropriate displays including stem and leaf plots.
- Identifying misleading representations of data and data sets.
- Exploring concepts of variation and error by collecting repeated measurements.
- Distinguishing between samples and populations with a concern for reliable data.
- Choosing data to collect as part of examining a hypothesis or a performance.
- Beginning to quantify probability in terms of ratio, proportion and percentage.
- Quantifying probabilities by means of simple fractions, decimals and percentages, and applying the outcomes to complementary events.

Accomplished learners
A learning barometer!

Question-led learning builds mathematical knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

Melvin Freestone
www.questionledlearning.org

Number

- Describing properties of prime, composite and square numbers.
- Using multiplication and division facts to solve realistic problems and justify solutions.
- Calculating accurately with whole numbers, fractions and decimals, and applying this knowledge in real-life situations.
- Recognising, representing and ordering numbers involving thousandths and connecting them to fractions
- Comparing and contrasting fractions using equivalence.
- Solving additive problems involving fractions with unrelated denominators
- Justifying uses of the place value system to partition and regroup decimal numbers to thousandths and beyond.
- Recognising and solving problems involving unit ratio, rates, proportion and percentage.
- Exploring relationships between ratio, proportion and percentage.
- Solving problems that involve percentage rates of increase and decrease over time and in particular situations.
- Using the unitary method to explain and judge reasonableness of results.
- Understanding integers in the context of the laws of exponents with integral powers.
- Understanding, describing and using generalisations of the index laws with positive integral indices.
- Estimating and calculating squares and square roots, cubes and cube roots.
- Selecting and applying relevant formulas and simple equations for specific tasks.
- Generalising arithmetic patterns, including linear functions, to represent them algebraically and graphically.
- Generalising the distributive law to expansion and factorisation of simple algebraic expressions.
- Understanding formulas that apply to many different situations are generalised algebraic representations.
- Creating, solving and interpreting linear equations, including those that use realistic algebraic and graphical techniques.

Spatial awareness

- Drawing 3D figures in 2D showing hidden faces and counting vertices, edges, faces, and nets.
- Comparing and measuring angles to describe slope and relative positions.
- Describing patterns in terms of reflection, rotational symmetry, and translations.
- Using ICT to generate graphical representations of reflection, rotational symmetry and equivalent transformations
- Using scales, legends, compass points, distances, and grid references to describe and interpret locations on maps and plans.
- Constructing maps and plans to scale using standard symbols.
- Interpreting contour maps to give a 3D picture of the terrain
- Creating and interpreting plans projections, and isometric views of 3D objects.
- Using the Pythagoras theorem to solve problems involving right-angled triangular shapes.
- Generalising formulas for the perimeter for triangles and rectangles to other quadrilaterals.
- Investigating the features of symmetric and asymmetric shapes and their possible transformations.
- Creating patterns and sequences with 2D regular and irregular shapes.
- Generating formulae to describe the construction of repeating patterns.

Measurement

- Solving problems that require comparisons of length, area, volume and other attributes
- Selecting appropriate tools, scales and metric units for measuring with the required accuracy.
- Converting between metric units of length, capacity and mass by means of whole numbers and decimals.
- Creating and interpreting timetables and timelines, and adjusting them to allow for elapsed or lost time.
- Comparing perimeters, areas and volume of rectangular areas and rectangular prisms.
- Investigating relationships between the area of quadrilaterals and volumes of triangular prisms.
- Investigating the relationship between the features of circles such as radius, diameter, circumference.
- Measuring area of trapeziums, cubes, cuboids, cylindrical objects.
- Reconstructing scale models of objects and systems derived from dimensions in plans and drawings.
- Calculating gradients from data on contour maps, plans and drawings.
- Expanding and contracting scaled drawings of 2D and 3D objects.
- Using coordinates to describe transformations of plane figures.
- Understanding size of objects in our solar system relative to each other
- Understanding relative distances in our solar system and time taken to cover those distances.

Chance and data

- Conducting data-based inquiries that examine a number of variables.
- Choosing measures to represent spread and centre within a data set.
- Constructing, reading and interpreting a range of tabular and graphical representations of data sets.
- Interpreting secondary data and identifying misleading representations.
- Understanding effects of sample size for a survey in terms of validity and reliability.
- Exploring concepts of variation and error.
- Identifying complementary events, patterns and trends in data collections.
- Interrogating data analyses to assess the validity and authenticity of conclusions.
- Using a mean or median from a sample to estimate the mean or median of a population.
- Using relative frequency of events in raw data and percentage data to predict likely 'happenings' in the future.
- Using and interpreting numerical and graphical summaries of data to draw conclusions and calculate probabilities.
- Identifying equally and less likely events or outcomes by calculating their probabilities and relative frequencies.
- Checking out probabilities against the facts that probabilities range between 0 and 1 and sum to 1 over the sample space.
- Connecting tabular, graphical and algebraic representations of linear functions.
- Using Venn diagrams or two-way tables to illustrate criteria as well as to calculate simple probabilities.

Being Healthy

Three interconnected elements

- **Personal and social development**
- **Movement and physical activity**
- **Well-being and identity**

Commentary

The detailed charts that follow provide a 'Learning Barometer' to aid question-led teaching and learning. They are NOT inquiries, just possibilities for learning. They complement the Australian Curriculum (ACARA).

Growth in Being Healthy – a broad overview

The ACARA national curriculum

Beginning

Learners are beginning to understand about their body and refine their physical coordination skills. They begin to understand factors that are important in a healthy lifestyle and what it means to be healthy. They participate with others, build relationships and share in decisions. They understand that respect for others is important as is sharing and interacting with others. They are coming to understand that care for others is a responsibility everyone shares.

They explore and investigate their ideas, feelings and attitudes about major life events. They perform movement patterns with and without equipment and become increasingly aware of how their bodies feel before and after exercise. They recognise actions that need to be taken to help ensure personal and community health and hygiene. Their understanding of factors that affect lifestyles and well-being is increasing, and they are beginning to develop concepts of physical, emotional and mental health. They recognise that people share responsibility to care for the well-being of others.

Developing

Learners understand that many health needs are common for all people and that some people have additional or different needs. They understand that the body changes as people grow and age. They make simple connections between types of foods and their role in maintaining good health and appreciate the benefits of eating a variety of nutritious foods. They consolidate basic movement skills by applying them to different situations in areas including play, games, dance, gymnastics and aquatics. They are learning to recognise and value relationships and people in their lives as well as respect the feelings, moods and needs of others.

They understand what being healthy means and identify some personal and social factors that influence their health. They demonstrate a growing sense of identity and self-esteem and discuss similarities and differences between themselves and others. They understand that how they think and feel about themselves affects them. They demonstrate a growing sense of identity, self-esteem and self-worth, and learn strategies that promote them. They explore how personal qualities such as rights and responsibilities contribute to their identity and connections with other people.

Maturing

Learners are learning about the importance of taking personal responsibility for their own health and wellbeing. They understand that all the dimensions of health are important to maintain a healthy lifestyle. They understand that people grow at different rates. They recognise and compare physiological changes that occur at each major life stage including conception, birth, puberty and aging. They learn how food habits relate to health and wellbeing. They realise the need to take personal responsibility for their own health and well-being.

They understand that being healthy and being well can be described in particular ways by different people at different times in their lives. They learn how some behaviours such as smoking and drug addiction can negatively influence health. They learn how food habits and regular physical exercise relate to health and wellbeing. They identify harmful, risky and unsafe situations and behaviours, and become aware of a wider range of factors that influence their health.

Question-led inquiry into action

The three-stage process helps to give inquiries purpose and coherence.

The structure and the questions often need to be refined, even transformed, as an inquiry progresses.

Apply to

Being healthy

For details go to – frame 25

#1 – Select generic generative questions (GGQs)

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FUNCTION	How does it work?
CAUSATION	Why is it like it is?
CONNECTION	How is it connected to other things?
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RESPONSIBILITY	Who might be responsible?
CARE	How could people care for others?
ETHICAL	Where is the ethical reasoning?
AESTHETIC	How is aesthetic sense manifest?
THINKING	How is the thinking evolving?
INNOVATION	What might innovation add?

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Select only 2 or 3 of the most relevant

2 – Conduct inquiries

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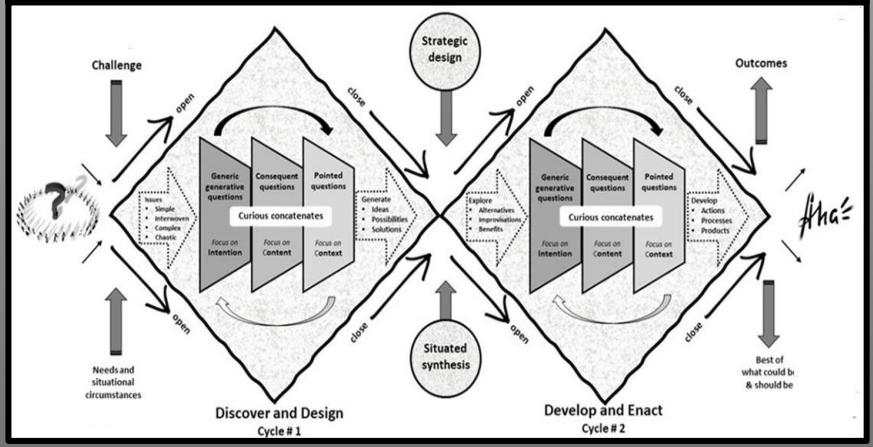
Moving forwards	**Designing performances** - *devise CQs, and PQs if necessary, for selected GGQs, prioritize and translate them into practicable inquiries that contain realistic tasks to enact them.* **Exploring performances** - *conduct investigations customised to the demands of the design tasks, the capabilities of individual participants, and their expressed interests.*
Drawing together	**Culminating performances** - *build on inquiries by extrapolating what has been discovered to different contexts and to new or emerging challenges, and so doing by diverse means.* **Reviewing performances** - *backtrack to the initial questions and goals for inquiry to determine what has been achieved or needs to be addressed, and where to next.*

Conduct the inquiry in 2 cycles

3 – Engage in inventiveness



Early learners
A learning barometer!

Question-led learning builds being healthy knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

Melvin Freestone
www.questionledlearning.org

Personal and social development

- Developing an appreciation of own personal likes and dislikes, interests, preferences and how they change.
- Understanding positive thoughts and feelings help people develop a positive attitude.
- Reflecting on own experiences to understand the strengths, interests and preferences in self and others.
- Describing some physical and personal characteristics, and being positive when faced with challenges.
- Appreciating that self and others have positive and negative feelings as well as rights and needs.
- Working constructively with others by relating to each other in socially functional and acceptable ways.
- Acting fairly in ways that recognise the importance of respect and trust in relationships.
- Making shared decisions and organising self and others to get things done with goals and tasks achieved.
- Recognising changes in their own capacities compared to the recent past.
- Recognising risks to others created by rapid, unexpected or rough actions.
- Comparing events and relationships which make us happy or unhappy, suggesting reasons for mood and attitude changes.
- Relating body signals to physical and/or emotional stress and identifying possible causes in self and others.
- Identifying when help is needed and when people need to act independently.
- Showing care when interacting with friends as well as when interacting with others
- Relating positively when with others by identifying strategies that can help overcome negative feelings.
- Being optimistic when faced with challenges and difficulties, and when taking risks.
- Recognising actions that build trust and respect are those which are most likely to enhance relations.

Movement and physical activity

- Understanding how our daily lifestyles and practices can impact on our well-being and physical health.
- Understanding some of the impacts sleep, nutrition, exercise and relaxation can have on physical and mental health.
- Understanding how food choices affect health in terms of personal well-being and fitness
- Improving gross and fine motor movements required for catching, throwing, kicking, jumping, and hopping.
- Refining fine motor movements for tasks that require precise movement such as cutting, drawing, and balancing.
- Realising how bodily coordination is involved in movement and how we can move creatively in response to stimuli.
- Responding to movement demands in defined spaces and for defined purposes.
- Recognising basic parts of own body, realising what can be done with them and observing changes during exercise.
- Locating different external and internal body parts and describing their functions.
- Identifying personal improvements in movement by means of physical exercises, games and dance activities.
- Identifying personal likes, dislikes and talents in physical activities including, sports, movement, and outdoor activities.
- Practising separate movement patterns and joining them in a sequence to achieve particular purposes and effects.
- Monitoring exertion and observing fitness requirements in different physical activities and sports.
- Understanding how rules are needed to ensure games and physical activities are fair, safe and encourage people to cooperate individually and as members of a team.
- Enacting the rules and spirit of games they have created as well as rules and acceptable practices that are well known in established sports and community activities.
- Pursuing personal interests in particular physical activities, sports and recreational activities, and persevering with them in good times and difficult times.
- Taking more responsibility for own physical health and fitness.

Well-being and identity

- Understanding that each person is an individual with differing needs and interests, talents and capabilities
- Understanding that developing independence builds self-worth and personal responsibility.
- Realising that internal factors such as need, personal attitudes, talents and interests affect well-being.
- Realising that external factors such as atmosphere, surroundings and human interaction affect well-being.
- Being aware of how feelings and emotions in self and others change in response to external and internal factors.
- Recognising our need for good food, personal hygiene, cleanliness and responsible social habits.
- Becoming increasingly aware of how relationships affect our sense of well-being and happiness
- Recognising personal feelings and emotions affect our sense of self-worth and well-being.
- Accepting personal responsibility to work and play with others in ways that recognise their feelings and emotions.
- Identifying features in communities that affect the way we live and impact on our sense of well-being.
- Understanding there are many physical, social and emotional factors that contribute to a person's identity.
- Demonstrating hygiene behaviours in food preparation, personal habits and keeping living conditions clean.
- Distinguishing between situations where free choice is appropriate and those in which group consensus is needed.
- Comparing school, home and community rules and practices, explaining why they are different.
- Respecting the choices of others without criticism and beginning to recognise why those choices are made.
- Appreciating how personal likes and dislikes as well as attitudes affect participation in everyday life.
- Taking greater responsibility for looking after own health and fitness.
- Taking action to enhance collaboration among friends and peers, and thereby promote positive feelings and attitudes

Transitional learners
A learning barometer!

Question-led learning builds being healthy knowledge and skills
Indicative <u>experiences</u> are listed without any priority order

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Personal and social development

- Cooperating and collaborating with friends and peers in ways that generate positive interaction.
- Supporting the special talents, feelings and aspirations of people as well as generating optimism
- Understanding self knowledge allows us to embrace new situations with confidence and take risks.
- Understanding personality features in self and others including strengths and less strong qualities.
- Talking about changes that have occurred in their bodies and the function of body parts.
- Recognising conditions and circumstances that make us happy or unhappy and cause mood and attitude changes in self and others.
- Recognising signals and possible causes of physical and emotional stress in particular situations.
- Predicting negative feelings and how self and others might overcome or cope with them.
- Displaying optimism when faced with new situations, difficulties and conflicts of opinion.
- Building trust and respect in personal relationships as well as in team or cooperative situations.
- Understanding how embracing optimism gives us confidence in ourselves and our future.
- Examining views about men and women and the effects of stereotypes on girls and boys.
- Encouraging effort and assisting less skilled and less motivated peers to engage in group activities.
- Explaining ways our lives are made interesting and varied by having females and males involved.
- Identifying values other than their own and suggesting ways to be appreciative and minimise inappropriate negative reactions.
- Discussing how relationships are influenced by the roles ~~of~~ people play and the degrees of friendliness.
- Negotiating with peers and others to find common ground, seek agreements, and discover shared action.

Movement and physical activity

- Understanding how participation in regular exercise and physical activities improves fitness and body skills.
- Recognising the value of participation in sport, leisure and recreation activities in enhancing health and well-being
- Understanding how people go through different stages and develop at different rates from one another.
- Practising gross and fine motor skills through movement sequences and by using equipment in defined spaces.
- Adapting movement patterns to account for changes in surface characteristics and obstacles.
- Understanding how the rules, routines and safety procedures in sports, games and physical activities make them safe, fair and enjoyable.
- Understanding how sleep, nutrition, exercise and relaxation are important to physical, emotional and mental health
- Developing own skills in goal and target driven ways within physical and recreational activities of personal interest.
- Understanding how particular physical activities can affect and place demands on the body in terms of hydration, nutrition and rest.
- Understanding how participation in physical activities impacts on mental and emotional health.
- Describing what fitness is in terms of its effect on the body, why it is important, and requirements for keeping fit and healthy.
- Practising movement changes and patterns in a variety of physical activities.
- Refining and sequencing speed, direction and levels of movement in games, dance and other activities.
- Understanding and respecting why some people participate more frequently in physical activities than others.
- Understanding the importance of teamwork in sports, group games, recreational activities including adventure activities.
- Identifying strategies and tactics that enhance teamwork and those that are unhelpful.
- Reflecting on personal responsibilities in being a 'team player' and acting in ways that benefit a team as a whole.

Well-being and identity

- Understanding how a person's self-concept can change and grow with experience and time, and be inspired by others.
- Identifying aspects about physical activities that make self and others feel healthy and positive about themselves.
- Explaining the effect of good and poor hygiene practices on personal and community health and well-being
- Identifying specific issues in food hygiene behaviours, personal habits and clean living conditions.
- Understanding the key elements in a balanced diet and combinations of foods that fulfil this requirement.
- Recognising when group decision making is required in order to achieve shared outcomes and be fair to others.
- Explaining and justifying the reasons for rules and regulations in particular sports and recreational activities, and their benefits.
- Understanding how personal likes, dislikes and behaviours can impact on attitudes to participation in everyday life.
- Taking responsibility for looking after own health and fitness by taking and persevering with appropriate action.
- Using collaborative skills when working with peers to build trust, reach agreements and resolve conflicts.
- Recognising how different ideas, feelings and attitudes are reflected in the actions and behaviours of self and others.
- Starting to understand that a person's identity evolves as a result of many cultural influences.
- Predicting how choices of friends, study options and work can influence own health and the health of others.
- Discussing past choices and their effects, and predicting the potential effect of choices on future health and well-being.
- Indicating what can be done and what has been done to contribute to the safety of others.
- Adapting rules and regulations to meet the needs of particular situations and the capabilities of others.
- Understanding that constructive criticism benefits self and others by helping to improve what we are doing or can do.

Proficient learners
A learning barometer!

Question-led learning builds being healthy knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

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Personal and social development

- Understanding self-worth affects what we think and feel about ourselves which impacts on our motivation and behaviour.
- Describing links between own behaviour and relationships that have been or are being established with others.
- Relating how self-concept is enhanced by interactions with friends, family, teachers and neighbours.
- Comparing a view of self from earlier years with the present, giving reasons for changes.
- Exploring different parts of the body and their functioning both as individual 'units' and as parts of a whole system.
- Understanding the influence of hormones on development of the body, their effect on mood and perceptions of self.
- Describing ways of maintaining effective body functions as a result of proper care.
- Applying plans to increase positive interactions and minimise undesirable effects or avoid negative and unhealthy interactions.
- Showing preparedness to work with others who are different in ways that are inclusive as distinct from exclusive.
- Recognising positive features in valued relationships and the need to respect the rights and feelings of those involved.
- Identifying personal characteristics which lead to particular friendships and group memberships.
- Identifying significant people in areas of family, school and community life who are available to help when needed.
- Supporting a view held by others which may be contrary to own view or preferences.
- Exploring the concept of resilience in meeting challenges and difficulties of everyday life.
- Explaining the function of the human reproductive system and issues related to population control.
- Demonstrating through role play and dialogue actions to resist unwanted sexual advances.
- Explaining influences in own life that affect views about masculinity and femininity.
- entifying ways to maintain and enhance personal resilience and deal with lversity.

Movement and physical activity

- Setting personal goals and developing plans to enhance performance and expertise with specific skills.
- Reflecting and acting upon own preferences for physical activity and how this contributes to personal well-being and self-image
- Using different pieces of equipment and techniques for particular purposes in different sports and physical activities.
- Demonstrating through performance over time that personal goals for movement and fitness have been achieved.
- Explaining safety practices and equipment used for a range of activities and assessing the risks of particular actions and activities.
- Explaining the benefits of showering, hair washing and personal hygiene after exercise, and the need to clean and wash equipment.
- Relating incidents in which injuries and emotional stresses have occurred through not showing adequate respect and care.
- Maintaining a personally tailored program for fitness which is enjoyable, flexible and developmental.
- Practising positional play in sports and games, giving proper attention to fair play and sportsmanship in all these activities.
- Taking on leadership and supporting roles as a member of a team as required.
- Understanding the benefits of teamwork and why it is important in many sports and recreational activities.
- Understanding there are substances that can cause harm to personal and community health.
- Explaining how coaches, videos, books, teachers and peers are used to develop and help practise skills.
- Showing willingness to persist when physical comfort zones are exceeded.
- Showing willingness to support and commend effort even if results are not always as expected or desired.
- Considering specific physiological benefits of fitness which can improve concentration, relaxation, sleep and digestive functions.
- Monitoring fitness programs in terms of the balance between the capabilities of participants, activity levels and food intake.

Well-being and identity

- Understanding different cultures influence the formation of personal and group identities.
- Recognising that stereotyping can put pressure on people which can lead to misconceptions and stress.
- Realising that persisting with tasks enhances own self-reliance and makes people more autonomous.
- Describing damaging behaviours in schools and communities which impact on personal health.
- Explaining how physical fitness relates to overall health and expectations of what 'I can do'.
- Distinguishing the nutritional value of foods, making own choices and accepting responsibility for them.
- Describing ways of maintaining effective body functions through care, observation and monitoring.
- Describing how holding and advocating particular values and beliefs is part of a positive self-concept.
- Understanding that factors such as gender influence how people grow and change.
- Realising that the ways we display our 'motivation' reveals our intentions, personality and values.
- Examining factors that shape views gender, sexuality, nationality, language and culture.
- Recognising own qualities, strengths and limitations, and how these contribute to our concepts of self.
- Relating how interactions with friends, family, teachers and neighbours enhances self-concept.
- Recognising role models among family, friends, community and significant others.
- Understanding own role in maintaining own health and well-being as well as in making a positive contribution to the health and well-being of others.
- Reflecting on self-worth with a view to further growth and how it affects responses to particular situations and environments.
- Identifying own personality traits and how they are expressed in different situations.

Accomplished learners
A learning barometer!

Question-led learning builds being healthy knowledge and skills
Indicative <u>experiences</u> are listed without any priority order

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Personal and social development

- Identifying some physical, social and emotional changes related to early and late adolescence.
- Understanding the development of primary and secondary sexual characteristics and physiological responses involved.
- Recognising issues and choices during adolescence that can lead to positive outcomes or lead to stress and conflict.
- Understanding and dealing with positive and negative consequences of fantasy in relationships.
- Practising strategies that enhance personal and group resilience and displaying empathy and respect for others.
- Linking individual behaviours to particular values and beliefs, considering personal responsibility and choice.
- Reflecting on personal strategies for balancing study, sleep, good eating, family commitments and friendships.
- Identifying adolescent health and community services in their local community.
- Understanding the benefits of prescribed medicines for pain relief, immunisation and minor illnesses.
- Explaining personal and community responsibilities to promote preventive health strategies such as immunisation and the dangers of inappropriate use of drugs and alcohol.
- Discussing ways to avoid unhealthy lifestyles and communities
- Recognising the difference between decisions made hastily and those that are made calmly without pressure.
- Accepting compliments for praiseworthy decisions and actions, and complimenting others for similar reasons.
- Contributing to the development of strategies that support others and deal with individual and group harassment.
- Growing a sense of self-worth and resilience to deal with challenges, adverse situations and stressful environments.
- Developing personal plans for dealing with extreme emotional responses and avoiding damaging behaviours.
- xploring the benefits of calm and considered decision making as opposed to ecisions made ‘in the heat of the moment’.

Movement and physical activity

- Transferring basic movement skills and concepts to sport specific situations tasks and strategies.
- Displaying independence and self-motivation when refining existing skills and developing new skills.
- Applying movement concepts and patterns to devise movement sequences in physical activities and dance.
- Identifying sport specific thinking strategies for game tactics and for developing team cultures.
- Practising and monitoring fitness and sport specific skills by applying them in particular contexts.
- Setting fitness goals as well as participating in and persevering with a personalised fitness program.
- Understanding the effect of healthy eating, balanced diet and regular meals on bodily performance and health.
- Reflecting on the influence peer choices, advertising and family can have on eating habits and food choices.
- Exploring the benefits of using technology to monitor and analyse fitness levels and personal health
- Applying concepts of fair play and sportsmanship and their associated behaviours as an 'attitude of mind'.
- Applying decision making and negotiation processes to improve team performance.
- Recognising the importance of safety in physical activities and taking the necessary steps as required.
- Encouraging others to participate in sports, adventure and recreational activities.
- Conducting safety audits on sports and recreational activities, procedures and equipment.
- Differentiating between skills others use and skills which are compatible with own personality and capabilities.
- Recognising the value attached to and gained from particular physical, sports and recreational activities in different cultures and environments.

Well-being and identity

- Understanding how physical and emotional changes during puberty can affect self and peers
- Identifying situations where personal responsibility builds health and well-being,
- Recognising own emotional responses in particular situations and ways of acting effectively and appropriately.
- Understanding why health information and services change in response to need and new ways to support people and communities.
- Recognising how the generic issue of 'balance' impacts on different aspects of personal and community health.
- Understanding how to set and enact personal healthy eating goals and how to make strategic plans for future action.
- Recognising that to take risks demands personal resilience and perseverance, which may lead to positive, negative or unexpected outcomes.
- Defining own values and beliefs on significant issues and explaining how they have changed since childhood.
- Appreciating own personal physical, social , emotional qualities and having confidence in their expression.
- Developing an understanding of own personality and how own actions affect and impact on others
- Understanding a balance between– physical, mental, emotional and spiritual – health leads to personal well-being.
- Debating health and well-being issues and providing information to others on strategies for personal and community growth and development.
- Accepting compliments as well as a reasonable level of critical feedback.
- Discussing the benefits to self and community of the diverse talents and understandings of all community members.
- Supporting others in ways that create a sense of collegiality among groups and enhance the well-being of members.
- Displaying a strong sense of citizenship and responsibility among friends and in the community.

Being Expressive

Five interconnected elements

- **Visual arts**
- **Music**
- **Drama**
- **Dance**
- **Media**

Commentary

The detailed charts that follow provide a 'Learning Barometer' to aid question-led teaching and learning. They are NOT inquiries, just possibilities for learning. They complement the Australian Curriculum (ACARA).

Growth in Being Expressive – a broad overview

The ACARA national curriculum

Beginning

Learners are beginning to respond to and enjoy different art forms. They recognise that art is a means of expression. They begin to use the different art forms in intentional ways to express their perceptions of experience and their feelings in particular situations and as a whole. They use colour, shape and movement to convey their ideas and in so doing create 'works' for others to view and appreciate. Painting, drawing, role playing and dancing are prominent and sources of much enjoyment and personal pleasure. They begin to understand people make meaning through the use of symbols.

They use colour, shape and movement to convey their ideas and in so doing create 'works' for others to view and appreciate. Painting, drawing, role playing and dancing are prominent and provide much enjoyment and personal pleasure. They learn a simple language for talking about the arts and begin to form basic concepts relating to aesthetic values.

Developing

Learners become more selective in what they use in their arts works and become more intentional in their art making. They use both actual experiences and imagination as a basis for making arts works. They express ideas and feelings by selecting, emphasising and organising arts elements in different ways. They reflect on their own arts works and those of others. They respond to the most apparent features of the works and show how some key elements such as shape, form, repetition and time have been used. They talk about their preferences and why they like or dislike particular works and begin to discriminate between different arts styles.

Learners prepare and present their works for others to appreciate. They recognise that arts works are made for different purposes, such as entertainment, celebration or to express ideas and feelings. They discuss the purposes of the arts in their community and different ways arts works are made as well as the contribution they make to communities and cultures.

Maturing

Learners explore issues, beliefs, values and experiences through the arts. They experiment with ideas, explore feelings and persist to find satisfactory solutions to tasks. They carefully choose, combine and manipulate arts elements to explore effects created with different approaches. They use a range of presentational skills to plan and present their works for different audiences or purposes. They understand that the arts may be shared with others in diverse ways. They analyse content of arts works and discuss their basic ideas; and share their responses to their own arts works and those of others. They show an understanding of the arts of different social and cultural groups, at local and global levels.

They appreciate that creation and interpretation of art works deepens our understanding of ourselves and the world around us. They talk and write informally about arts works, noticing how elements are used for specific expressive effects. They offer interpretations of arts works' meanings or ideas and speculate about artists' intentions. They look for clues to help identify the country, cultural context, religious purpose or historical period in which works were made.

Question-led inquiry into action

The three-stage process helps to give inquiries purpose and coherence.

The structure and the questions often need to be refined, even transformed, as an inquiry progresses.

Apply to

Being expressive

For details go to – frame 25

#1 – Select generic generative questions (GGQs)s

FORM	What is it like?
FUNCTION	How does it work?
CAUSATION	Why is it like it is?
CONNECTION	How is it connected to other things?
CHANGE	How is it changing?
PLACE	What is the role of place here?
RESPONSIBILITY	Who might be responsible?
CARE	How could people care for others?
ETHICAL	Where is the ethical reasoning?
AESTHETIC	How is aesthetic sense manifest?
THINKING	How is the thinking evolving?
INNOVATION	What might innovation add?

For details go to – Frame 16, 17, 18, 19

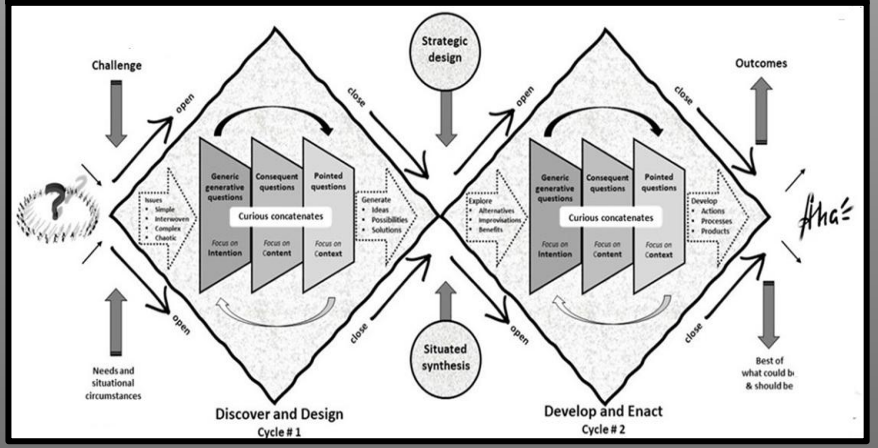
Select only 2 or 3 of the most relevant

2 – Conduct inquiries

Getting started	**Positioning performances** - *focus on prior learning, knowledge, experience, and interests, and on aspects of challenges that need to be explored or considered.* **Opening performances** - *select a few relevant GGQs, together with the goals for inquiry associated with them, and develop shared understandings of what they mean.*
Moving forwards	**Designing performances** - *devise CQs, and PQs if necessary, for selected GGQs, prioritize and translate them into practicable inquiries that contain realistic tasks to enact them.* **Exploring performances** - *conduct investigations customised to the demands of the design tasks, the capabilities of individual participants, and their expressed interests.*
Drawing together	**Culminating performances** - *build on inquiries by extrapolating what has been discovered to different contexts and to new or emerging challenges, and so doing by diverse means.* **Reviewing performances** - *backtrack to the initial questions and goals for inquiry to determine what has been achieved or needs to be addressed, and where to next.*

Conduct the inquiry in 2 cycles

3 – Engage in inventiveness



Early learners
A learning barometer!

Question-led learning builds being expressive knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

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Visual arts

- Telling stories through paintings, photographs, drawings, collages and combinations of them.
- Identifying the materials and processes used in art works.
- Experimenting with different materials, colours and textures, and possibilities with 3D shapes.
- Recognising the primary colours as distinct from colours that are combination of them.
- Appreciating that people see (interpret) their visual creations in different ways.
- Describing their visual art works to others in terms of their meaning and the pleasure they had creating them.
- Using the work of familiar artists to inform their art making.
- Starting to order their art making by controlling and manipulating materials.
- Identifying some elements and principles of art such as composition, tone, colour, form, shape, texture and balance.
- Asking questions about why art works are made and the meaning behind them.
- Understanding that different people and different cultures have their own stories and traditions to tell through art.

Music

- Making and exploring a range of sounds with different instruments and materials.
- Identifying and responding through movement to musical rhythms and tunes.
- Recognising the 'line' in a piece of music and 'patterns' in rhythm.
- Developing capabilities to play particular rhythms on percussion instruments.
- Singing songs in tune or close to it individually and in groups.
- Responding through movement to different styles of music.
- Recognising and appreciating how music can stimulate and express feelings and emotions.
- Choosing particular forms of music to create an 'atmosphere'.
- Working in small and large groups to learn basic instrumental skills.
- Interpreting rhythmic symbols from a graphic score and being aware of conventional notation.
- Demonstrating awareness of different musical styles.
- Using simple musical vocabulary such as high/low, loud/soft, slow/fast.
- Demonstrating a sense of audience and occasion during performances.

Drama

- Responding to performances, stories and plays from other times and places.
- Pretending to be imaginary characters and acting out what they are like.
- Selecting characters from their experience and telling 'their story' through dramatic activity.
- Portraying a stereotype or particular kind of action through movement and voice.
- Taking the role of audience in listening and viewing dramatic performances by others.
- Participating in forms of drama such as mime, role play, teacher-in-role, expressive movement.
- Asking questions to gain insight into intentions of performers.
- Translating imaginative play from their own culture into a dramatic performance.
- Understanding simple sequences and causal relationships and a sense of an ending.
- Developing vocabulary for dynamic movement such as speed. force, shape, aesthetics.
- Starting to identify character, time, place and narrative when designing own works.
- Performing simple scripts and presenting work to entertain.

Dance

- Showing curiosity about live and recorded dance performances.
- Displaying etiquette such as watching, listening and responding to a performance.
- Translating movements observed in the environment into dance movements.
- Exploring the elements of dance such as action, space, time and energy.
- Moving different parts of the body in time to musical tunes and rhythms.
- Making dance movement choices that seem 'right' or are preferred and are intentional.
- Experimenting with dance movements from different cultures and communities.
- Responding in dance to a particular experience, emotion or stimulus.
- Explaining why particular body postures and movements communicate certain ideas and feelings.
- Using dance elements such as actions, space and energy in response to music and events.
- Understanding that music, costuming and props are important in their drama works.
- Exploring and showing interest in others' cultural dance styles.

Media

- Creating symbolic representations and images of their world.
- Observing symbolic features in digital resources, products and networks.
- Realising how different media products use different forms of symbolism.
- Creating simple media works with voice, text, colour, graphics, pictures, music and different textures.
- Becoming familiar with how to access, use and navigate digital software.
- Selecting media forms that describe particular characters, features, feelings and personal experiences
- Identifying messages in media products and materials.
- Understanding processes for planning media texts such as storyboards.
- Designing texts for a purpose such as a narrative, a recipe, an interview, a demonstration.
- Articulating what they like about media products created by others.
- Using key terms when making media texts such as image, colour, zoom movement, foreground, background.
- Describing the basic stylistic elements of different texts such as fantasy, documentary, and drama.
- Using strategies to develop and select ideas such as brainstorming, concept mapping, PMI, and the like.
- Understanding reactions to media products vary between individuals

Transitional learners
A learning barometer!

Question-led learning builds being expressive knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

Melvin Freestone
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Visual arts

- Producing art works that tell personal stories with an eye for detail and meaning.
- Selecting art materials and processes for their purposes
- Incorporating ideas and styles from artists in own art works.
- Using observation and perception to make visual art.
- Controlling and manipulating materials for particular purposes.
- Using tone, colour, form, shape, texture and balance to achieve particular effects.
- Understanding that artists work within a given medium such landscape, portrait, still life.
- Understanding that people make art for different reasons and that art works have a history.
- Producing art works that reflect a personal point of view.
- Developing a basic vocabulary of visual art.
- Recognising art elements such as proportion, scale, composition and perspective.
- Discussing why particular art works have been created and the meaning behind them.
- Being influenced by popular culture when developing preferences for art works.
- Understanding there is diversity in art works within own culture.

Music

- Exploring musical responses to a narrated story or event.
- Singing playing and performing musical works and songs in groups and individually.
- Responding through movement to different rhythms and tunes.
- Working in small and large groups to learn the skills to play a musical instrument.
- Understanding purposes and symbols of musical notation.
- Using the basic structure of conventional notation while continuing to use graphic scores.
- Interpreting rhythmic symbols and dynamic markings in performances.
- Responding to a wide range of musical styles and recognising personal preferences.
- Choosing sounds, voices and instruments to achieve particular effects in own music making.
- Showing awareness of structure when creating musical patterns.
- Learning the conventions of improvisation and making basic aesthetic choices.
- Understanding reasons behind the placement of voices and instruments for a performance.
- Recognising the characteristic styles of music from different cultures, places and communities.

Drama

- Using drama to tell stories about people and events.
- Designing works that draw on sources for content such as films, stories, events, and experiences.
- Using a repertoire of movement skills such as ‘canon’, ‘position’ and ‘flowing'.
- Discussing character, props, costume and sound, and their contribution to a performance.
- Creating simple sequences of related elements that have a sense of an ending.
- Developing skills of voice, mime and gesture to narrate personal stories and stories from literature.
- Recognising the role of time, character, place and narrative when designing own works.
- Explaining own emotional response to a drama work and the feelings portrayed in it.
- Performing scripts and freeze frames linked with a few words for retelling a story or mime.
- Comparing varied styles in performances of dramas from their own culture.
- Explaining ways ideas, feelings and experiences can be communicated through drama.
- Understanding that suspension of belief and aesthetic choices are basic to drama.

Dance

- Creating movement and dance sequences in response to music, emotions and events.
- Identifying dance components such as rhythm and use of space.
- Using movement phrases such as changes in level and speed, dynamics and balance.
- Demonstrating persistence and resilience learning to move the body for specific purposes.
- Using music, costuming and props in their drama works to achieve their purposes.
- Recognising and describing the movement and design choices in own and others’ works.
- Extending sequences observed in the natural world and in performance by others.
- Understanding different cultures and eras have particular movement styles.
- Presenting dance works that focus on different dance styles.
- Comparing historical dance genres to contemporary forms.
- Understanding some of the codes for making a dance.
- Modifying dance works to fit particular performance spaces.
- Responding to stimuli in ways that are both personal and relevant to a particular context.

Media

- Creating narratives, recipes, interviews, demonstrations and film sequences for specific purposes.
- Recognising the potential and limitations in media products.
- Selecting equipment and processes that best convey a given message.
- Using image, colour, movement, zoom, foreground, background to achieve particular purposes and effects.
- Recognising technical elements such a sequencing, colour, camera effects..., and how they help convey a message.
- Talking about the stylistic elements in fantasy, documentary, drama, film...
- Becoming skilful in using computer based hardware and software through experimentation and selection.
- Seeking guidance when planning and editing or needing technical support.
- Following media processes such as storyboarding to develop media products.
- Creating multimedia texts in a variety of genres and making the necessary technical choices.
- Understanding that materials used affect aesthetic outcomes and influence meaning.
- Recognising that ‘reading’ of a media texts is influenced by own point of view.
- Recognising the influence of media products on contemporary lifestyles

Proficient learners
A learning barometer!

Question-led learning builds being expressive knowledge and skills

Indicative experiences are listed without any priority order

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Visual arts

- Making informed choices about materials and techniques based on their benefits and limitations.
- Experimenting with structural devises such as juxtaposition, overlay and appropriation.
- Developing a high skill level within own preferred genre which is manifest in art works produced.
- Using art specific vocabulary to describe processes used in art.
- Valuing realistic representations and relating codes and conventions used by artists to own work.
- Investigating what artists are trying to convey in art works.
- Understanding how technologies available at the time affect art works that are created.
- Exploring contexts in which art works were, and are being, created.
- Understanding personal ways artists communicate ideas and generate stylistic preferences.
- Recognising art works have multiple meanings depending on the context people view them.
- Developing awareness of the significance of cultural symbols.
- Understanding there is diversity of art works within own culture.
- Comparing, contrasting and categorising art works from a range of cultures, places and times.

Music

- Reflecting on how music can express their personal voice as well as impact on others.
- Developing a musical vocabulary for particular musical styles and using it appropriately
- Reading and using conventional and graphic notation competently.
- Practising singing and playing an instrument to reach the desired consistency and standard.
- Singing individually and in groups with accuracy, control and expression.
- Developing a high degree of control over chosen instruments.
- Making choices about roles of performer, composer, director, producer, listener and consumer.
- Composing with intent using a range of structural elements.
- Using dynamics, tempo, texture, timbre, pitch to achieve purposes and effects in own music.
- Showing awareness of the social, cultural and historical contexts of music making and composition.
- Analysing different compositions in terms of their musical elements and audience appeal.
- Performing music in different styles recognising unique features.
- Making work available to others by recording it in varying forms.
- Appreciating and enjoying 'high quality' performances of music.

Drama

- Discussing aspects of drama that illustrate relationships between culture, history and locations.
- Controlling movement to portray emotive concepts such as friendship and bullying.
- Selecting a form and style suited to the dramatic story being told.
- Clarifying emotional responses to a performance.
- Appreciating drama from diverse times, cultures and social contexts and applying this in their work.
- Exploring how dramatic meaning illustrates values, beliefs and observations.
- Enhancing characterisation by introducing timing and spatial awareness to performances.
- Using selectively a repertoire of movement skills such as canon, position, flow and sequence.
- Accepting responsibility to support others in maintaining the suspension of belief.
- Understanding rules and conventions behind different styles and forms of drama.
- Presenting dramatic texts in ways that are faithful to its perceived intentions.
- Making clear aesthetic choices using appropriate language to explain those choices.

Dance

- Recognising that dance plays an innovative role in communicating ideas within cultures and societies.
- Creating dance works with attention to structure, cohesion and audience.
- Applying codes and conventions to develop an idea with an increasing grasp of technical language
- Demonstrating kinaesthetic awareness, emerging technical skills and a willingness to explore new ways of moving.
- Developing dance skills which broaden own dance vocabulary.
- Understanding production elements such as costume, music and props and use them purposefully.
- Using mirroring, canon, unison, tableau and transition to achieve own or group purposes.
- Developing an understanding of motif and symbolism in movement.
- Forming opinions and making value judgements about the success of dance works.
- Performing dance works of others in ways that communicate personal interpretations.
- Demonstrating preferences for particular dance styles and genres.
- Making connections with cultural and historical dance forms.
- Combining choreographic devices to achieve particular effects.

Media

- Making technical decisions to achieve intentions and desired effects.
- Employing technical knowledge when ideas are conceived and media products designed.
- Creating complex media texts in variety of genres around popular and contemporary culture.
- Understanding media texts carry multiple meanings and messages.
- Applying storyboarding, lighting, sound, camera angles and digital software to create media works.
- Editing work to refine mood, and atmosphere, and check the credits, titles and copyright.
- Identifying conventions of genre within multimedia texts and how they are used to support purpose.
- Articulating considered responses to media products, justifying own position and/or that of others.
- Analysing key cultural, social and historical perspectives in texts from different media genres.
- Providing feedback to enhance the making of media products and the translation of authors' intentions.
- Understanding roles in media production, and organising self and others in production teams.
- Recognising the influence of media products on lifestyles and values.

Accomplished learners
A learning barometer!

Question-led learning builds being expressive knowledge and skills

Indicative <u>experiences</u> are listed without any priority order

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Visual arts

- Understanding art works express a personal view or perception of experience.
- Understanding art generates meanings beyond the literal for many different purposes.
- Understanding that artists make stylistic and technical choices to support their intentions.
- Developing expertise across a repertoire of techniques based on own preference and intention.
- Using juxtaposition, overlay and appropriation with skill and purpose.
- Understanding how design elements combine to produce pattern, harmony, and contrast.
- Selecting materials appropriate to aesthetic ideas and intentions.
- Engaging with a range of genres beyond own preferences
- Making responses to art works informed by insights into styles and past movements in art.
- Using arts vocabulary to describe form, connections, structure, patterns in art works.
- Recognising different eras, movements and styles of art making.
- Understanding the making of art has evolved in response to technological and social change.

Music

- Using conventional notation when composing own music.
- Reading, writing and using conventional and graphical notation competently.
- Making considered choices when selecting musical components.
- Shaping musical works according to a predefined scheme.
- Performing music of different styles, demonstrating a greater knowledge of stylistic features.
- Persevering to develop technical skill and control of their chosen instrument.
- Deconstructing musical works in terms of the musical elements and the composer's intentions.
- Understanding the structure, conventions, mood and purpose of different musical styles.
- Understanding the social, cultural and historical context of the music being played.
- Developing musical works based on contemporary culture.
- Making choices about roles as performer, composer, director, producer, listener/consumer.
- Arranging and writing musical pieces for a selected groups in conventional notation.
- Responding to nuance in direction as leader or soloist or accompanist or group member.

Drama

- Drawing on stimuli such as work of others, research, stories, articles and documentary evidence.
- Enhancing characterisation by through timing, use of space, sophistication and improvisation.
- Understanding symbols include props, costume, gesture, voice, sound, lighting, and staging.
- Selecting props to generate meaning and atmosphere.
- Understanding elements that provide clues about context (who, where, what, why, when).
- Using knowledge of time, place, people and culture to bring meaning to performances.
- Analysing diverse times, cultures and social contexts and applying this knowledge to own work.
- Portraying a character in a way that places them in a historical, social or political context.
- Experimenting with technical elements such as light and sound to enhance message.
- Analysing the effectiveness of performances, expressing observations and opinions.
- Justifying own aesthetic choices and the choices made by others.
- Considering the nature of different audiences when creating, designing and staging dramatic performances.

Dance

- Creating dance works with structure, coherence and style.
- Responding to stimuli in ways that reflect own values and experiences
- Presenting polished work with the physical skill required.
- Demonstrating an increasing grasp of technical language.
- Making judgements about dance works in terms of the codes and conventions used.
- Using original conventions and characteristics when arranging works created by others.
- Connecting the origins of dance and the reasons why people dance to their own dance-making.
- Reflecting personal strengths and stylistic preferences through movement.
- Justifying the selection and arrangement of movements to communicate an idea.
- Understanding and using symbolism in dance movement sequences
- Combining the choreographic devices of canon, abstraction, improvisation and accumulation.
- Appreciating dance traditions and repertoire among different social and cultural groups.
- Creating dance works with particular audiences in mind.

Media

- Designing multimedia sequences that convey a 'point of view' within a media product
- Controlling equipment and design elements to produce coherent and extended media texts.
- Assessing style and effectiveness of a media product in terms of the conventions of different genres.
- Deconstructing a media text for meaning, the techniques used and the relationship between elements.
- Responding to a multimedia text by describing structures and features that impressed self and/or others.
- Constructing multimedia texts with the cultural values and experiences of the audience in mind.
- Understanding roles in a media production and organising them within teams – producer, director, camera operator, editor… .
- Recognising cultural, social and historical differences in media texts and the nature of different genres.
- Understanding cultural symbols and histories reflect political, social, commercial, and religious purposes and practices.
- Understanding histories and cultural traditions are recorded and constructed in media.
- Interpret and describe the design, stylistic, technical, expressive and aesthetic features of works created by different people.

Being Knowledgeable

Three interconnected elements

Scientific inquiries
Five Aspects
- Acting scientifically
- Energy and force
- Matter
- Living things
- Earth and space

Societal inquiries
Six Aspects
- Acting socio-culturally
- Identity, relationships and culture
- Democratic values and processes
- Interconnections between systems
- Responsible citizenship
- Historical perspective

Environmental inquiries
Five Aspects
- Acting environmentally
- Sustainability
- Impact
- Survival
- Interaction

Commentary

The detailed charts that follow provide a 'Learning Barometer' to aid question-led teaching and learning. They are NOT inquiries, just possibilities for learning. They complement the Australian Curriculum (ACARA).

Growth in Being Knowledgeable – a broad overview

The ACARA national curriculum

Beginning

Learners explore and investigate their world as 'our world'. They do not see it as divided into specific areas. Instead, they see it as learning about real life experiences, processes, events and significant occasions. To them 'our world' encompasses experience inside and outside school. Inquiries might, for example, explore questions like - *How the world works? How we care for our world? Where we are?*, and *How we organise ourselves?.*

Inquiries need to be substantial, but not last too long. Care is also required to keep them within the sphere of interest and experience of the learners, and to carefully adjust them to the potential development of the individual and collective capabilities of learners.

Developing

Learners continue to explore and investigate their world as 'our world'. They do not see it as divided into specific areas. Instead, they see it as learning about real life experiences, processes, events and significant occasions. To them 'our world' encompasses experience inside and outside school. Their investigations of questions like - *How the world works? How we care for our world? Where we are?*, and *How we organise ourselves?.* become more systematic with a greater appreciation of teamwork.

The primary focus is on personal experience inside and outside school. At same time learners at this level develop a growing awareness of the wider world with investigations being more intentional. Information, opinions and possibilities are used in processes that make sense of experience and develop understandings. They are beginning to perceive that there are different fields of knowledge and experience

Inquiries need to be substantial yet doable within a reasonable amount of time. Care is also required to keep them within the sphere of interest and experience of the learners, and to carefully adjust them to the potential development of the individual and collective capabilities of learners.

Maturing

At this level learners learn through lived experience from which they generate understandings that inform their everyday lives. 'Lived experience' enables them to experience and encounter disciplines of inquiry that are characteristic of different fields of knowledge and experience. They progressively develop their competence in disciplined inquiry; and at the same time, they come to understand ideas and concepts that are associated with specific disciplines.

While they are beginning to differentiate their learning into different disciplines this need not detract from the multi-disciplinary nature of their learning and inquiries. Their knowledge is also expanding beyond their immediate experience to considerations at a more global level.

They begin to explore the 'big ideas' and concepts embedded in the fields of scientific, societal and environmental studies as well as inquiry skills characteristic of disciplines related to these studies. In addition, they encounter and explore, an age-appropriate level, the design and technological processes relevant to each of these fields.

Design and technology

Being Knowledgeable enables learners to develop understandings and appreciations of - technology in society, engineering principles, materials and resources, and technological specialisations. The process of **design-make-appraise** is key. Learners build their capabilities for investigating, generating, devising, creating, producing, implementing, evaluating, collaborating and managing.. They develop and apply understandings and capabilities that emanate from and apply to the gamut of scientific, societal and environmental fields of knowledge and experience, now and in the future.

Question-led inquiry into action

The three-stage process helps to give inquiries purpose and coherence.

The structure and the questions often need to be refined, even transformed, as an inquiry progresses.

Apply to

Being knowledgeable

#1 – Select generic generative questions (GGQs)

FORM	What is it like?
FUNCTION	How does it work?
CAUSATION	Why is it like it is?
CONNECTION	How is it connected to other things?
CHANGE	How is it changing?
PLACE	What is the role of place here?
RESPONSIBILITY	Who might be responsible?
CARE	How could people care for others?
ETHICAL	Where is the ethical reasoning?
AESTHETIC	How is aesthetic sense manifest?
THINKING	How is the thinking evolving?
INNOVATION	What might innovation add?

For details go to – Frame 16, 17, 18, 19

Select only 2 or 3 of the most relevant

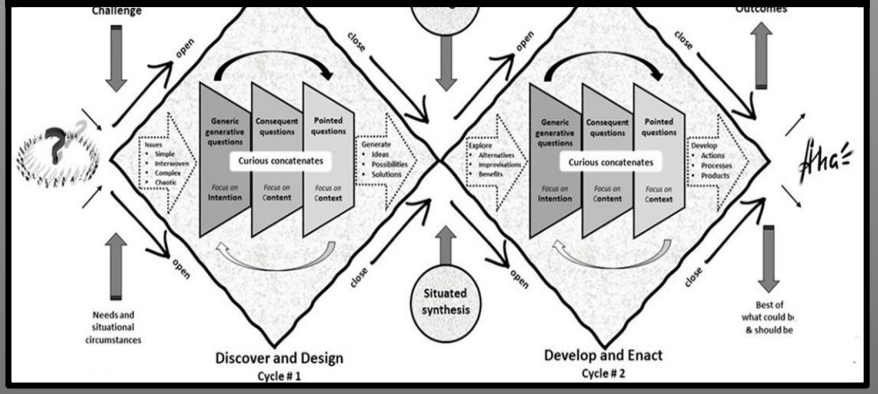
2 – Conduct inquiries

Getting started	**Positioning performances** - *focus on prior learning, knowledge, experience, and interests, and on aspects of challenges that need to be explored or considered.* **Opening performances** - *select a few relevant GGQs, together with the goals for inquiry associated with them, and develop shared understandings of what they mean.*
Moving forwards	**Designing performances** - *devise CQs, and PQs if necessary, for selected GGQs, prioritize and translate them into practicable inquiries that contain realistic tasks to enact them.* **Exploring performances** - *conduct investigations customised to the demands of the design tasks, the capabilities of individual participants, and their expressed interests.*
Drawing together	**Culminating performances** - *build on inquiries by extrapolating what has been discovered to different contexts and to new or emerging challenges, and so doing by diverse means.* **Reviewing performances** - *backtrack to the initial questions and goals for inquiry to determine what has been achieved or needs to be addressed, and where to next.*

Conduct the inquiry in 2 cycles

For details go to – frame 25

3 – Engage in inventiveness



Early learners

A learning barometer!

Question-led learning involves - investigating, experimenting, hypothesising, designing, making, predicting, and reflecting. ***Indicative experiences are listed without any priority order***

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How the world works

- Observing, monitoring and recording changes in the world around them.
- Realising predictions can be made from observing the world around them.
- Identifying characteristic features in nature, and in simple constructions and machines.
- Describing simple patterns in natural events
- Recognising cycles in the growth and habits of living things.
- Recognising that weather and other natural events have great force and energy
- Realising how the survival of communities depends on cycles in nature.
- Making simple inferences from data on climate and weather
- Recognising how cycles in nature determine how people live.
- Understanding people have evolved ways and roles to deal with climatic and environmental conditions
- Realising how our patterns of life reflect what happens in nature.
- Exploring how things can move and adapt or change for particular purposes.
- Investigating how the properties of things affects what can be done with them.
- Understanding people around the world adapt the way they live to their environment
- Investigating how 'pushing and pulling' can be used to make things move.
- Realising that energy is involved in 'pushing and pulling'.
- Illustrating patterns in our natural and constructed worlds through graphical images, diagrams, images and pictures.
- Making drawings and paintings that show sequences of events and how things work.
- Becoming aware many Art works feature our environment, weather, climate and industrial practices Designing and constructing objects and systems for particular purposes.

How we care for our world

- Observing common and unique features in plants and animals.
- Realising that plants and animals need particular conditions to live in and survive such as food and shelter.
- Recognising habitats are where plants and animals live.
- Investigating the habits of living things and the environments in which they live.
- Exploring the features of constructed environments and their purposes.
- Conducting investigations to reveal how habitats and living communities work.
- Understanding how we can care for our surroundings – facilities, places of worship, services, institutions...
- Realising conflicts can occur between people in how best to care for natural and constructed environments.
- Appreciating the diversity of living things and how human action can affect their survival.
- Recognising energy is an important resource for living things and the way we live.
- Comprehending how plants supply the food needs for many animals.
- Understanding the basic concept of a simple food chain in which plants and animals depend on each other.
- Realising people choose which plants and animals to grow in large quantities.
- Exploring ways of looking after and maintaining our living conditions.
- Exploring infrastructures including their development and maintenance.
- Using visual and/or dramatic means to show tensions and conflicts in our surroundings.
- Using paintings, drawings and photographs to show the functional and aesthetic features in natural and constructed worlds.
- Becoming aware plants and animals are the subject of many Art works.
- Designing and making 'models' to show how systems in the world work.

Where we are

- Observing features and patterns in different natural and social environments.
- Appreciating ways people make use of land and water and other facilities.
- Recognising pictures, diagrams, labels and sentences explain family histories.
- Appreciating people in families have different features and personal characteristics.
- Understanding members within a family have shared and different responsibilities.
- Recognising relationships between and within families.
- Understanding families develop and evolve characteristic attitudes and ways of behaving.
- Recognising people have feelings that are not always the same as their own.
- Identifying key features in natural and constructed environments.
- Recognising relationships between size and shape in how spaces are used
- Exploring different ways things and environments are used.
- Recognising the importance of land use and that people make choices in how they use it
- Identifying different systems for transport and communication in local communities.
- Recognising that people have personal responsibilities in moving from place to place.
- Making personal choices in organising journeys and communicating with others.
- Realising that safe behaviour is important for self and others when moving from place to place.
- Using photographs, pictures and drawings to record where people have been, are now or hope to be in the future.
- Using stories and anecdotes to tell about journeys, how land is or could be used... .
- Realising that self-perception of who and where we are generates personal identity and resilience.

How we organise ourselves

- Observing what people do when they are getting organised.
- Identifying guidelines and rules that affect how people are organised and work.
- Realising the ways scientific and technological inventions affect our everyday lives.
- Realising different sources of energy are used in how we live our everyday lives.
- Understanding the properties of materials are used for particular purposes.
- Identifying what is required when working with or using facilities in own community.
- Discussing problems in order to reach shared perceptions and solutions.
- Building relationships with friends and people they have met recently.
- Using listening skills as part of working with people and in getting tasks done.
- Exercising self-management to give other people a 'fair go' and access to opportunities.
- Persevering to do and complete tasks well.
- Recognising the system and services needs of people depend on their circumstances.
- Understanding people need to cooperate in the safe and effective use of systems and services.
- Identifying the sequence of steps in getting designing and making tasks done.
- Posing questions to improve the way designing and making tasks are carried out.
- Helping others to get tasks done especially when they are having difficulty.
- Working fairly and constructively with others in carrying out shared tasks.
- Realising that different places and contexts need specific guidelines and rules.
- Producing charts, diagrams and 'maps' of steps involved in tasks and activities.
- Constructing visual and dramatic representations of the consequences of unsafe and harmful practices.

Transitional learners

A learning barometer!

Question-led learning involves - investigating, experimenting, hypothesising, designing, making, predicting, and reflecting. ***Indicative experiences are listed without any priority order***

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How the world works

- Recognising everyday materials have observable properties which can change over time.
- Realising particular materials are used for particular purposes.
- Recognising choices are made in the materials used in structures and constructions in the natural and constructed world.
- Understanding the relative strength of a material enables it to withstand forces and stresses
- Understanding issues of force, strength and stress affect how things are constructed.
- Realising changes in construction designs and practices can be mapped over time.
- Appreciating constructions, places and environments have particular features.
- Appreciating different communities care for places and structures in different ways.
- Understanding designs are influenced by the needs and purposes of particular groups and communities.
- Recognising construction designs reflect their purposes, expectations, the availability of materials and the technologies used.
- Realising that energy is needed and used to make things work.
- Understanding energy exists in many forms and can be used in many ways.
- Understanding energy is a precious resource that needs to be used wisely.
- Understanding design plans are drawn to scale using standard codes and conventions.
- Recognising different forms and media are used to visualise designs and constructions in 2D and 3D formats.
- Understanding the planets in our solar system in terms of size, distance and order.
- Explaining how day and night and the seasons of the year work.
- Realising strong forces can cause changes in the earth with effects on land, water and air.

How we care for our world

- Understanding living things share a similar set of requirements to stay alive and survive.
- Recognising living thing things have external and internal parts.
- Identifying important unique features in particular natural and constructed environments.
- Understanding ecosystems evolve and adapt over time to changing conditions.
- Understanding pollutants damage our environment and affect living things.
- Identifying substances, materials and processes which are potential pollutants.
- Realising reduce-reuse-recycle is caring for living things and the environment.
- Recognising guidelines are needed to encourage people to reduce-reuse-recycle.
- Understanding the importance of safe disposal wastes and minimisation of waste.
- Realising personal choices impact on other people and whole communities.
- Appreciating self and others have similar and different views on environmental issues and practices.
- Understanding looking after our surroundings is an ethical responsibility now and in the future.
- Recognising health issues and challenges in particular communities, conditions and circumstances.
- Understanding the importance of good food, clean water and adequate sewage in healthy living conditions.
- Recognising the impact exercise and a positive attitude can have on personal and community health.
- Understanding the role of sports in personal and community health.
- Being aware environmental factors, impacts and consequences are depicted in Art works.
- Appreciating many Art forms and media can be used to explain changes within ecosystems in the natural and constructed world.

Where we are

- Realising some changes in our environment are obvious, other less so.
- Recognising places and 'things' have features in common as well as unique features.
- Mapping 'things' in local environments showing their features and uses.
- Mapping the states and regions in our country showing the basic features.
- Understanding land and water are used in different ways for different purposes.
- Understanding familiar materials are suited to particular purposes.
- Investigating scientific and technological applications that help us live and work.
- Recognising evidence helps us understand events and predicting future consequences.
- Understanding information and events can be sequenced over time.
- Understanding people and groups interact in characteristic, often different, ways.
- Understanding choices are made about the use of physical resources – land, water, sea, earth, air - as well as human resources.
- Recognising land is developed and used in different ways for different purposes.
- Appreciating past, present and future choices affect the future health of people and communities.
- Investigating the contributions of valued people in our society including scientists, artists, religious and political people.
- Recognising the nature of significant places in our community and their role.
- Understanding the lives of people and events have unique histories.
- Appreciating different places and communities have unique music, drama and dance traditions and practices.
- Realising people and communities develop a heritage of Art works overtime.

How we organise ourselves

- Understanding how systems in the human body process and use our food.
- Investigating farming processes and sustainable production processes/methods.
- Understanding people trade to acquire the foods and health related services they need.
- Understanding rights and responsibilities in fair trading are interconnected.
- Understanding the components of balanced diets and their effect on our health.
- Exploring different ways to prepare food and preserve food.
- Appreciating the effects of food habits and preferences on healthy living.
- Recognising the effect of cultural differences on food production and presentation.
- Identifying human and physical resources in particular communities and environments.
- Recognising prevention as the primary way to deal with health issues and disease.
- Understanding the role of clean water in the health and well-being of communities.
- Understanding past and present changes in human and physical infrastructure systems.
- Realising that people feel good when they have a say in planning processes and actions
- Understanding simple plans for action often involve a number of steps carried out in sequence.
- Recognising the importance of short and long term planning in developing infrastructure.
- Realising scientific evidence helps to determine the value, effectiveness and impact of services.
- Realising technical terms are often used to describe scientific and technological properties.
- Recognising graphical techniques are effective ways to show design plans and the steps involved in managing resources.
- Appreciating Art works often depict the history of scientific and technological developments.

Proficient learners
A learning barometer!

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Scientific Inquiries — emphasis on evidence

Acting scientifically

- Planning and carrying out inquiries that involve sequential steps and suggesting alternative methodologies.
- Setting up 'fair tests' with appropriate equipment to produce information from which conclusions and predictions can be made.
- Posing questions that can be investigated using available equipment and resources to produce relevant information.
- Using scientific properties when designing systems and products.

Energy and force

- Investigating types of force, relationships between force, pressure and movement, difference between force and energy.
- Exploring ways in which energy can be produced and stored – batteries, the sun, power stations, renewable sources...
- Exploring and constructing simple 'machines' that use force and energy – levers, pulleys, moving vehicles, electrical circuits...
- Investigating ways to save energy – switch it off, use insulation, make use of the sun and other renewable sources.

Matter

- Observing how substances can change physically from solid to liquid to gas such as in the water cycle.
- Investigating 'chemical reactions' that change substances permanently such as rust, corrosion, combustion... .
- Determining the properties of everyday materials such as hard/soft, heavy/light, shiny/dull, sharp/smooth, grainy.. .
- Exploring what happens when substances are mixed.
- Investigating the positive value and potential dangers of different materials and chemicals.

Living things

- Investigating the habitats of living things – their features, living things found there and how their needs are met...
- Exploring interactions between living things such as food chains, examples of interdependence, and plants as the base.
- Exploring adaptation and variation in plants and animals as well as heredity and genetic similarities & differences.
- Exploring the structure and function of human body systems.

Earth and space

- Investigating different sources of water – places, seasonal variation, and our uses of water...
- Exploring instances of nature's 'severe' events on earth and in the solar system, and explaining how they happen.
- Investigating the place of earth in our solar system – moon, eclipses, satellites, gravitational/magnetic field conditions.

Societal Inquiries — emphasis on relationships

Acting socio-culturally

- Observing social interactions in groups and communities and the operation of social systems.
- Asking challenging questions to assess the relevance, and authenticity of ideas and information.
- Comparing different pieces and sources of information on an issue.
- Designing processes and products to meet specified social and community needs.

Identity , relationships and culture

- Exploring family relationships – members and roles, family trees, likes and dislikes, size of people, houses & occupations.
- Investigating family and community eating patterns and preferences – foods, recipes, eating places, and celebrations.
- Realising the social and cultural diversity of communities and nations, including traditions and places in the world
- Investigating the nature of past and present societies from 'high-tech' communities to hunter gather to early farming... .

Democratic values and processes

- Identifying the main elements in own country's growth and independence including leadership, living conditions, rights...
- Exploring how decisions are made in our school and community.
- Investigating ways to include people inside and outside school – seeking opinions, accepting difference, managing conflicts...
- Understanding the main features of national, state and local government in own country and other countries

Interconnections between systems

- Investigating changing farming processes in relation to crop production, harvesting, food storage and distribution.
- Exploring the effects of movement on own community – transport of goods and services, movement of people.
- Identifying the role of different industries in the economy – farming, manufacturing, high-tech, entertainment, media...

Responsible citizenship

- Exploring different ways to work constructively with others – offering help, taking advice, listening to concerns... .
- Considering ways to improve our local surroundings – litter and garbage clean up, growing trees and flowers, walkways... .
- Exploring rights and responsibilities in school and the community.

Historical perspective

- Investigating significant historical and modern buildings - their origins, functions, maintenance and preservation... .
- Examining the nature and history of 'freedom and democracy'.

Environmental Inquiries — emphasis on systems

Acting environmentally

- Observing components, factors, conditions and circumstances in different environments and cultures.
- Collecting balanced information related to the issues and actions under investigation including different points of view.
- Focusing on interactions and consequences through unbiased use of information
- Designing solutions to environmental issues and problems.

Sustainability

- Investigating clean and dirty water, and ways to make water clean from sewage and garbage pollution, boiling and bottling water, water flow and stagnation, water borne diseases... .
- Investigating how food can spoil such as decay, hot conditions, unclean preparation, reheating cooked food.
- Investigating endangered species and actions humans can take to protect animals and plants, ecosystems and habitats.
- Examining renewable sources of energy and how they work – wind power, solar energy, wave power, recycling...

Impact

- Investigating the role of transport in our lives such as the use of animals, trains/buses/cars/airplanes/boats, walking... .
- Examining changes in the built environments around own village/town/city such as buildings, infrastructure, air quality.
- Exploring human impact on ecosystems through farming practices, use of land resources, development activities... .

Survival

- Examining the parts and features of plants and animals to find out how they aid survival in particular environments
- Investigating forests in the past, present and future – native forests, plantations, timber uses, degradation, firewood...
- Exploring issues of extinction and change over geological time.
- Investigating the importance of biodiversity in the survival of ecosystems – dependence and interdependence

Interaction

- Exploring how people in communities engage with each other in teams, sports and recreation, leadership by respected and elderly people, community leaders and 'heroes'.
- Examining choices people can make in how earth's resources are used such as fossil fuels/renewable energy, diesel/petrol, plastic derivatives, minerals and metals. land and water usage... .
- Observing how plants and animals interact with each other in terms of their interdependence for food, water and shelter.

Accomplished learners
A learning barometer!

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Scientific Inquiries emphasis on evidence

Acting scientifically

- Designing and carrying out scientific and technological inquiries making reasoned predictions based on analysis of data and scientific concepts they have met.
- Using concepts underlying scientific processes such as attention to variables, controls and consideration of hypotheses.
- Designing and carrying out experiments with fair tests that account for different variables.
- Explaining patterns in data drawing conclusions, making predictions and forming hypotheses from it.
- Formulating and refining questions for further investigation,and devising means to carry out inquiries that result.
- Designing and making systems, prototypes and functional objects that meet specified criteria.

Energy and force

- Investigating the effects of forces supporting or opposing each other as in floating and sinking, simple machines, speed and motion, friction and resistance... .
- Investigating how force, pressure and motion are interconnected.
- Exploring how to every action there is an equal and opposite reaction.
- Describing what is meant by gravity and its effects on objects and movement.
- Exploring forces that attract and/or repel as in magnetism and electricity.
- Exploring how forms of energy differ in the way they are transferred and stored.
- Comparing how different renewable and non-renewable energy sources and systems are used.
- Investigating ways the properties of objects affect how forces act on them - strength, durability, conductivity... .
- Describing systems that capture, transform and use energy into different forms for particular purposes.
- Setting up electrical circuits in series and parallel as well as in robotic devices.
- Exploring different IT devices and networks to improve connectivity and efficiency.

Matter

- Investigating how the properties of substances and materials vary in composition and the arrangement of elements within them.
- Investigating how the properties of materials can be used in industrial and technological applications.
- Investigating physical and chemical changes - reversibility and applications in natural and constructed systems.
- Investigating the nature, components and sources of light and how it travels
- Exploring how light interacts with different surfaces - reflection, lenses, refraction, forming coloured images...
- Investigating the physical and chemical properties of materials in terms of hardness, conductivity, malleability, corrosiveness,
- Exploring processes of evaporating, condensing, concentrating, dissolving, decanting, filtering, separating...
- Analysing conditions that cause substances to react/change/transform and ways to prevent these effects.
- Investigating movement of the air to create wind, weather patterns, sound waves of varied pitch and volume.... .

Living things

- Identifying characteristics of plant and animal cells, recognising the cell as the basic unit of all living things.
- Exploring different ways plants can reproduce and specialised structures they have for this purpose
- Constructing and interpreting food chains and webs as part of modelling relationships in ecosystems.
- Exploring how different reproductive methods have particular advantages in terms of species survival.
- Applying established systems of classification to differentiate living things into groups with like features.
- Investigating some structural, physiological and behavioural adaptations that help ensure survival
- Understanding human reproduction in terms of fertilisation, growth of embryo, nutrition for mother and baby
- Exploring the 'living conditions' that enhance growth and development in particular plants and animals.
- Investigating genetic variation, genes, DNA coding and replication.
- Exploring the meaning of diversity of species and genetic engineering

Earth and space

- Explaining and modelling the orbits of the Earth, Moon and Sun based on effects observable from Earth and space.
- Investigating the properties and behaviour of components in our solar system.
- Realising gravity is analogous to movement in 'bent space' which helps to keep objects in the solar system in orbit.
- Understanding gravity as a force of attraction between small and large bodies.
- Examining processes involved in the water cycle, carbon cycle, weather cycles, formation of rocks and new stars.
- Investigating earth's resources in terms of those that are reusable or renewable and why this is the case.
- Using geological evidence to explain changes in the earth including tectonic plate movements and volcanic activity.
- Comparing the composition, properties and origins of different types of rock.
- Examining processes of erosion and land formation in different geological periods.
- Investigating the composition, properties and behaviour of earth's atmosphere, and how it is changing.
- Exploring conditions for life on earth in different periods of geological time

Accomplished learners
A learning barometer!

Question-led learning involves - investigating, experimenting, hypothesising, designing, making, predicting, and reflecting. ***Indicative experiences are listed without any priority order***

Melvin Freestone
www.questionledlearning.org

Societal Inquiries emphasis on relationships

Acting sociologically

- Distinguishing between fact and opinion when searching for bias, assumptions, validity and credibility in information.
- Understanding how information is influenced by context, values and beliefs, and how reasonable conclusions can be reached.
- Understanding how background, experience and culture influence the interpretation of information and the application of ideas.
- Analysing information sources for reliability, and seeking alternative viewpoints and explanations.
- Creating purposeful communication products with careful attention to the expectations and perceptions of audiences.
- Designing human systems to deal with social issues, environmental challenges and personal health needs.

Identity , relationships and culture

- Examining values and beliefs of different cultural groups and how they reflect identity
- Investigating how values and identity have developed in own and other societies.
- Understanding the value of diversity and respect for difference in societies.
- Recognising issues equity and equality, human rights and responsibilities in societies.
- Realising how groups can and do influence social cohesion, mobility and conflict.
- Identifying changes in attitudes towards different cultural and ethnic groups.
- Evaluating the way inequities can be addressed at national and international levels.
- Investigating ways to express own identity, preferences, talents, and aptitudes.
- Exploring ways social media can affect personal or group identities and relationships.

Democratic values and processes

- Understanding how values affect individual and group beliefs, and shape concepts of democracy.
- Understanding democratic systems in terms of levels of government, rule of law, power relationships... .
- Understanding the nature and significance of constitutions in democratic systems
- Examining how democratic rights and responsibilities are afforded in own and other countries.
- Investigating how laws evolve in response to social, cultural and economic change.
- Realising that changes in laws are sometimes desirable, necessary and unavoidable.
- Identifying key features in different democratic systems and processes
- Analysing the decision making and voting processes, procedures and patterns in democratic systems.
- Exploring the role of international agencies in development programs and in the resolution of conflicts, and in providing humanitarian aid.
- Conducting surveys of opinion and need, and debating the findings.

Interconnections between systems

- Distinguishing between needs and wants, and how individuals or groups respond to them.
- Understanding how services meet needs and wants of particular groups in society.
- Understanding how providers of goods and services respond to demand and market their services.
- Investigating how the media functions, its role in society and its influence on everyday life.
- Understanding how changes in laws reflect social, cultural and economic needs and conditions.
- Understanding access to goods and services can reflect socio-economic status and privilege.
- Exploring legal systems for regulating the development and use of resources.
- Examining the current and potential role of 'high tech' in our community and country.
- Investigating how health programs and systems benefit people and societies

Responsible citizenship

- Understanding how individuals and groups play a part in community life.
- Examining political, social, gender and environmental - issues, views, and perspectives.
- Identifying benefits from diverse groups participating in community decisions.
- Exploring how democratic processes can address socio-cultural issues... .
- Considering citizenship as an attitude of mind to help and care for others.
- Recognising the value and importance of voluntary work and voluntary agencies.
- Realising that 'citizenship' confers rights obligations and responsibilities on people.
- Examining how the rule of law can protect human rights, and govern/promote appropriate behaviours.
- Investigating 'citizenship' as displayed by internationally renowned people and groups.

Historical perspective

- Applying historical analyses to past and emerging issues, ideas or events.
- Investigating different versions of historical events and issues
- Exploring how past actions and choices can inform the future directions and actions.
- Assessing historical information for credibility, reliability and authenticity.
- Establishing historical fact, opinion or speculation from primary and secondary data.
- Developing a sense of historical perspective that informs present and future directions and actions
- Examining histories and evolutions in own culture and literature over time
- Investigating changes in social structures, industries, manufacturing and management practices.
- Exploring the history of local, national and international organisations.

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Environmental Inquiries emphasis on systems

Acting environmentally

- Analysing components, factors, conditions and circumstances that affect environments in particular situations.
- Interpreting information bias and credibility, and synthesising information from varied sources.
- Assessing interactions and predicting likely consequences and impacts.
- Making suggestions for improving investigations based on feedback and the emergence of new information.
- Understanding and synthesising information from varied sources and producing preferred as well as alternative explanations.
- Synthesising balanced interpretations and conclusions from relevant data to improve environmental practices and safeguards.
- Designing and trialling solutions to biological and social challenges and existing or emerging environmental issues.

Sustainability

- Examining interactions in ecosystems related to biodiversity, community and interdependence.
- Investigating how combinations of factors make up the environmental conditions in particular situations.
- Exploring credible evidence to predict changes in local and global environments and weather patterns.
- Exploring human use of materials/resources in terms of being reusable, renewable, biodegradable, toxic... .
- Exploring options for dealing with environmental issues in particular situations and synthesising responses.
- Examining ways to resolve issues such as energy from fossil and/or nuclear fuels and/or renewable sources.
- Exploring environmental 'disasters' that have taken place and measures to prevent them in the future.
- Considering own environmental responsibilities, choices and actions in personal and community life.
- Investigating ways to treat atmospheric, water and land based pollutants and toxic wastes.
- Exploring the potential of genetic engineering in bacteria and viruses, plants and other animals.

Impact

- Exploring current and potential impacts of human and natural processes on climate and ecosystems.
- Investigating benefits of clean air and water, and healthy lifestyles on people and communities.
- Investigating issues of habitat protection, environmental conservation and control of pollution.
- Exploring processes and practices for sustainable land use, maintenance of biodiversity, and safe use of resources
- Identifying human impacts on living things and communities, and on the features of non-living environments.
- Examining how natural and built places change over time and the effects of those changes.
- Investigating past and present conflicts, or potential conflicts, in land use and environmental protection.
- Examining effects of technology on health promotion, aged care, drugs, treatments, antibiotic resistance,... .
- Exploring how computer based technologies are changing lifestyles and the conduct of human affairs.

Survival

- Exploring how food chains, variation and adaptation help organisms address physical and competitive challenges.
- Investigating potential effects of human population size and projected growth in different parts of the world.
- Exploring industrial and technological developments in terms of potential effects on the human condition.
- Investigating how to improve the allocation of and shared access to water resources.
- Investigating ways to prevent water loss, recycle water, treat sewage and clean polluted water.
- Exploring how climate change may affect land use and its availability for human habitation.
- Examining how human activity in particular situations can or may impact on biodiversity and lifestyles.
- Investigating factors that can improve or degrade environments and their potential effects on the survival of species.
- Examining examples of 'extinction', conditions at the time, and reasons for the death of particular species.

Interaction

- Examining past ,present and future implications of growth and development of built environments on lifestyles.
- Investigating evidence for changing climates and potential physical and human consequences.
- Using geographic, topographical and mapping processes to show how natural elements affect human activity.
- Recognising interactions in specific ecosystems including issues related to interdependence and community.
- Investigating potential effects and/or benefits of genetically engineered organisms on other living things including humans.
- Comparing how changing or conflicting values influence choices and decisions in particular places and contexts.
- Exploring different strategies to promote human interaction and the sharing of ideas and practices.
- Generating supportive environments where people are prepared to take risks and present alternative points of view.
- Seeking ways for people to 'have a voice' and share in decision making about life, work and environmental management of the natural and constructed worlds.

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