



# ● The literacy of geography

*John Butler*

- The release of the *Australian Curriculum: Geography* brings exciting opportunities for Primary teachers and students. For decades the ideas and methods of geography have been submerged or forgotten in many primary classrooms, but in the new geography curriculum there is an emphasis on the place of geography in a child's understanding of the world. Geography skills in the community have changed and expanded with the widespread use of geographic information systems in so many contexts, and the need to know more about environmental, social and population issues. With this has been an expansion of the kinds of literacy children are expected to master. Yet the basics of geography are still there – interest in places, skills in using maps, fieldwork, and inquiries into local, national and global spatial patterns and issues. All of these require literacy skills, and at the same time they further develop the literacy skills of individual students. There are many opportunities to connect the teaching of geography with English, mathematics, science and history, and at the same time show students a different view of the world seen through the lens of geography.

This PETAA Paper focuses on the ways that the new *Australian Curriculum: Geography* can be used to develop literacy in Primary Schools. It uses the literary continuum to show the variety of kinds of texts used in teaching and learning geography. An analysis of the uses of these texts in geography is followed by practical suggestions regarding pedagogy and resources.

The F-10 *Australian Curriculum: Geography* aims to ensure that students develop:

- sense of wonder, curiosity and respect about places, people, cultures and environments throughout the world
- deep geographical knowledge of their own locality, Australia, the Asia-Pacific region and the world

- the ability to think geographically, using geographical concepts
- the capacity to be competent, critical and creative users of geographical inquiry methods and skills
- as informed, responsible and active citizens who can contribute to the development of an environmentally and economically sustainable, and socially just world.

Teachers would readily recognise these qualities as desirable, so the questions then are: What are the most effective ways of approaching the *Australian Curriculum: Geography* in my classroom and school context, and what is the best way to do so to develop general capabilities such as literacy?

In some classrooms the answer to this will be discrete units of work, in others thematic approaches, and in others again a connected curriculum across classes and year levels. In all of these, literacy will remain central because it is the base of understanding, expression and personal development.

What is clear, however, is that the inclusion of geography in the Australian Curriculum provides more techniques, more contexts, more stimulation and more connections to help the development of literacy in all students.

## Types of literacy

Literacy is a broad term, and there are many kinds of literacy that are relevant to schools. These include information literacy, media literacy, computer literacy and visual literacy. This article uses the term literacy as defined in the Australian Curriculum (ACARA, 2013, Australian Curriculum: Literacy) and the notion of different kinds of texts within each subject.

The Australian Curriculum states that:

*Literacy encompasses the knowledge and skills students need to access, understand, analyse and evaluate information, make meaning, express thoughts and emotions, present ideas and opinions, interact with others and participate in activities at school and in their lives beyond school. (ACARA, 2013, Australian Curriculum: Literacy)*

The Australian Curriculum describes in detail the literary continuum through which students move, learning to comprehend and compose texts by listening, reading, viewing, speaking, writing and creating.

As with other subjects, younger students use mainly a 'spoken-like' language for the activities, concepts and skills of geography. 'Written-like' language is gradually introduced where it is suitable for the developmental level of the child. The development of this is encouraged by specific guidance and modelling. 'Abstract-technical' language is a further development of this, often within subject disciplines.

## Texts and the literacy continuum

Geography, like other subjects, employs its own particular set of 'texts'. For geography the most common texts used are:

- maps (print and digital)
- three-dimensional models, including the globe of the world
- diagrams
- statistical tables and graphs (numerical data displays)
- photographs (print and digital)
- factual descriptions
- explanations
- fictional stories (based on geographical concepts)
- interviews
- field study reports
- persuasive texts and arguments.

The literacy continuum in the Australian Curriculum (ACARA, 2013, Australian Curriculum: Literacy) suggests a framework for the use of these particular geographical texts for developing language and literacy, as shown in the table below. Each of these texts is comprehended through listening, reading and viewing, and students develop the ability to compose each of these text types through speaking, writing and creating. The table on the next page is adapted from the table that accompanies the Australian Curriculum: English.

One interesting issue about literacy in geography is that one could argue that a further 'text' could be added to those discussed above: the landscape. In a study of geography, a key 'text' that needs to be comprehended is the outdoor landscape, the real world or the physical and human environment around us.

## TEXTS USED IN THE AUSTRALIAN CURRICULUM: GEOGRAPHY

Literacy continuum	Language	Literacy
<i>Comprehending</i> texts through listening, reading and viewing	Expressing and developing geographical concepts	Observing, collecting, interpreting, analysing, evaluating
<i>Composing</i> texts through speaking, writing and creating	Using appropriate language for interacting and communicating	Creating texts which are effective in achieving their purpose
Literacy continuum	Language in geography	Literacy in geography
Text knowledge	Knowledge of elements of different kinds of texts Knowledge of structure and organisation of different kinds of texts	Interpreting, analysing, evaluating and concluding within the inquiry approach Creating texts: explanations, reports, recommendations, persuasive texts
Grammar knowledge	Knowledge of sentence structures and word groupings	Expressing opinions and points of view
Word knowledge	Using geographical terminology Spelling terms correctly Expressing and developing ideas clearly	Using geographical terminology appropriately and effectively Selecting vocabulary that is precise and appropriate for the purpose
Visual knowledge	Knowing and using the elements of maps Recognising and using statistical data forms Knowing and using the elements of photography	Interpreting and analysing maps Creating maps on paper and digitally Analysing statistical data Interpreting and creating geographical photographs Interpreting, responding to and creating multimodal texts

Although it does not fit the definition of text as used in the Australian Curriculum (in which texts are both comprehended and composed), in geography it will be one of the key ‘texts’ that needs to be comprehended, because geography is nothing unless it has a clear focus on the real world that the learner sees and perceives around them.

## Research into literacy in geography

Because geography has not been a separate subject in Primary education in Australia for fifty years, there is a dearth of research studies. A research program in Arizona produced useful results in the integration of reading with geography. Its intention was to ensure that students in elementary schools learned geography while at the same time improving their reading. Lessons were devised to integrate geography with reading (particularly comprehension) and with writing as an engaging and creative activity (Hinde, 2007).

The program was used in many schools and the results were studied in detail. They showed that almost all students

who were taught GeoLiteracy lessons showed gains in reading achievement; students in Years 5, 6, 7 and 8 showed statistically significant gains in reading comprehension compared to students who did not use the program; and students in Year 7 who already had moderate reading skills showed statistically significant gains in reading comprehension relative to comparison students.

This program only looked at one aspect of literacy, but it is one of the few academic studies of the relationship between teaching geography and developing literacy, and it points to promising possibilities.

With the introduction of the *Australian Curriculum: Geography* in Primary classrooms, we have a much more comprehensive set of opportunities. How should we best manage them at different year levels and through different approaches?

## The early years – conversations and play

In Foundation and Year 1, children do much of their learning through play, which then generates other learning situations such as conversations. The language employed by the children and the teacher is the ‘spoken-like’ language, and this is part of the texts used, such as stories, photographs and picture maps. Children begin school with:

*... an embryonic geographical background. Children play inside and in the garden or the outdoor area, possibly ‘explore’ a little, watch television, and talk. Children are taken out and make journeys because parents or siblings go shopping, visit places and meet relatives and friends. Through such experiences the youngest children begin to develop a number of facets of their personal or everyday geographies. (Catling, Willy and Butler, 2013)*

Young children learn the location and layout of places they visit often. By the time they are in Foundation year, they are ready to express this in words. They draw on their own experiences, but the more words they have at their disposal, the easier and more accurate their expression.

Some of the pedagogy used in the early years in geography, which develops literacy, includes:

- using play as a tool to encourage talking about place and space
- tapping into children’s direct experience of new and familiar places
- imagining places in stories, drawing them and modelling them
- developing mental maps of the local area and the rest of the world.

## Middle and upper Primary

In middle and upper Primary, learning comes from a huge breadth of texts and direct experiences. Geography uses not only written factual material, but much visual filmed material, photographs, maps (including digital interactive maps), globes of the world, field trips to new locations, guest speakers, websites with interactive games, interviews and surveys, inquiries into issues and reports of the findings, and apps on tablet devices.

From all of these, students can take stimulation to expand their knowledge and their interests. This may be an interest in travel to far-off places, or it may be just the names of far-off places! Some might develop a passionate interest in animals of the African savannah; others might be whole-hearted in their desire to improve their environment.

In these years, developing complexity of language is important. The geography experiences listed above can help take students to reading more complex texts, writing for a range of audiences in a variety of forms, giving analytical answers orally or in writing, and organising more complex ideas.

A mastery of language is an important step to the mastery of ideas, so development of literacy must go hand-in-hand with the development of all subject areas.

### Geography experiences that are useful for language development:

- maps (on paper)
- digital interactive maps
- atlases (both print and digital)
- photographs
- globes of the world
- field trips to new locations
- guest speakers
- websites
- email contact with distant children
- imaginative and informative texts
- films and videos
- websites with interactive games
- interviews and surveys
- inquiries into issues
- reports of findings.

Many activities for middle and upper Primary students combine the use of language with the development of spatial reasoning, map understanding and visual literacy. An example of one of

▶ these is the use of a written description from which students are asked to draw a map. This involves accurate reading and comprehension of the writing, the transformation of that into a spatial image, and the representation of that spatial image as a map with standard conventions that make it intelligible to others.

Below is an example of such an activity: a pirate's description of an imaginary island where he has buried his treasure:

*'When you have read this note, burn it! ... But before then, draw a map that shows what I am about to tell you. Today I found the perfect place to bury my treasure chest. It is on an island that is shaped like a banana. The ends of the island point north-west and south-west, and on the inside curve of the banana shape there is a long beach of about 3 kilometres. If you walk along this beach, 2 kilometres from the north-western end, you will see a conical hill immediately inland from the beach. From the eastern side of the hill you can see the other side of the island, which is mostly rocky. Halfway between the top of the conical hill and the rocky coast on the eastern side, there is a small lake, and in the centre of the lake is a tiny island. If you can reach the island, and follow these directions to the tiny island in the lake, you will find my treasure chest. Good luck!'*

*Draw a map based on this letter, making sure all the instructions are used accurately*

## Word knowledge: Vocabulary

The development of a wide vocabulary is an important part of literacy, and geography like other subject areas has its own terminology with many descriptive nouns. Many of these are words not confined for use only in geography, but after explicit teaching of them, students will find them useful additions to their functional vocabulary.

**A small sample of the developing vocabulary through geography:**

- **Foundation:** place, earth, globe, map, plan
- **Year 1:** weather, seasons, natural, managed, constructed
- **Year 2:** continents, ocean, equator, north and south poles, tropics, hemispheres
- **Year 3:** state, territory, border, capital city, mountain range, plain, river valley, desert
- **Year 4:** coastal, river basin, alpine, raw materials, wastes, rainforest, savannah
- **Year 5:** topography, relief, environmental change, residential, retail, industrial, hazard
- **Year 6:** diversity, life expectancy, per capita income, South Asia, Indigenous

Developing geography vocabulary is not only about acquiring new words. It is primarily about having the words available as part of a linguistic repertoire and being able to use them to describe places, spatial features, directions, functions, changes, environments and patterns.

## Text knowledge: Writing

Geography provides another purpose for involving students in many different kinds of writing. In particular, it encourages the use of written reports on outdoor observations, a language skill that is quite different to that of writing other kinds of reports. Students need a breadth of vocabulary, a set of accurate observation skills, and a level of literacy that can put their own thoughts into a form that can be clearly communicated.

Report writing is best developed through the use of scaffolding and models of the kind of writing that is needed in geography. Students cannot be expected to write in this way without models and scaffolding structures. Reports in geography contain precisely worded observations, carefully chosen and labelled photographs, maps that have a clear communicating purpose, and statistics that have been processed to enable conclusions to be drawn.

To develop power with language, geography encourages teachers to take the children at Foundation level and Year 1 into the schoolyard on observation visits, using digital cameras to record places, writing words to accompany photographs, and displaying their observations together in the classroom. From these small beginnings, students in Years 5 and 6 should have developed the language and the experience to conduct their own inquiries into fieldwork locations they visit, and write reports about their observations, the issues and their recommendations.

## Text knowledge: Reading

Obviously geography requires students to develop the same level of reading skills as other subjects in order to interpret factual material. However, geography provides particular help in this for some children, with the prolific use of visual material to accompany written material. Maps, diagrams, photographs, film clips, and in particular the outdoors, give children different ways of learning about the world, which go side-by-side with language development. For some children a map or diagram can stimulate a plethora of ideas which they would not get from words alone, but which stimulate the need to use words in increasingly complex ways to express the ideas.

Storybooks are a great stimulus about other places and peoples for younger readers, but as the example given later in this article shows, stories written for older children can teach concepts just as well as non-fiction writing. For some children, stories about the adventures of children in different environments will stimulate them to write their own stories.

## Text knowledge: Speaking

In the section on early years learning, the point was made that playing with toys, role-playing, or making models have their place in learning geography because of the conversations they generate. For the early years, listening to children talk about what they have created, or what they see around them, is an effective method of assessment of their learning.

In the middle and upper years there are many opportunities to continue the use of conversation as a central learning tool, through group work in the outdoors, discussions about issues in class or the planning of inquiries. There are also many opportunities to use more formal

▶ speaking experiences, such as group reports about findings, and presentations of points of view on geographic issues.

## Text knowledge: Listening

We expect children to have listening skills, but we often don't deliberately teach them or assess them. In geography the range of visual material is so great that listening skills may be overlooked. Nevertheless, there are many opportunities to focus consciously on this aspect of literacy by methods such as having the class listen to a guest and then question the speaker, watch a video clip and then repeat what was said, and summarise the main points given by another student in a talk.

## Visual knowledge: Maps

Maps are a major stock-in-trade of geography, because, like the subject itself, they focus on the spatial. Therefore, comprehending and composing maps is essential to learning geography. There is a sequential set of understandings of elements of maps, from Foundation to Year 10, described on the GeogSpace website (GeogSpace.edu.au: Year F-4, Key Understandings, Illustration 2: Sequential development of understanding maps). Maps can contain multiple layers of information, and the rapidly developing field of geographic information systems explicitly uses layers of information in the digital creation of maps to communicate specific information. In geography, students of all ages will engage in comprehending and composing maps, using them to inquire into issues, discover locations, patterns and interconnections, and to demonstrate concepts.

## Visual knowledge: Photographs

Photographs of many kinds are used as texts in geography. They are important both as a vicarious means of seeing places and environmental features, and in themselves as texts that tell a story effectively. They include not only photographs taken from the usual horizontal viewpoint but also aerial (vertical and oblique) photographs, which contain a different kind of information and need to be read in a different way to other photographs.

In Primary School geography, children should be shown many photographs for the purpose of comprehending; interpretation, analysis and increased depth of understanding. With the widespread availability and inexpensiveness of digital photography, the creation of geographic photographs also becomes a key technique used in the subject.

# Classroom resources

The GeogSpace project is a major initiative developed by the Australian Geography Teachers Association (AGTA) and is available to all teachers throughout Australia on the GeogSpace website, which is also linked to the AGTA website and the *Australian Curriculum: Geography*. Within this website there are exemplars of good practice covering all year levels from Foundation to Year 10, as well as many extra sections on skills, understandings, inquiry and fieldwork. Many of the exemplars are deliberately designed to be rich in the language of the subject and helpful in developing the use of language in accurate and meaningful communication.

Two exemplars for Year 4 and Year 5 each contain a short story specifically written for the new *Australian Curriculum: Geography* and designed to introduce key ideas about wastes and pollution (Year 4) and bushfire hazards (Year 5). The stories are divided into chapters, and suggested questions and discussion points are provided at the end of each chapter. The aim is to engage students in thinking about the story, predicting what may happen next and reflecting on what ideas and actions have been described. A sample of one of these stories and the teacher guidelines is given below.

## Extract from GeogSpace Year 5 story 'The GeoSix and the Bushfire'

*By lunchtime the wind was so strong that Sam said, 'This is a really bad day for bushfires. If anyone lit a fire today, it could easily get out of control. See the dead leaves on the ground? They burn easily and the wind blows them around. The fire would climb from the grass to these trees and they would burn easily because of the eucalyptus oil in their leaves.'*

*'Let's go back to Sam's house' said Antonia, 'It will be cooler there. Did you notice that the trees were cleared near the house so there is less danger from fires?'*

*'And we keep the dead grass and leaves away from the house and especially the gutters' said Sam.*

*They set off on their bikes, pushing hard against the strong wind. Suddenly Joshua shouted: 'What are those people doing?'*

*The others followed his pointing finger. They saw three men and a barbecue. But something was wrong! The barbecue fire had spread to the grass, and the men were jumping around trying to stamp out the fire. As fast as they stamped it out, it erupted somewhere else. The leaves and grass were catching fire and the wind was blowing it this way and that.*

*(At this point the teacher should stop the story and ask the students to write their own version of the next events.)*



Another example from GeogSpace is suggested for Year 6 and shown below. The key idea of Australia's diversity of connections with neighbouring countries

## A sample of thought-provokers from GeogSpace

### Thought provoker Question 1: Why did Sandy and Chris go to Bali for their holiday?

*Read carefully through these statements. All of them are factually correct, but not all of them are relevant to answering the question.*

- 1 Select those that are relevant.*
- 2 Put them in a logical order.*
- 3 Use them to write an answer to the question.*

*Bali is close to Australia.*

*A holiday in Bali is relatively cheap.*

*Bali has many beautiful temples.*

*Bali has a population of about 4 million people.*

*Bali has many luxury hotels.*

*Bali has warm weather all year round.*

*Most Balinese are of the Hindu religion.*

*Balinese music is very different to western music.*

*Bali has beautiful sandy beaches in the south.*

*Bali is home to 280 species of bird.*

*Because of water and land demands by the tourist industry, half of Bali's rivers have dried up.*

*Bali has an equatorial climate with high temperatures and high rainfall.*

*Bali has many different types of entertainment available.*

*Bali has an active volcano.*

*The high rainfall and fertile soils of Bali support highly productive farming.*

is developed by giving students one of a set of ‘thought-provokers’, each of which starts with a thought-provoking question. It is accompanied by a list of statements. All of them are factually correct, but not all are relevant to the question. Students are asked to select the statements that are relevant, preferably discussing this with members of a small group, and then to put them in a logical order. This exercise focuses on accurate use of language, with clear thinking leading to clear expression.



In the GeogSpace website, there are also other sections with advice for teachers on the teaching of the *Australian Curriculum: Geography*. Two of these in particular are support units on the language of geography, vocabulary, spelling, explanations and general literacy.

Another major resource linking literacy with geography is the Global Words website, developed jointly by PETAA and World Vision. It has twelve units of work covering the themes of sustainability, refugees and migration, indigenous peoples and Asian/Pacific neighbours, all of which are central parts of the Geography curriculum. Each unit contains great ideas, practical methods and references to many useful stories and sources.

The English for the Australian Curriculum website ([www.e4ac.edu.au](http://www.e4ac.edu.au)) also has useful resources that link English with geography, particularly at Year 1 and Year 5 levels.

## REFERENCES

- ACARA 2013, *Australian Curriculum: Geography*.
- ACARA 2013, Australian Curriculum, General Capabilities: Literacy.
- AGTA 2013, GeogSpace website: [GeogSpace.edu.au](http://GeogSpace.edu.au), The Language of Geography – Teaching literacy in geography.
- The Language of Geography – Vocabulary and spelling.
- Catling, S, Willy T and Butler, J 2013, *Teaching Primary Geography for Australian Schools*, Hawker-Brownlow Education, Melbourne.
- PETAA and World Vision 2012, Global Words website: [www.globalwords.edu.au](http://www.globalwords.edu.au).
- Hinde, E 2007, ‘The Integration of Literacy and Geography: The Arizona GeoLiteracy Program’s Effect on Reading Comprehension Theory and Research,’ *Social Education*, Summer, Vol. 35, No. 3, pp. 343–65.
- Martin, F 2006, *Teaching Geography in Primary Schools*, Chris Kington Publishing, Cambridge, UK.
- Scoffham, S (ed.) 2010, *Primary Geography Handbook*, Geographical Association, Sheffield, UK.
- Scoffham, S 2013, *Teaching Geography Creatively*, Routledge, Oxford.

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**John Butler OAM** has been a teacher and enthusiast of geography all of his life. He has also been an adviser, a statewide consultant, an author, an examiner, a curriculum developer and a school administrator. He has received numerous awards including the Medal of the Order of Australia for his services to education. In recent years he has been the lead writer of the primary section of GeogSpace, co-author of *Teaching Primary Geography for Australian Schools*, and lead writer of the *Pearson Primary: Discovering Geography* program.

## ABOUT PETAA

The Primary English Teaching Association Australia (PETAA), founded in 1972, is a national professional association supporting primary school educators in the teaching and learning of English and literacies across the curriculum. For information on how to join and to view professional learning resources, visit the PETAA website.

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