

A Critique of Version 9.0 of the Australian Curriculum: Geography for Primary Schools

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Abstract

The article offers a critique of the Knowledge and Understanding sub-strand of the revised Australian Curriculum: Geography for Years F-6, due to be implemented in Australian schools in 2024. As a foundation for this critique, the article first discusses what should be the aims of geography in primary schools, in order to provide some criteria for evaluating the revision. It argues that what is educationally valuable about geography in the primary school years is not so much a body of geographical knowledge, but what that knowledge contributes to the personal development, abilities and values of a primary school child. The article describes seven of these contributions. The second part of the article evaluates the new curriculum against these educational objectives, and identifies a number of deficiencies. Part 3 describes the aims of the Australian Curriculum, Assessment and Reporting Authority (ACARA) in undertaking the review and revision of the Australian Curriculum, and evaluates the extent to which these have been achieved in the geography curriculum for the primary school years. The final part of the article presents an alternative revision that might meet both ACARA's aims and the educational objectives identified in Part 1.

The aim of this article is to provide a critique of the recent revision of the Australian Curriculum: Geography for the primary school years F-6, and to suggest an alternative. This revision (Version 9.0) was completed in early 2022, and will be implemented in schools in 2024. Such a critique must go beyond simply identifying errors, misleading statements and inconsistencies. and evaluate whether the new curriculum succeeds in fulfilling the educational objectives of primary school geography, as well as ACARA's aims in undertaking the revision. The article only discusses the separate Knowledge and Understanding sub-strand of the curriculum, and not the combined Skills sub-strand. It starts with the question: What does geography contribute to the educational development of primary school children?

Part 1: What does geography contribute to the educational development of primary school children?

To answer this question, I argue that what is valuable about geography in primary schools is not so much a body of geographical knowledge, but what that knowledge contributes to the personal development, abilities and values of a primary school child. These contributions are described below under seven headings.

Place attachment and personal development

Becoming familiar with the place you live in, and developing an attachment to it, contributes to the emotional development of children. Little and Derr (2018, p. 15) write that "much like with human attachment, children gain a sense of their self-worth and self-identity from attachment to place," while Jack, a British social work academic, concludes from research in the UK that "place continues to play an important role in the development of personal identity, feelings of security and a sense of belonging in the modern world" (Jack, 2015, p. 417). Place attachment also contributes to children's resilience and coping ability, especially in times of displacement and natural disaster (Little & Derr, 2018). The foundations for this attachment are formed in middle childhood, during the primary school years, and geography has a role in this. Spencer (2005, p. 305), a psychologist, argues that in "doing geography" with children, the primary school teacher is facilitating "the child's very personal development of self-identity which will shape much of their lives, their values, sense of belonging and self-worth." This occurs through the development of a child's familiarity with, and sense of attachment to, their place. He concludes

It is clear that the plausible, intuitively persuasive, case for the importance of place in the development of a complete, rounded self-identity has begun to be made. And it is also clearly arguable that

the subject of geography, and its earlyyears teaching, can have a major role to play in partnership with parents and peers and personal exploration of the neighbourhood (Spencer, 2005, p. 308).

A geography that teaches students about their own place and what it is like, how it supports their lives, and how they are connected to it and to the people who live it, can help to develop their sense of belonging and attachment. This is an important but largely neglected contribution of primary school geography to the development of children. It may be especially important in the case of children who have moved to a new place and a new school, and who may need help to develop a sense of belonging to their new location. Geographical studies of their place will help them to become more familiar with and involved in it. and are recommended by an American teacher in her study of ways to help military children adjust to their frequent moves (Imhoff, 2017).

Pro-environment attitudes

Place attachment has also been shown to be associated with people's appreciation of the biophysical environment (sometimes described as the natural environment) and their willingness to protect it. Fornara et al. (2020), in their review of a wide range of research, conclude that:

the literature provides various theoretical arguments and empirical evidence for a positive link between local attachment and pro-environmental behavior. Place-attached individuals tend to be more keen to protect their place, to engage in civic activities that are beneficial to the local environment, and to appreciate and protect the local natural resources (Fornara et al., 2020, p. 201).

However, they also point out that place-attached individuals may resist environmental projects that they perceive, or are persuaded to perceive, threaten local identity or economic interests. Consequently, place attachment may be a necessary, but not sufficient, condition for proenvironment behaviour. Another study finds that pro-environment behaviour is associated more with attachment to the natural aspects of a place than to the human aspects (Scannell & Gifford, 2010).

Local citizenship

Geographical studies of the place in which students live, that also include how to explain what it is like, how and why it is changing, and how that change is managed, can develop students' sense of local citizenship. If they learn about the ways that local people can influence

the planning and development of their place, and even become involved themselves, they will gain an understanding of how to act as local citizens. Their involvement could come through geographical studies of a range of local issues, such as:

- recreation facilities for young people
- bicycle paths
- revegetation projects
- · waste management
- a redevelopment proposal
- urban graffiti
- a proposal to close a public facility or service

Students could investigate an issue, decide what should be done about it, and present their findings to the appropriate authority, which is most likely to be the local council. As an example, in a UK school students investigated a dispute over how an area of land should be used, made a submission to the decision-making body, ended up on the winning side and felt greatly empowered. Such experiences provide a strong foundation for local citizenship.

Spatial intelligence

Primary school geography, that includes the construction, use and interpretation of maps, helps to develop children's spatial intelligence, which is a separate type of intelligence to mathematical and verbal intelligences (Ness et al., 2017). Spatial intelligence, or the ability to think spatially, is important in everyday life, but is also used in mathematics, several fields of science, architecture, engineering, urban planning and geography. Furthermore, skill in spatial thinking is positively correlated with competence in mathematics and some branches of science (Newcombe, 2017), while in a recent article Judd and Klingberg (2021) report strong evidence that spatial cognitive training improves mathematical learning in children.

Geography has a role to play in this training, as Liben, a psychologist, argues that "geography education in general, and map education in particular, can have an important place in developing spatial thinkers" (Liben, 2017, p. 221). When children make models of familiar places, or draw maps, or interpret photos taken from the air, they are developing their spatial thinking skills. When they interpret maps of geographical phenomena, such as vegetation or population distribution, they are learning to perceive patterns that they can try to explain, which is another set of spatial thinking skills. One aspect of this spatial thinking has been described as survey knowledge—the ability to think about multiple relations among locations based on the

information provided by an aerial photograph or map. As Davies and Uttal argue, maps facilitate students' thinking about spatial relations, as "maps can become 'tools for thought', allowing children to encode spatial relations in an efficient, integrated manner that is difficult, and sometimes impossible, to gain from direct experience or from linguistic descriptions" (Davies & Uttal, 2007, p. 233).

On the other hand, electronic navigation programs, which provide only point to point information (and which may be verbal rather than visual), may fail to develop this ability to perceive spatial relations and think spatially. This is because, when children are following a designated route, they are not observing the space through which this route passes, or the relative location of places within this space, and they are not developing cognitive maps of places. However, when students use a map to find their way through unfamiliar territory, such as when orienteering, they are forced to think spatially, and to relate what they interpret from the map with what they observe on the ground.

Knowledge of the world

Primary school geography should make students aware of the world, its structure, its places and its diversity. Some of this knowledge is locational. For example, they need to understand the basic geographical divisions of the world, such as the equator, tropics, continents and oceans, as well as latitude and longitude. These locational markers influence

so many of the earth's systems that without a grasp of it early in their education, pupils do not have one of the critical geographical frameworks that allow them to make sense of many natural and human phenomena. For example the effect of proximity to the equator (OFSTED, 2021).

They also should have sufficient knowledge of the world to enable them to follow events, such as sporting activities, disasters, conflicts and other happenings reported in the media as they become increasingly aware of them. World knowledge is important in other ways. One is to enable students to understand the ways that their place and their lives are connected with people and places around the world through trade, migration, history, and cultural and other influences. Another is to challenge children's stereotypes about other places and people, which they absorb at an early age from their family, peers and the media. The need for this knowledge was demonstrated by a study by Reynolds (2004) of a sample of children in New South Wales, which found that they had

a very limited knowledge of the countries of the world, including many that are relatively close to Australia, and that there were many that they were afraid of. The OFSTED (2021) report quoted earlier records a comment by the former US President Barack Obama that:

the study of geography is about more than just memorising places on a map. It's about understanding the complexity of our world, appreciating the diversity of cultures that exist across continents. And in the end, it's about using all that knowledge to help bridge divides and bring people together.

Students should also know something about the differences between countries in populations, incomes, energy consumption, health and other characteristics, and the extent to which these variables have been changing over recent years. For example, they should be aware that some countries are already declining in population and some are about to, because this will affect students in the future through changes in Australia's trade and other relations with these countries. They should also know that social indicators of the wellbeing of many countries had been improving until the recent pandemic reversed this trend, because this will make them aware that progress is possible, but can be interrupted. All this is basic knowledge required to understand the world in which they live, and how it is changing, and is an important foundation for informed citizenship.

Understanding their dependence on the biophysical environment and the concept of sustainability¹

Primary school students should learn about the ways they depend on the environment to support their lives and wellbeing. While in science and geography they will learn about specific aspects of this dependence, such as the provision of water resources through the water cycle, it is important that they gain a more comprehensive and holistic view, so that they recognise the variety of ways in which the environment supports them. This knowledge is also essential if students are to comprehend what sustainability means in practice. This should encompass an understanding of the following:

1. The environment as a source of materials and energy. This includes the production of food and materials from the natural resources of plants, water, soil, minerals and marine life, and the power produced by fossil fuels, and solar and wind energy. Students should also learn the difference between renewable and non-renewable

- resources, because sustainability practices differ between them.
- 2. The environment as a sink into which humans dump wastes. This includes the discharge of wastes into the atmosphere, rivers and lakes, soils, oceans and landfill sites. Students should also learn the difference between biodegradable and non-biodegradable wastes, again because sustainability practices differ between them.
- 3. The environment as a provider of services that regulate and maintain the environmental and the life support systems on which humans depend, such as:
 - soils, rivers and wetlands that break down, filter, purify, store and dilute pollutants in water
 - pollination by insects, birds, bats and wind, needed for most plants to reproduce
 - vegetation that reduces land and coastal erosion, shelters animals, cools cities, and stores carbon
 - predators that control pests

These are environmental processes that operate without human involvement or even awareness, but they are also processes that humans can damage, to the detriment of their wellbeing.

4. The environment as an influence on our emotions, health, imaginations and beliefs, ranging from feelings produced by a walk in a park or on a beach, or on viewing a beautiful or dramatic landscape, to the physical and mental health benefits of green vegetation and blue water, and to beliefs in the spirituality of the environment.

These understandings are important in showing students how they depend on the biophysical environment, and therefore why it should be both respected and protected. They are also required for them to grasp the meaning of sustainability, because sustainability means the maintenance into the future of these environmental functions. Without this understanding, students will not comprehend the reasons for the sustainability practices they are encouraged to adopt. Sustainability is a frequently misunderstood and often contentious concept. Gaining a good understanding of it may be one of the most important aims of a primary school education. because this understanding is essential for the future welfare of humanity.

Conceptual understandings

As with other school subjects, primary school geography should introduce students to a few of the subject's key concepts, as they start to learn the ways of thinking of different disciplines. Much of primary school is about places, both local and distant, and through these studies students will gain an understanding of some of the dimensions of place as a concept. Through their studies in geography and science they will learn something about how to think about the environment and its significance to them, and consequently gain some understanding of the concept of environment. Finally, through studies of where things are located, whether at the scale of their home, their school or their neighbourhood, they will be exploring a part of the concept of space.

Part 2: How well does the revised curriculum for primary school geography develop these contributions?

The ideas described above on the educational contributions of geography in primary schools are now applied to a commentary on the revised Australian Curriculum: Geography.

Place attachment and personal development

In Foundation this content description in the previous curriculum:

The places people live in and belong to, their familiar features and why they are important to people

has been replaced with this one:

the features of familiar places they belong to, why some places are special and how places can be looked after.

The change removes the emphasis on "the places people live in and belong to," and puts it on features. It also removes the words "and why they are important to people." This eliminates much of the point of the original content description, which was to get children to think about the significance of their place in their lives, for the reasons explained earlier. Strangely, the retention of this content description in Foundation:

the importance of Country/Place to First Nations Australians and the Country/Place on which the school is located

suggests that the revisers of the curriculum recognise places as only being significant for First Nations children.

An elaboration in Year 3 was about:

exploring people's feelings for place and the factors that influence people's attachment to place, through reading and viewing poems, songs, paintings and stories.

It encouraged students to think and talk about their emotional connections to their places, and to places that they might have lived in before, but their elaboration has been deleted.

Conclusion: The revision has reduced the curriculum's contribution to the development of place attachment of children.

Local citizenship

In the previous curriculum, Year 3 had this content description:

The similarities and differences between places in terms of their type of settlement, demographic characteristics and the lives of the people who live there, and people's perceptions of these places.

This content further developed an understanding of places by studying them as settlements, populations and communities, and it also provided an opportunity for students to learn how to use Australian Bureau of Statistics (ABS) statistics to find out about their own place and others that they were interested in. It has been deleted as a content description and relocated as an elaboration attached to a content description with which it has no conceptual relationship.

In the previous curriculum, Year 5 had this content description:

The environmental and human influences on the location and characteristics of a place and the management of spaces within them.

This was intended to complete the sequence of content descriptions that developed an understanding of places by examining ways of explaining their characteristics, and by exploring how the spaces within them are managed. It provided an opportunity for students to learn more about their own place, and to engage with local planning issues and conflicts, and it showed students how their understanding of places could be applied to real world issues.

The content of this content description is partly included in this one in the revised curriculum:

the influence of people, including First Nations Australians and people in other countries, on the characteristics of a place. However, the revision no longer includes mention of the environmental influences on a place, or the management of the spaces within a place, yet highlights the influence of First Nations Australians and people in other countries.

Conclusion: The revision has greatly reduced student understanding of their place, and of how they could act as local citizens.

Spatial intelligence

The revised curriculum has the following content descriptions that are about spatial representation by models, aerial photos and maps:

- sort and record information including pictorial timelines and locations on pictorial maps or models (Foundation)
- collect, sort and record information and data from observations and from provided sources, including unscaled timelines and labelled maps or models (Years 1 and 2)
- interpret information and data from observations and provided sources, including the comparison of objects from the past and present (Years 1 and 2)
- locate, collect and record information and data from a range of sources, including annotated timelines and maps (Years 3 and 4)
- interpret information and data displayed in different formats (Years 3 and 4)
- locate, collect and organise information and data from primary and secondary sources in a range of formats (Years 5 and 6)
- evaluate information and data in a range of formats to identify and describe patterns and trends, or to infer relationships (Years 5 and 6).

Conclusion: If taught well these content descriptions will help to develop the spatial abilities of students, and complement the extensive content on space in the mathematics curriculum. As the second content description in Years 1 to 6 includes maps as "provided sources" and "formats," students will learn to interpret patterns in maps, make their own models and maps, and get information from provided maps. Perhaps the one thing missing is the use of maps to navigate through space, as in orienteering.

Knowledge of the world

The revised curriculum has only two content descriptions about the world:

- Australia's neighbouring countries (Year 3)
- The geographical diversity of the Asia region (Year 6).

This content in the previous curriculum has been removed:

- The division of the world into hemispheres, continents and oceans (Year 2)
- The main climate types of the world and the similarities and differences between the climates of different places (Year 3)
- A brief study of the continents and major countries of Africa and South America (Year 4)
- A brief study of the continents and major countries of Europe and North America (Year 5)
- Differences in the economic, demographic and social characteristics of countries across the world (Year 6)
- The world's cultural diversity, including that of its indigenous peoples (Year 6).

The previous curriculum had a good coverage of world knowledge, but the revised one is seriously deficient. Students will be taught nothing about some of the countries Australia is closely connected to through history, trade, migration, alliances, and government and non-government aid, such as the United States, the United Kingdom and countries in Europe. They will also learn nothing about the economic, demographic, social and cultural differences between the countries of the world, and will have no sense of the world as a whole.

Conclusion: Students' knowledge of the world will be severely limited.

Understanding their dependence on the environment and the concept of sustainability

The revised curriculum has two content descriptions in Year 4 that contribute to this educational objective:

- the importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent
- sustainable use and management of renewable and non-renewable resources, including the custodial responsibility First Nations Australians have for Country/Place.

Together with their elaborations, they provide opportunities to explore water as an environmental resource, the services provided by vegetation, and the aesthetic, emotional and spiritual connections that people may have with the environment. However, like the previous curriculum, the revision does not give students a comprehensive and systematic understanding of the ways that the environment supports their

lives, or of how these ways underly the concept of sustainability and explain what it means. What students will be learning is factual knowledge without its conceptual foundations.

Conclusion: Students will gain a limited understanding of the ways in which they depend on the environment, but little of the concept of sustainability.

Conceptual understandings

Place

In the previous curriculum, Year 2 had this content description:

 The idea that places are parts of Earth's surface that have been named by people, and how places can be defined at a variety of scales.

The revised content description is:

 how places can be spatially represented in geographical divisions from local to regional to state/territory, and how people and places are interconnected across those scales.

In the revision, the idea that places are parts of Earth's surface that have been named by people has been removed, but this idea was the first step towards a conceptual understanding of place.

The previous curriculum had a recognisable, but by no means perfect, progression in understanding the concept of place, from the place the child lives in and its features and characteristics, to the importance of places for people, their feelings for and attachment to places, the meaning of a place, the settlement and population characteristics of places, and the environmental and human influences on what places are like, including the actions of local people. Most of the links in this progression have been weakened or deleted, and the understanding of places and their significance to young people has been greatly reduced.

Space

In Year 2, a content description on activities in the local place and reasons for their location has been removed, as has a Year 3 content description on the influence of purpose, distance and accessibility on the frequency with which people visit places. Their elimination deletes the two main content items that developed understanding of the concept of location, including why things are located where they are, and the influence of location and accessibility on people's activities. These were in the curriculum to get students thinking about the effects of location and distance

on their lives, and about where things should be located, which are fundamental aspects of the concept of space.

Conclusion: The revision has significantly weakened the teaching of conceptual understanding.

A curriculum that might achieve the educational objectives proposed in this article, while also significantly reducing content in Part 4.

Part 3: What were the aims of the revision of the curriculum, and have they been achieved?

The Terms of Reference for the review and revision of the curriculum state that

Specifically, the review will:

- a. refine and reduce the amount of content across all eight learning areas of the Australian Curriculum F-10, with a priority on the primary years, to focus on essential content or core concepts
- improve the quality of content descriptions and achievement standards by removing ambiguity and unnecessary duplication, and ensuring consistency and clarity of language and cognitive demand
- rationalise and improve content elaborations, ensuring they are fit for purpose and they suggest to teachers the most authentic ways to treat general capabilities and cross curriculum priorities when teaching the learning area content (ACARA, n.d.)

The extent to which the revised curriculum has achieved these aims is evaluated below.

Refine and reduce the amount of content . . . to focus on essential content or core concepts

The revision has certainly reduced the content in primary school geography, by 48%. However, if evaluated against the aims of the curriculum described in Part 1, a large amount of essential content that it should focus on is missing, as was explained in Part 2. In addition, in two of the remaining content descriptions and their elaborations there has been an elimination of any study of the human characteristics of places, content that geographers would also consider essential. These are described below.

1. This Year 3 content description in the revised curriculum:

the similarities and differences between places in Australia and neighbouring countries in terms of their natural, managed and constructed features

replaces this one in the previous curriculum:

the location of Australia's neighbouring countries and the diverse characteristics of their places.

Three of the elaborations in the revised content description are:

- identifying and locating examples of the main climatic types in Australia and neighbouring countries (for example, equatorial, tropical, arid, semi-arid, temperate) and the features of those climate types and their impact on other natural features
- identifying and describing the similarities and differences between places in Australia and places in neighbouring countries, such as Indonesia and Pacific Island nations, in their natural features; for example, rocks, landforms, bodies of water, climate, soils, natural vegetation and animal life
- choosing a place in a neighbouring country, such as Indonesia or Pacific Island nations, to compare with a place in Australia in terms of managed and built features, to explore the reasons for similarities and differences.

The content description in the previous curriculum was about characteristics, which are both biophysical and human, but the revised content description is about features, and in its elaborations there is no mention of such human characteristics as populations, cultures, economies and ways of living. Instead, it is suggested that teachers focus on "rocks, landforms, bodies of water, climate, soils, natural vegetation and animal life," and on "managed and built features."

2. A similar change has been made in Year 5. The previous curriculum had this content description:

the environmental and human influences on the location and characteristics of a place and the management of spaces within them.

The content of this content description is partly included in this one in the revised curriculum:

the influence of people, including First Nations Australians and people in other countries, on the characteristics of a place.

Three of its elaborations are:

 identifying how First Nations Australian communities altered the environment and

- sustained ways of living through their methods of land and resource management; for example, firestick farming
- exploring the extent of change in the local environment over time (for example, through vegetation clearance, fencing, urban development, drainage, irrigation, erosion, farming, the introduction of grazing livestock such as sheep and cattle, forest plantations or mining), and evaluating the effects of change on economic development and environmental sustainability
- exploring examples of positive influences people have on the characteristics of places; for example, reforestation, land-care groups, rehabilitating former mining, industrial or waste disposal sites.

These elaborations are only about the environmental characteristics of a place, so once again learning about the human aspects of a place is essential content that is missing.

On the other hand, one change in the revision actually adds content. In Year 5 this revised content description:

the management of Australian environments, including managing severe weather events such as bushfires, floods, droughts or cyclones, and their consequences

has replaced this one from the previous curriculum:

The impact of bushfires or floods on environments and communities, and how people can respond.

The revised content description has greatly increased the scope of the previous one, and is now about the management of Australian environments. This change is carried through in the two elaborations:

- exploring how environments are used and managed, the practices and laws that aim to manage human impact, the use of zoning to manage local environments, creation of wildlife corridors and national parks
- examining how changes due to environmental practices create issues, such as water shortages and increased floods and bushfires, the impact of issues on places and communities, and how people can mitigate the impacts through building codes, zoning, firebreaks and controlled burns, and efficient irrigation.

The content description in the previous curriculum was solely about reducing the impacts

of bushfires or floods, and was quite limited. Its three elaborations were:

- mapping and explaining the location, frequency and severity of bushfires or flooding in Australia
- explaining the impacts of fire on Australian vegetation and the significance of fire damage on communities
- researching how the application of principles of prevention, mitigation and preparedness minimises the harmful effects of bushfires or flooding.

Now teachers are asked to cover a wide range of environmental management practices at a level similar to that of the Year 10 unit on Environmental change and management. At the same time, the principles of prevention, mitigation and preparedness, that would help students to classify and comprehend the range of practices that can be adopted to manage the impact of bushfires or floods, have been deleted.

A stated aim of the revision was also to focus on key concepts, yet in primary school geography it has weakened the development of the core concepts of place, environment and space, as explained in Part 1. It has also resulted in an incorrect description of the concept of scale. Year 2 in the revised curriculum has this content description:

how places can be spatially represented in geographical divisions from local to regional to state/territory, and how people and places are interconnected across those scales.

Its elaborations are:

- investigating the places locally and at a broader scale that they and their families visit for shopping, health, recreation, religious or ceremonial activities, or other reasons
- identifying links they and other people in their community have with people and places at the regional and/or state/territory scale; for example, where produce in their supermarket comes from or produce from their farms goes to, relatives they visit, places they go for holidays
- describing how communication and transport technologies connect their place to other places at the regional and/or state/territory level; for example, online communication, phone, road, rail, planes, ferries.

Both the content description and the elaborations are confused about scale. The visits, links and connections they describe are between individual places, as each one clearly states, and are

therefore at the same scale. They are not visits, links and connections between a place and a region or a state, but between a place and other places that are located in another region or state. They are connections across distance, and not across scales as stated in the content description. As very few primary school teachers have studied much geography, they may be misled.

Improve the quality of content descriptions . . . by removing ambiguity and . . . ensuring consistency and clarity of language

This has been achieved, but there were few problems with the content descriptions in the previous curriculum.

Rationalise and improve content elaborations, ensuring they are fit for purpose

Elaborations should describe ways that teachers can teach the content description to which they are attached. The following are examples where the elaborations appear to be incompatible with their content description.

- 1. Year 1 in the revised curriculum has this content description:
- how places change and how they can be cared for by different groups including First Nations Australians.

Two of its elaborations: are

- identifying which resources they can recycle, reduce, re-use or none of these, and what local spaces and systems support these activities; for example, rules, signs, waste collection truck routes
- describing how local places change due to changing weather and seasons, and how we can care for places because of those changes; for example, not walking in muddy areas during wet weather, and watering plants in dry weather.

The first elaboration is only tenuously linked to the idea of caring for places, while the second has no link. It is about regular seasonal changes, and not about permanent changes such as new buildings, structures or land clearing.

- 2. Year 3 of the revised curriculum has this content description:
- the similarities and differences between places in Australia and neighbouring countries in terms of their natural, managed and constructed features.

Two of its elaborations are:

- investigating differences in the type of housing that people use in different climates and environments
- exploring different types of settlement and classifying them into hierarchical categories, such as isolated dwellings, outstations, villages, towns, regional centres and large cities.

To be compatible with the content description, the first elaboration should be limited to the neighbouring countries. The second elaboration has been imported from a content description in the previous curriculum on types of settlement that has been deleted, and has no relationship with the revised content description.

3. Year 6 of the revised curriculum has this content description:

the geographical diversity and location of places in the Asia region, and its location in relation to Australia.

It looks similar to this one in the previous curriculum:

the geographical diversity of the Asia region and the location of its major countries in relation to Australia.

However, the revised content description is now about the diversity of places, and not of the diversity of the region as a whole. It is also about places, not countries, yet these changes are not matched in several of the elaborations, which continue to be about the diversity of the region and about countries.

Two other elaborations are:

- comparing the daily lives of people in other countries, in terms of food, clothing, personal and household goods, housing and education, and differences between the wealthy and poor in a country
- researching the proportion of the Australian population and of the population from their local area who were born in each world cultural region, using data from the Australian Bureau of Statistics, and then comparing aspects of selected cultures.

They have both been imported from content descriptions that have been deleted. The first covers the world while the second is only about Australia; neither belongs to a content description that is about the Asia region.

4. Also in Year 6, this content description in the revised curriculum:

Australia's interconnections with other countries and how these change people and places

is the same as in the old curriculum, but this elaboration has been added:

using geospatial tools such as a globe, wall map or a digital application, to identify the geographical divisions of the world, including the Asia and Pacific regions.

This has no relationship with the content description, which is about countries, not the geographical divisions of the world into continents and oceans, and has been imported from a deleted content description in Year 2 of the previous curriculum.

Conclusion

The revision has not improved the focus on essential content or the key concepts, and has created elaborations which do not fit the content description which they are meant to elaborate.

Part 4: A suggested geography curriculum for primary school

The curriculum described below presents an alternative F-6 curriculum that follows the educational objectives described in Part 1 of this article. It also:

 preserves as much as possible of the old version (Version 8.4) that teachers are familiar with

- removes some unnecessary content added to Version 9.0
- removes some errors, and elaborations that do not match their content description
- restores references to the human characteristics of places that had been removed
- relocates some content to more appropriate year levels (for example, study of Australia's neighbours has been moved to Year 6, as these important countries deserve a Year 6 depth)
- refines the writing to improve the clarity and precision of curriculum statements
- groups content descriptions in each year around a theme, in recognition that many primary school teachers teach themes rather than subjects
- reduces the number of content descriptions in the previous curriculum (8.4) by 29% overall, and by 44% in the first four years of primary school

Foundation

Theme: My place

Foundation Geography introduces students to the concept of a place, such as the neighbourhoods, suburbs or towns they live in, or places they feel are special, and why these places are important to them. They also learn that their place has a First Nations Australian identity, name and cultural significance. The core concept illustrated is place.

Content description Students learn about:	Elaboration This may involve students:
the places people live in and belong to, and why they are important to them	identifying the place they live in and belong to (for example, a neighbourhood, suburb, town, rural locality or First Nations Australians' Country/Place)
	identifying places they consider to be special (for example, their room, a play area, holiday location or a place of family significance) and explaining why the place is special to them
	Discussing why places are important to them, and should be cared for
the Country/Place on which the school is located, and the importance of Country/ Place to First Nations Australians	discussing why the words Country or Place are used by First Nations Australians for the places to which they belong
	identifying and using the name of the local First Nations Australians' language group
	inviting members of the traditional owner group to talk about Country/Place and places of cultural and historical significance to their community in the local neighbourhood, suburb, town or rural area

Theme: What is my place like?

Year 1 Geography develops an understanding of place in two ways. One is the idea of places having natural, managed and constructed features, and that they need to be cared for. The other is that their place has a range of activities, and that these activities have locations which can be explained. The core concepts illustrated are place and space, but the idea of care will eventually lead to the concept of sustainability.

Content description Students learn about:	Elaboration This may involve students:
the places people live in and belong to, and why they are important to them	using observations of the local place to identify and describe its natural features (for example, hills, rivers, native vegetation), managed features (for example, farms, parks, gardens, plantation forests) and constructed features (for example, roads, buildings), and locating them on a map
	comparing their place with places throughout the world that they are familiar with or aware of
	listening to and viewing Dreaming and Creation stories of First Nations Australians that identify the natural features and landmarks of a place, and traditional sacred and significant sites
the Country/Place on which the school is located, and the importance of Country/Place to First Nations Australians	using observations and/or photographs to identify changes in natural, managed and constructed features in their place (for example, recent erosion, revegetated areas, planted crops or new buildings)
	describing local features people look after (for example, bushland, wetlands, a park or a heritage building) and finding out why and how these features need to be cared for, and who provides this care
	identifying the activities in their place (for example, retailing, medical, educational, police, religious, office, recreational, farming, manufacturing), locating them on a pictorial map, and suggesting why they are located where they are

Theme: My place and me

Year 2 Geography starts a progressive study of the continents and countries of the world with the major geographical divisions. The understanding of place is further developed with the idea that places are areas that have meanings, significance and attachments for people. The core concepts illustrated are place and space.

Content description Students learn about:	Elaboration This may involve students:
the major geographical divisions of the world	investigating the definition of a continent and discussing how many continents there are
	naming and locating the continents, oceans, equator, North and South Poles, tropics and hemispheres, locating them on a globe, and labelling them on an outline map
	describing the hot, temperate and polar zones of the world, locating them on a globe, and labelling them on an outline map
places as parts of Earth's surface that have been named and given meaning by people, how they can be defined at a variety of scales, and people's attachments to them	examining the names of places in the local area, their location and meaning, including the names and meanings given by the local First Nations Australians
	describing the scale of places, from the personal (home), the local (their suburb, town or district), the regional (state), the national (country) and the world regional (a continent or division of a continent)
	comparing their place with places throughout the world that they are familiar with or aware of
	exploring people's feelings for place and the factors that influence their attachment to place, through reading and viewing poems, songs, paintings and stories

Year 3

Theme: How am I connected with other places?

Year 3 Geography continues the progressive study of the world with a focus on Australia. It starts with a comparison of the map of the contemporary states and territories of Australia with the Aboriginal Languages Map of Australia before colonisation, to show that Australia can be spatially represented in two ways. It then examines students' connections with other places, both within Australia and around the world, and the ways that First Nations Australians are interconnected with Country/Place. The year finishes with a study of the influence of distance on their visits to places, which introduces the idea that distance can be a constraint. The core concepts illustrated are space, interconnection and place.

Content description Students learn about:	Elaboration This may involve students:
the representation of contemporary Australia as states and territories, and as Countries/Places before colonisation, and Australia's major natural features and places	using the Aboriginal Languages Map and a Map of Australia to compare the spatial pattern of Aboriginal Countries with the spatial pattern of Australian states and territories, to gain an appreciation of the different ways Australia can be represented and the diversity of First Nations groups across Australia
	discussing how to explain the different areal size of territories on the Aboriginal Languages Map, and what this tells them about the distribution of the population before colonisation
	using a map or atlas to locate and name the states and territories in Australia, along with their capital cities
	identifying and describing, using European and traditional names where appropriate, the major natural features of Australia (for example, rivers, deserts, rainforests, the Great Dividing Range, the Great Barrier Reef and islands of the Torres Strait), and describing them with annotations on a map
people's connections with places in Australia and the world, including the connections of First Nations People of Australia to Country/Place	examining the ways they are connected to other places (for example, through relatives, friends, things their family buys or obtains, holidays, sport, family origin or religion)
	comparing their place with places throughout the world that they are connected to
	describing the connections of the local First Nations Australians with the land, sea, waterways, sky and animals of their Country/Place
	recognising that some First Nations People of Australia have special connections to many Countries/Places (for example, through marriage, birth, parents, residence and chosen or forced movement), and that First Nations Australians can identify with more than one country
	discussing why and when to use Acknowledgement of Country and Welcome to Country at ceremonies and events
the influence of distance on the frequency with which they visit other places	investigating the places they and their families visit for shopping, recreation, holidays, religious or ceremonial activities, or other reasons, and the influence of distance on the frequency of these visits

Theme: Our environment²

Year 4 Geography starts with a study of the concept of climate, building on the study of weather and seasons in Year 1 Science, and explores the main climate types of the world. It continues with a study of vegetation, its environmental and human uses and value, and its relationship with climate. It concludes with an exploration of the main geographical characteristics of South America and Africa, and the location of their major countries. The core concepts illustrated are space, place, environment and interconnection.

Content description Students learn about:	Elaboration This may involve students:
the concept of climate, and the characteristics and location of the main climate types of the world	understanding the concept of seasons, and comparing the seasonal calendars of First Nations Australians with the four-seasons calendar derived from Europe and the two or three seasons calendar of Northern Australia
	identifying the difference between climate and weather, and understanding climate as the long-term average pattern of weather experienced by a place over the year
	identifying and locating examples of the main climatic types in Australia and the world (for example, equatorial, tropical, arid, semi-arid, temperate and Mediterranean)
	investigating and comparing what it would be like to live in a place with a different climate to their own
the uses of vegetation, and the location and characteristics of the main types of vegetation in the world	exploring how vegetation produces oxygen; protects land from erosion; retains rainfall; produces medicines, wood and fibre; provides habitat for animals; shelters crops and livestock; cools urban places; and creates attractive and calming environments
	identifying the main types of vegetation, including forest, savannah, grassland, woodland and desert, and explaining the relationship between climate and natural vegetation
	explaining the significance of vegetation endemic in the local area to the survival of First Nations Peoples (for example, as a source of food, shelter, medicine, tools and weapons)
the main characteristics of the geography of the continents of South America and Africa, the location of their major countries, and their interconnections with Australia	using printed or electronic maps to identify the main geographical characteristics of the continents of Africa and South America (for example, topographic features, rivers, climates, vegetation, population distribution, peoples, cities, religions)
	using printed or electronic maps to identify the major countries of Africa and South America and their locations relative to each other
	investigating the countries in South America and Africa that have the closest interconnections with Australia in migration, business, trade, tourism, aid, education, defence or culture

Theme: Sustaining our environment

Year 5 Geography explores the continents of Europe and North America, and their main characteristics and countries. The rest of the year is about the environment, starting with the concept of sustainability, what it means, and how this meaning can be applied to the use and management of natural resources and waste. This theme is further developed by an introduction to the First Nations Australians' concept of custodial responsibility, and how that has influenced their practices of sustainable resource use. The environmental theme concludes with a study of either bushfires, floods, droughts or cyclones, one or more of which affect every part of Australia, and how their impacts can be reduced. The core concepts illustrated are place, environment and sustainability.

Content description Students learn about:	Elaboration This may involve students:
the main characteristics of the geography of the continents of Europe and North America, the location of their major countries, and their interconnections with Australia	using printed or electronic maps to identify the main geographical characteristics of the continents of Europe and North America (for example, topographic features, rivers, climates, vegetation, population distribution, peoples, cities, religions)
	using printed or electronic maps to identify the location of the major countries of Europe and North America relative to each other
	investigating the countries in Europe and North America that have the closest interconnections with Australia in migration, business, trade, tourism, aid, education, defence or culture, and examining the effects of at least one of these on their own place
the meaning of sustainability and its application to the use of natural resources and the management of waste	exploring the functions of the environment that support their lives, and how sustainability means the maintenance of these functions into the future
	investigating how to decide if the use of a renewable resource, or the disposal of waste matter into the environment, is sustainable
	investigating where a particular renewable natural resource comes from, and the different ways its use and disposal can be made sustainable (for example, the difference between recycling paper or planting more trees)
the custodial responsibility First Nations Australians	exploring the meaning of custodial responsibility for First Nations Australians
have for Country/Place and how it influences their sustainability practices	investigating how First Nations Australians' practices such as prohibitions on hunting and burning in specific areas and at specific times, prohibitions on catching animals when they are breeding, prohibitions on harvesting plants that are seeding, controlled burning, and planned mobility to allow plant and animal resources to regenerate, contribute to sustainable resource use
	recognising the extensive knowledge of plant and animal resources, seasons and water supplies of First Nations Australians that enabled them to use these practices effectively, and the ways this knowledge was passed on from generation to generation
the impact of bushfires, floods, droughts or cyclones on environments and communities, and how people can respond	mapping and explaining the location, frequency and severity of bushfires, floods, droughts or cyclones
	examining the economic, social and environmental costs of bushfires, floods, droughts or cyclones, and their implications for sustainability
	researching how the application of the principles of prevention, mitigation and preparedness can minimise the harmful effects of bushfires, floods, droughts or cyclones

Theme: How places differ and change

Year 6 Geography concludes the investigation of the continents with a study of the geographical diversity of the Asia/Pacific region. It then takes a global view that examines some of the major economic, demographic and social differences between countries around the world. The theme of difference continues with a study of the similarities and differences between places in their types of settlement, demographic characteristics, and the lives of the people who live in them. The theme of change is developed through an exploration of the factors that influence the characteristics of places and how they change, and provides students with an opportunity to gain a deeper understanding of their own place and how changes to it are managed. The core concepts illustrated are place, space and interconnection.

Content description Students learn about:	Elaboration This may involve students:
the geographical diversity of the Asia/Pacific region, the location of its major countries, and their interconnections with Australia	using printed or electronic maps to identify the location of the major countries of the Asia/Pacific region (defined as South, Southeast and East Asia, the Pacific Islands and New Zealand) relative to each other
	using printed or electronic maps to identify the main geographical characteristics of the Asia/Pacific region (for example, topographic features, rivers, climates, vegetation, populations, peoples, languages and religions)
	investigating the countries in the Asia/Pacific region that have the closest interconnections with Australia in migration, business, trade, tourism, aid, education, defence or culture, and examining the effects of at least one of these on their own place
differences in the economic, demographic, social and cultural characteristics of countries across the world	classifying countries by their per capita income into four categories, and comparing people's lives in places with different levels of income
	comparing and discussing trends in the rates of population growth or decline of countries
	investigating and discussing the relationships between the per capita income of countries, and their health (as measured by life expectancy) and energy consumption, and investigating how these have changed over time
	mapping and discussing the distribution of the world's major religions
	identifying examples of Indigenous peoples in different countries in the world (for example, the Maori of Aotearoa New Zealand, the First Nations of North America, the Orang Asli of Malaysia and Indonesia), and investigating their similarities and differences
the similarities and differences between places in their types of settlement, demographic characteristics, and the lives of the people who live in them	identifying different types of settlement and classifying them into hierarchical categories (for example, isolated dwellings, outstations, villages, towns, regional centres and large cities)
	investigating the demographic characteristics of their place (for example, age, birthplace, First Nations Australian People, ancestry, occupations and education), using Census data, and comparing them with those of other places and the total population of Australia
	comparing the lives of people in different places
why their place is like it is, how it is changing, and how change is managed (1)	investigating the effects of the environment (for example, landforms, climate, water resources), relative location, and interconnections between their place and other places (such as employment, trade, service provision, migration, tourism) on the characteristics of their place
	exploring how decisions that affect the characteristics of their place are made, such as the location of new developments or the zoning of land use
	investigating a current local planning issue (for example, redevelopment of a site, protection of a unique environment), exploring why people have different views on the issue and developing a class response to it

⁽¹⁾ This links has links with the roles and responsibilities of the three levels of government in Australia in Civics Year 6, and how citizens with shared beliefs and values work together to achieve a civic goal in Civics Year 5.

Conclusion

The discussion in the first part of this article identified seven ways in which primary school geography can contribute to the education of young people. Some of these are about children's personal attributes, such as place attachment, identity and belonging, spatial abilities, and environmental attitudes. Some are about their understanding of their place and how it is changing. Others are about their understandings of the world and their relationship with other places, and of the environment and their dependence on it, while the last is about their understanding of some key concepts and ways of thinking with them. While all of these depend on factual geographical knowledge, they go beyond this knowledge to encompass identities, understandings, abilities, attitudes and ways of thinking. These are all significant educational contributions, and show that geography is more than a body of facts about the world.

The second part of the article evaluated the latest version of the Australian Curriculum: Geography for primary schools against these educational contributions. It concluded that the curriculum should help to develop students' spatial intelligence, and needed only a minor change to be even more effective. It will give students some understanding of their dependence on the environment, but none of the concept of sustainability. It will do little to contribute to children's personal development, has nothing about how people manage changes to places and act as local citizens, teaches very little about the world, and does not develop an understanding of basic concepts such as place and space.

Part 3 of the article outlined ACARA's objectives in revising the curriculum, and discussed the extent to which these had been achieved in the revision of geography in F-6. Part 4 presented an alternative revision that better developed the educational objectives identified in Part 1, yet still achieved a considerable reduction in content. ACARA's revision could have been much better.

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Some of the material on spatial intelligence was first published in Robertson et al. (2019).

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Curriculum content descriptions for the revised curriculum (Version 9.0) were obtained from the ACARA website at https://v9.australiancurriculum.edu.au/

Content descriptions for the previous curriculum (Version 8.4) were obtained from the ACARA website at https://www.australiancurriculum.edu.

Endnotes

- 1. For a fuller discussion see Maude (2022).
- 2. In this article the term *environment* refers to the biophysical environment, which includes the built environment.

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