AUSTRALIAN CURRICULUM, ASSESSMENT AND REPORTING AUTHORITY

DRAFT
SHAPE OF THE AUSTRALIAN CURRICULUM: GEOGRAPHY

AUSTRALIAN CURRICULUM ASSESSMENT AND REPORTING AUTHORITY

Contents

Consultation on the draft *Shape of the Australian Curriculum: Geography Paper*

An introductory note

The development of the Australian Curriculum for geography began in May 2009 with a position paper on key matters, including the definition of geography, the organisation of the curriculum, the structure of the curriculum for senior courses and geography's relationship to other learning areas and subjects. In developing the position paper, ACARA was assisted by a reference group composed of teachers, school leaders, academics and curriculum experts.

Following completion of the position paper, in November 2009, ACARA appointed Associate Professor Alaric Maude as the lead writer for the development of the *Shape of the Australian Curriculum: Geography*. With the assistance of an advisory group, Professor Maude drafted an Initial Advice Paper, which was examined at a national forum on 27 April 2010. The national forum included over 120 experts and stakeholders across the Arts education community.

Key strengths identified by the national forum included a consensus view of the value of geography around Australia; strong support for the integration of geographical inquiry into ...; and broad agreement that the proposed initial advice provided a sound direction for the development of a geography curriculum.

The key recommendations for improvement were incorporated into a draft *Shape of the Australian Curriculum: Geography* paper which is now available for consultation until 27 August 2010. This paper along with an online questionnaire is available for comment at www.acara.edu.au.

The purpose of the questionnaire is to enable individuals and groups to provide feedback on the draft *Shape of the Australian Curriculum: Geography*. Feedback is sought in relation to:

- The clarity and coherence of the rationale
- The emphasis of geography's contribution to the general capabilities and cross dimensions
- The proposed organisation of the K-12 curriculum around the two strands geographical knowledge and understanding and geographical inquiry and skills
- The clarity of the proposed organisation of learning (how the strands are integrated)
- The coherence and appropriateness of the proposed scope and sequence K-12

For those wishing to provide more detailed feedback, additional notes can be emailed directly to ACARA. Further information on how this can be done is available at the end of the online questionnaire. It would be helpful if the notes were organised around the headings in the questionnaire and the draft *Shape* paper.

Further information describing the consultation process including a draft timeline for the development of the Australian Curriculum for geography, is available at the ACARA website http://www.acara.edu.au/geography.html

Rationale

What is geography?

1. Geography is the investigation and understanding of the environmental[1] and human characteristics of the places that make up our world. It is described as the 'why of where'. Geography answers our questions about why places are like they are, and how they are connected to other places. It explains how and why they are changing, and how and why their characteristics vary from place to place.

2. Geography provides the tools to analyse interpret and understand places and the meanings people give to them. Places are specific areas of the earth's surface. They can be a locality, a town and its hinterland, a river catchment, a coastal zone, a metropolitan area, a major sub-national region or a whole country. Places are defined by people and consequently different people may perceive, name and define them differently. They have porous boundaries and are interconnected with other places through a range of links. These links include environmental processes, the movement of people, flows of trade and investment, cultural influences, and the exchange of ideas and information. A place's character is influenced by the way local environmental, economic and social conditions interact with the outcomes of these interrelationships. Places are therefore both local and global, and constantly changing.

3. The characteristics of places studied in geography include population, climate, economy, landforms, built environment, soils and vegetation, communities, water resources, cultures, minerals, landscape, and recreational and scenic quality. Some characteristics are tangible such as rivers and buildings. Others are intangible such as wilderness and socioeconomic status.

4. Geographers are interested in both the similarities and differences between places. They seek to identify patterns that make sense of and give meaning to the world. To do this they mostly specialise in understanding one or a small number of the characteristics of places, through the different branches of thematic geography.

5. To investigate such phenomena, geographers often study their spatial distribution across many places (using space as an analytical tool). They look for regularities in these distributions. They also study the environmental and socioeconomic processes, such as vegetation clearance or migration, that help to explain these spatial distributions.

6. Geographers are particularly interested in place dependency. This means finding out

[1]The term 'environment' has a range of meanings. This paper uses the term 'biophysical environment' for what is sometimes called the 'natural environment'. It uses 'built environment' to mean the constructed environment of buildings, roads and other infrastructure. The term 'human environment' is not used. The terms 'environment' and 'environmental' when used in this paper, mean the biophysical environment. However, when geographers study the biophysical environment they also investigate the interrelationships between human societies and this environment.

how the same processes can produce different outcomes in different places through their interaction with local environmental, economic and social conditions. Geographers seek understanding through the operation of general processes. But they also emphasise the contingency of these processes and the resulting diversity between places. Order and diversity are equally important concepts in the discipline.

7. The study of interrelationships between the characteristics of places complements the approach of thematic geography. A key theme is the interaction between human societies and their biophysical environment. This involves studies of human impact on environments, both locally and globally, and environmental influences on human life. Other themes include the study of the relationships between the different biophysical characteristics of places. An example is the effects of rainfall on vegetation. Yet another is the relationships between the different human characteristics of places, such as the effects of local economic conditions on population mobility, or the effects of culture on local economies.

Why geography?

8. Geography responds to student's curiosity about places. It nurtures their wonder about the world and its diversity. It develops a geographical imagination that enables them to relate to other places and the lives of people in those places. It equips them with knowledge of the world that allows them to understand, debate and make informed decisions on a range of current local, state, national and global events and issues.

9. Geography is essential to an understanding of key aspects of Australia's environment, population, economy and society. For example, by studying their own place, and the places to which they are connected throughout the world, students gain insight into the factors that influence their locality, their community and their lives.

10. Geography teaches students about the resources and services that the biophysical environment provides to support their life. They learn how these are produced and maintained by environmental processes. They also discover how people perceive and use these resources and services, and change them through this use. They investigate the opportunities and constraints that these resources provide for human life and economic activity, and examine current challenges such as the ability of the Australian environment to support a much larger number of people. They also explore the sustainability of these resources.

11. Geography teaches students how to view the world spatially. It enables them to understand the significance of location. As well, it provides insights into how location is mediated through infrastructure, technology, and economic and social relationships.

12. Geography teaches students how spaces are organised and designed, and the consequences of this for different groups of people. It explores the spatial distribution of phenomena and investigates the causes and consequences of economic and social differences between places. This provides an opportunity to teach students about inequalities between places in Australia (an important contribution to national citizenship) and between nations (an important contribution to global citizenship).

13. In addition geography provides opportunities for students to learn how they can have an influence as active citizens. It encourages them to question why things are the way they are. It prompts them to imagine other ways in which their world could be organised, and to investigate and evaluate alternative futures. Through their exploration and discussion of such issues, students can develop an informed view of their responsibilities towards the biophysical and built environments. Importantly, too, they gain insights into their responsibilities towards people throughout the world.

Aims of the K–12 geography curriculum

14. The geography curriculum should contribute to the general educational aims set out in *The Shape of the Australian Curriculum*. It should also achieve specifically geographical aims. These aims include:

    - helping students to make sense of their own experience of the world
    - developing their knowledge of and sense of wonder about the world's variety of places (and their environments and peoples)
    - developing their understanding of why places are like they are, and how and why they are changing, including a sound knowledge of their own place
    - developing their spatial awareness and understanding of locations, spatial distributions and flows, and their consequences
    - nurturing their fascination with places through fieldwork and the use of new technologies in and beyond the school grounds and the local area
    - fostering their interest in, and valuing of, the ways that the environment supports their life, and helping them to understand why a sustainable approach to the future is vital but contested
    - developing their understanding of the visual, spatial and written representations of places and environments
    - encouraging them to be thoughtful local and global citizens when making decisions that affect their lives and the lives of others
    - helping them to develop the intellectual capabilities, knowledge, and awareness of their place in the world that will allow them to function effectively in that world, and to make informed choices about how to live
    - learning the process of geographical inquiry, how to use it to discover new geographical knowledge and make sense of new situations, and how to be confident and creative users of geographical skills and communicators of geographical knowledge (adapted from Catling & Willy 2009, p. 18).

15. Above all, the curriculum should produce students who are enthused by geography – students who want to learn, who can 'think geographically', who have a well-developed understanding of geography as a way of investigating the world, and who can use this

understanding to influence their own and their community's future.

16. To achieve its aims, the curriculum should be engaging and intellectually challenging, and focus on depth of understanding rather than breadth of content. It should provide opportunities for teachers to connect with young people's present and future lives, to use their experiences to make them active agents in their own learning, and to 'challenge and excite them with content that might be beyond their immediate horizon' (Geographical Association 2009).

What does geography contribute to the development of the cross-curricular dimensions and the general capabilities?

Indigenous history and culture

17. Australia's unique geography is the product of ancient environments, the long and continuous history of its Indigenous people and the more recent influences of diverse settler and migrant cultures. Indigenous knowledge traditions have enriched geography as a discipline within the Western knowledge tradition. By finding out how Indigenous peoples perceive, explain and manage their environment, all students can learn from the experience of the thousands of years of Indigenous occupation of this land. By understanding Indigenous conceptions of their interrelationships with nature, all students can learn that there are other ways of thinking about and interacting with the environment and its resources than those informed by a Western capitalist tradition. By learning about Indigenous concepts of place and space, and Indigenous connections to country through language and kinship, all students can gain a deeper understanding of their significance in human life. Students can come to understand that there are diverse visions of life by thinking about Indigenous perceptions of wellbeing.

18. All Australian students should understand the past and present contribution of Indigenous peoples to Australia's geography, and to ways of thinking geographically. Geography can examine the continuing influence of Indigenous peoples and cultures on Australian places, and on Australia's distinctiveness in the world. From these investigations, students can gain an understanding of Australia as a shared space.

Sustainability

19. Geographers study the environmental, economic and social sustainability of places. The subject integrates the natural and social sciences around studies of human–environment relations in particular places. It thus brings a holistic perspective to this analysis. For example, when exploring the sustainability of the biophysical and built environments, geography allows students learn about the environmental processes involved in phenomena such as climate change and land degradation. Geography also allows them to investigate their demographic, social, economic and political causes and consequences. Students can then evaluate the policies adopted or proposed in response to these phenomena. When investigating the economic and social sustainability of places, students learn through their study of geography to see how this is sometimes related to changes in the biophysical environment as well as to changes in economic, social and political conditions. A geographical perspective also leads conclusions about

how and why sustainability issues vary from place to place, and enables students to appreciate why different policies may be needed in different places.

Asia and Australia's engagement with Asia

20. Study of the geography of Asia is an essential part of the proposed curriculum. Students can investigate and explore Asian places, and learn about the ways Australia is connected to and engaged with them. A geographical perspective enables students to study Asia as a world region, as individual countries, as regions within countries, and at the local level. In particular, it teaches students about the diversity between and within the countries of Asia, and helps to counter stereotypes. By examining the characteristics of Asian places at these different scales, a study of geography leads to a growing understanding of the varied environments, peoples, economies and cultures of these countries. Geography can also help students to think about whether Australia is a part of Asia, or a separate world region with connections to both Asia and Oceania.

Geography's contribution to the general capabilities

21. The development of all of the general capabilities should be written into the curriculum from K–12. As a subject that straddles the natural sciences, the social sciences and the humanities, and uses a wide range of quantitative and qualitative methodologies, geography contributes to all the general capabilities identified in the *The Shape of the Australian Curriculum*.

Literacy

22. Geography develops literacy because it is a subject that is language rich. Students learn the vocabulary of geography to describe, analyse and explain. They also use descriptive, aesthetic and emotive language to express what they feel about places and landscapes. In their studies they use novels, poetry, magazines, reports, newspapers, reference books, films, art, CDs and the internet. These resources can be especially useful in stimulating students to imagine places they have never seen, and to think about places and landscapes emotionally as well as intellectually. To communicate what they have learned, students use language in a variety of spoken and written contexts, and further develop their oral and writing skills. Geography consequently develops both geographical and general literacy.

Numeracy

23. Numeracy is vital to geography. In using maps, students work with the numerical concepts of grids, scale, distance, area and projections. Students also count and measure, calculate statistics and interpret them, and construct and interpret graphs. In the senior secondary years, interpreting the results of statistical analyses requires an understanding of mathematical concepts such as probability.

24. In addition to literacy and numeracy, geography also builds the skills of graphicacy—which is, spatial and visual representation and interpretation, — through work with maps, diagrams, photographs, remotely sensed and satellite images, and other visual material.

ICT

25. Geography provides many opportunities to learn and use information and communications technology (ICT) skills. ICT and media tools include digital data representation and management, specialised spatial technologies, digital and electronic maps, 2D and 3D electronic maps, geographical positioning systems (GPS), remote sensing, and geographical information systems (GIS)—all rapidly growing areas of ICT. The British Educational Communications and Technology Agency (Becta) concluded in the Overview of a 2004 research report that: 'Geography provides a rich and varied context for the use of new technologies to enhance both learning in the subject and to reinforce existing ICT skills' (Becta 2004, p. 1). The curriculum also provides opportunities to explore the effects of these technologies on places, on businesses and on people's lives.

Creativity

26. A geographical education provides students with the opportunity to be creative in applying key geographical concepts, understandings and skills to new situations. A 2003 United Kingdom study identified that some key ways by which geography students expressed their creativity included:

    - finding innovative ways to tackle inquiry
    - making connections within and beyond the subject
    - exploring and presenting their own personal meanings
    - appreciating how language and media can change and extend meanings
    - applying or re-conceptualising 'big ideas'.

27. In addition the study noted that the 'two key emphases which geographical work brings to creativity are: the focus on interpreting and understanding place and environment; and the use of maps, graphical representations and visual images, often alongside text' (Rawling & Westaway 2003).

28. Students can also be creative in thinking about the ways in which the places and spaces they use could be better designed, while geography's futures perspective stimulates them to think creatively about possible, probable and preferable futures.

Thinking skills

29. There is a growing interest in incorporating thinking skills into the teaching and learning of geography. A Thinking Through Geography program developed for teachers in the United Kingdom is argued to be '... more likely to equip pupils to handle complex information and relationships, tackle challenging tasks and transfer learning to new contexts. It is also more likely to keep them interested' (Leat 2002). The process of geographical inquiry includes a stage on 'reflecting on learning', which involves reflecting on what has been learned and how it has been learned, and gets students thinking metacognitively. It includes how we know 'what'; this involves a critical approach to

sources, the evaluation of evidence, an awareness of different ways of knowing, and an understanding of the contestability of knowledge. These ideas should be incorporated into the writing of the geography curriculum. The *21st century skills map: geography* has some specific examples of activities that can develop student creativity, innovation and thinking skills (Partnership for 21st Century Skills 2009).

30. Geography emphasises the need, and the challenge, to look for a holistic understanding of phenomena. It gives students the opportunity to learn how to integrate and synthesise a wide range of subject matter and ways of explaining. By using current events to explore geographical questions, students of geography are given practice in critically thinking about contemporary issues.

Ethical behaviour

31. When investigating inquiry based questions students evaluate their findings against the criteria of environmental sustainability, economic costs and benefits, and social equity. These all raise ethical questions about who bears the costs and who gains the benefits, and about group and personal responsibilities. By exploring such questions, students develop their own informed values and attitudes, and become aware of their own roles and responsibilities as present and future citizens.

32. When undertaking fieldwork, students learn about the ethical procedures that must be followed when investigating and working with people.

Intercultural understanding

33. Students can develop a geographical imagination and empathy from a study of geography. This enables them to think about other places and the people who live there. It can also help them to understand why people may see and construct the world differently. This promotes the valuing of diversity, a key geographical concept.

Self-management and teamwork

34. The use of inquiry-based learning in geography helps develop student's capacity for self-management. This gives students a role in directing their own learning and in planning and carrying out investigations. Through working cooperatively with others in group projects in the classroom and in the field, students develop their interpersonal skills, and learn to appreciate the different insights and perspectives that other group members bring. Teachers have long observed the particular effectiveness of fieldwork in developing teamwork skills as well as students' awareness of their own strengths and weaknesses. This observation is supported by English surveys that link quality fieldwork with improved interpersonal and collaborative skills.

Social competence

35. The geography curriculum contributes to the personal and social development of young people. It explores how people perceive places, the meanings they attach to places, how they experience places, and how their identity and culture are formed by the places in which they have grown up. By investigating their own place and its significance to them, students of geography are helped to develop their personal sense of identity, while

through the study of Australia's distinctive biophysical and human geography, they can develop their identity as Australians.

How is the geography curriculum organised?

36. Geographical knowledge can be grouped into knowledge of the 'facts' or content of geography, and knowledge of the processes, questions and methods of geographical inquiry. In this paper the former is called 'geographical knowledge and understanding' and the latter 'geographical inquiry and skills'. They form the two strands around which the curriculum is organised.

Geographical knowledge and understanding

37. Geographical knowledge refers to the facts, generalisations, principles and explanatory frameworks developed in geography to explain the distribution of and relationships between phenomena on the surface of the earth, and the resulting characteristics of individual places. The curriculum must recognise that this knowledge can be contested and dynamic, and help students to understand how people can come to different conclusions about the same phenomena. However, this does not imply that all viewpoints are equally valid, or that all answers have the same status.

38. Geographical knowledge also includes the concepts that geographers use to organise information and to provide frameworks for understanding. These are higher level 'big ideas' that can be applied across several fields of geography, and should not be confused with their use as specific terms. Key concepts in geography include place, location, space, environment, interaction, systems, scale, time, landscape, nature, globalisation, development and risk. Other concepts relating to the practice of geographical investigationinclude: behaviour, causation, culture, order, diversity, perception, justice, evaluation and policy. Each can be expanded to a set of related concepts. The curriculum will focus on the key concepts but will also provide definitions of related concepts, and specific guidance on contemporary debates about contested ones such as space and scale.

39. Geographical understanding is the ability to see the relationships between items of knowledge, to construct explanatory frameworks and models to show these relationships, and to weave them into an integrated whole. It is also the ability to use knowledge to solve new problems by thinking and acting flexibly with what one knows. A curriculum that develops understanding should emphasise explanation, help students to relate new knowledge to existing knowledge, and provide opportunities for them to apply their understanding to new questions and problems.

40. Students can gain geographical knowledge and understanding through studies based on three complementary analytical perspectives. The first is focused around the concept of place. This perspective examines the interrelationships between the characteristics of places. It also brings many areas of geography together in a holistic approach to understanding, and gives students knowledge of the characteristics of localities, cities, regions, countries and continents throughout the world, and how these can be understood. It can also be used in a comparative analysis of places, which is an important geographical method of analysis of investigating the relationships between the

characteristics of places. As well, the perspective includes an exploration of what places mean to students, and the ways in which where they live shapes their lives.

41. The second perspective is focused around the concept of environment. In geography this concept means much more than is conveyed by the term 'environment'. It includes the study of the biophysical environment and its resources. It also encompasses the reciprocal influences of the biophysical environment on human life and of people and their activities on the biophysical environment. These ways of studying the environment constitute a longstanding tradition in geography that is now increasingly informed by the concept of sustainability.

42. The third perspective is focused around the concept of space. Geographers using this perspective study how the individual characteristics of places—such as climate, vegetation, economic activity or population—vary across the surface of the earth. This aspect of geography has become more diverse in recent years, with studies of topics such as money, locational disadvantage, and cyberspace.

43. These three perspectives provide the vertical structure of the proposed curriculum. The content in the curriculum should predominantly be studied through the perspective under which each item is listed, so that students gain a sound understanding of the three basic ways in which geographers view the world. However, the other two perspectives should also be used where appropriate to the subject matter.

Geographical inquiry and skills

44. The first component of geographical inquiry is about identifying the questions that arise from students' observation, discovery and exploration of their world. Some questions will be descriptive, about how to describe what they have observed. Others will be 'why' questions about how to explain what they have observed. There will also be 'so what' questions about consequences, 'what might happen' questions about the future and 'what if' questions about alternatives.

45. The second component of geographical inquiry consists of its methods and skills. These start with the collection of information from a variety of classroom resources. As schooling progresses, primary and secondary sources such as field observation, mapping, monitoring, remote sensing, interviews, studies and reports, and the Census will provide students with more information. Fieldwork outside the classroom should be an essential component of geographical inquiry from the very beginning of schooling, as it teaches students how to investigate their world in all its complex and messy reality. Geography also develops a range of other skills. These include the representation and communication of information through maps, diagrams and graphs; analysing data through cartographic, statistical, graphical and qualitative methods; and modelling spatial relationships.

46. Students must learn to be critical of these methods and of what they are measuring and portraying. For example, when students learn technical cartographical skills, they should also learn that maps are social constructions that can portray the world in distorted and selected ways. Similarly, when they use statistical methods, they should also learn about the questions that numbers cannot answer.

47. The third component of geographical inquiry is about where to look for answers to 'why' questions. By the end of Year 10, students should be familiar with the main approaches that geographers use to understand the object of their study; this may be the characteristics of a place, a spatial distribution, or a problem in a place. These approaches are:

    - a *locational approach*, which examines the influence of relative location on the object of study
    - a *local interaction approach*, which examines how the object of study can be understood by cause and effect relationships between phenomena and events *in the same place*
    - a *spatial interaction approach*, which examines how the object of study can be understood by cause and effect relationships with phenomena and events *in other places*
    - a *spatial analysis approach*, which examines how the object of study can be understood through an analysis of the spatial distribution of phenomena
    - a *human agency approach*, which examines how the object of study can be understood as a result of individual, group or organisational decisions, or by power relationships
    - a *scalar approach*, which examines how the object of study is influenced by interacting environmental, economic, social and political factors and processes at different scales
    - a *temporal approach*, which examines how the object of study has developed and changed over time
    - a *cultural/social constructivist approach*, which examines the effects of the different ways that phenomena and issues are perceived, constructed or represented by different people, and how these differences are contested and negotiated

How is learning organised?

48. Integration of the two strands of geographical knowledge and understanding and of geographical inquiry and skills can be achieved through inquiry-based learning. This approach turns phenomena being studied into questions for investigation. To answer these questions (guided by their teacher), students choose and apply particular perspectives and methods to collect, analyse, and interpret information. Selected concepts are used to organise and interpret this information, and to help in developing understanding. Where appropriate, the investigation should conclude with findings evaluated against the criteria of environmental sustainability, economic costs and benefits, and social equity. The final stage could also include a consideration of how the knowledge gained can be applied and of what actions might be taken. As Bonnett notes: 'Geography's outward disposition also encourages an engaged, involved outlook; a desire not merely to observe the world but to change it for the better' (Bonnett 2008, p.

122).

49. In this way students gain knowledge while learning and practising the process of geographical inquiry. This structure also ensures that models, theories, principles and ways of understanding will be used in context to answer a question, and not taught in isolation. It also means that ethical and equity questions, and attitudes and values, will be studied as they arise from the questions being examined—again, not in isolation. Similarly, students' understanding of citizenship can be developed out of both their discussion of the results of their investigations, and their involvement in community action projects related to their studies.

50. The process of inquiry may be short or quite lengthy. Nonetheless, the inquiry framework can be used in most situations to conceptually integrate the components of geographical knowledge. However, not all inquiry requires the collection and processing of information. The starting point could be a concept, or an ethical or aesthetic issue, which can be explored verbally. Many inquiries should start from the observations and questions of students.

51. The curriculum will therefore need to identify the concepts, skills and ways of explanation that match the content and questions being studied in each unit, and ensure the progressive development of these elements of geographical inquiry through the school years. This horizontal integration of the two strands is a central feature of the proposed curriculum.

52. Comparisons within one level of scale and analyses across different levels of scale are another vital aspect of geographical inquiry. If the local area is being studied, it should be compared with other local-scale places elsewhere in Australia and the world. Likewise, studies of regional and national patterns should make comparisons at the same levels of scale. No year of the curriculum should focus exclusively on Australia, or exclusively on places outside Australia. Again where appropriate, studies of patterns or processes at the local scale should be complemented by similar studies at levels of scale up to the global, as relationships at one level may not apply at a different level.

53. The curriculum should generally avoid prescribing specific case studies that all students must do. In early primary school, the places studied should include the local area—defined as the area around the school or home that can be walked around in a few hours—and places that students are aware of through visits, holidays, the origins of their families, classmates from other places, the media and books they are reading. In both upper primary and secondary school, the curriculum must ensure that students study those countries that are particularly important to Australia because of political and security relationships, cultural heritage and influence, migration, economic relationships, tourism and global environmental issues. These include the United States, China, Japan, India, Indonesia, the United Kingdom and New Zealand. Others include Papua New Guinea, the islands of the South Pacific, South Korea, Canada, Brazil and South Africa. Teachers could also choose case studies that are good illustrations of the phenomena or principles they are teaching, or that have similar characteristics to the location of the school, or that are the product of relationships the school may have been able to develop with other schools.

54. In addition, teachers should identify those places and countries that are important to the area in which their school is located . What these places and countries are will vary considerably from region to region across Australia. In non-metropolitan areas, the capital city of the state or territory in which the school is located should be included, and schools in all regions should include studies of Canberra as the national capital. School visits to the state or territory capital and to Canberra can be used to undertake geographical fieldwork. Students in metropolitan areas should also study at least one non-metropolitan region within their jurisdiction, again involving fieldwork. Within these guidelines, teachers should be given considerable freedom to select countries and cases to study.

Curriculum flexibility

55. An important aspect of the design of a national geography curriculum is how to ensure that it is relevant to students in different locations. Perhaps paradoxically, a geography curriculum must endeavour to be geographically neutral. One way is to leave the choice of case studies to teachers, within guidelines to ensure that their choices cumulatively cover those parts of the world significant to Australia, as outlined below. Another is to design units that contain options. For example, a unit on natural hazards could begin with an overview of hazards in general, followed by an in-depth investigation of a particular hazard or a comparative study of several. A third possibility is to have a variety of units that teach similar general ideas, from which teachers could choose one appropriate for their students. The curriculum could adopt all three ways to give teachers some freedom to adapt units to suit their own location and expertise. However, to maintain a structure that will reduce repetition, each unit in both the primary and secondary curriculum should have a different set of themes and questions.

56. Use of topical and current events and issues to teach students how to think geographically and how to do geography should be built into the curriculum at all stages.

Suggested scope and sequence: K–10

57. The curriculum should be structured to produce the following types of progression through the school years:

- from the description of phenomena to their analysis and explanation
- from observation to investigation, involvement, evaluation and reflection
- from a simple to a more complex knowledge of the process of geographical inquiry
- from the use of only one to a growing number of concepts, and a deeper understanding of these concepts
- the use of an increasing number of ways of explaining
- the use of increasing levels of abstraction
- clarification of values that become more contested

- the use of an increasingly more critical approach to evidence and knowledge.

58. Although the curriculum will be developed year by year, this document provides a guideline across four year groupings:

Years K–2:	typically students from 5 to 8 years of age
Years 3–6:	typically students from 8 to 12 years of age
Years 7*–10:	typically students from 12 to 15 years of age
Years 11–12:	typically students from 15 to 18 years of age

* Specific advice will be provided to writers on the development of the Year 7 curriculum.

59. In developing the curriculum, writers will be guided by indicative times. The indicative times have been developed to guide the writing process, taking into account the fact that students learn at different rates and that school authorities or schools will determine waht teaching time will be provided. Writers will be instructed to draft the curriculum so that it can readily be taught within the indicative times..

The text that follows describe the proposed structure of the curriculum. The content of the strand of geographical knowledge and understanding is outlined under the three perspectives of place, environment and space, with examples provided of what might be included in each stage. The strand of geographical inquiry and skills is divided into the concepts, skills, and approaches to explanation that could be introduced at each stage, but which should continue to be used and further developed at each succeeding stage.

Years K–2

60. In K-2 the curriculum focus is on geographical awareness, on exploring the geographies of children's lives and of places near and far.[2] Children are curious about their personal world and interested in exploring it, and teaching is focused on helping them to observe, describe and ask basic geographical questions about the features of that world. Research shows that young children are interested in distant places as well as their own locality, and early primary school geography should build on this curiosity and encourage students to explore widely. With very young children the selection of distant places should be guided by their awareness of and links with those places. Play is a central part of learning.

[2] Much of structure and content of primary curriculum adapted from Catling & Willy 2009, pp.175–6.

Years K–2 **Examples of possible content**

Conceptual focus	**Place**	**Environment**	**Space**
Geographical knowledge and understanding	Building up students' geographical vocabulary Investigating the local area Learning about more distant places	Learning about weather and seasons Investigating the resources of the biophysical environment	Observing how features are arranged in space
Major concepts	• place • risk	• order • location	
Geographical skills	• observation • description • understanding location, direction and distance	• making and using simple plans • using images and globes • locating places visited on an outline map	

Years 3–4

61. In years 3 – 4 , the curriculum focus is on becoming engaged in geographical investigations. Students have a growing awareness of associations and relationships between phenomena in the local place and other places known personally to them. They are able to ask a larger number of geographical questions, to investigate answers, and to think about causes and effects. They can identify locational and spatial patterns, and start to think about both their causes and their consequences. Their study of places near and far expands to a larger number and variety of places and countries. Fieldwork is an essential part of learning.

Years 3–4 **Examples of possible content**

Conceptual focus	**Place**	**Environment**	**Space**
Geographical knowledge and understanding	Finding out the location of places that students hear about Investigating the population of their place Comparing different places	Investigating how people alter their environment in using its resources Thinking about what it means to use the environment sustainably Investigating how water, wind and rocks shape the land	Explaining why things are located where they are
Major concepts	• space • centrality and remoteness • environment • interaction	• similarity • diversity • time • causation	
Geographical skills	• finding the way with large-scale maps • using geographical terminology to describe the location and position of places • using atlases and remote sensing images to locate and explore places • measuring distances on a map • making observations and measurements • doing fieldwork		
Approaches	• comparative analysis • locational	• local interaction	

Years 5–6

62. In years 5 – 6 , the curriculum focus is on geographical involvement. Students have a growing interest in their community, and can apply that to investigations into how their community manages environmental, social and planning issues. They also have a growing sense of fairness, and can apply that to an evaluation of the outcomes of these investigations. Their study of places near and far continues to expand, and students can use comparative analysis to suggest explanations for the differences between places. They investigate their own and other people's perceptions of these place, and become aware of stereotypes. They also study the connections between their place and other places and countries.

Years 5-6 **Examples of possible content**

Conceptual focus	**Place**	**Environment**	**Space**
Geographical knowledge and understanding	Understanding cultural differences between places and countries Finding out how local community issues are managed Exploring places in the world with similar characteristics to those of the students' own place	Investigating the local environment Investigating a local environmental project Investigating Australian and world climates and human adaptation to them Studying an extreme environment Learning about environmental hazards	Investigating how places are connected to each other Finding out how retailing and transport produce spatial patterns of towns and commercial centres
Major concepts	• system • spatial distribution • culture	• adaptation • perception • evaluation	
Geographical skills	• finding the way around countries and the world with small-scale maps • mapping land surfaces, human settlement and circulation • using maps to investigate locational and movement patterns • planning geographical inquiries • fieldwork • interviewing • using maps, photographs, statistics and literary sources • classifying and interpreting data • constructing climate graphs • using aerial photographs and satellite images to identify patterns • interpreting isopleth maps		
Approaches	• spatial interaction	• spatial analysis	

Years 7–10

63. In Years 7–10, students are absorbed in their own lives as they move into adolescence, and becoming more aware of and concerned with wider issues. They can work with more abstract concepts, follow more complex explanations and enjoy debating ideas. The curriculum focus is on developing geographical understanding through studies of the interactions between people and the biophysical environment, and the spatial patterning of human activities. Environment and space are consequently the two perspectives around which the curriculum is structured in these years, but place is also important whenever case studies are used. Through these studies, students will greatly increase their knowledge of and ability to apply geographical inquiry approaches, methods and skills. They will extend their previous knowledge, and learn new skills and approaches.

64. The content suggested for Year 7 can be taught by teachers who are not specialist geography teachers. It should be suitable for jurisdictions where Year 7 is the last year of primary school rather than the first year of secondary school. The structure of Year 7 recognises its role as a year of transition from primary to secondary education. Much of the content and approach are based on the 'Living geography' concept developed in Mitchell (2009), as a way of engaging students in geographical thinking that relates to their own lives and experiences.

65. The paper proposes that the Years 8–10 curriculum be organised around two main streams of study. A stream of environmental geography units will explore the main features of the biophysical environments of the local place, Australia and the world, and compare Australia's environments and environmental resources with those of other countries. While the emphasis in these units is on the human significance of the biophysical environment, students must also learn the basic environmental processes that need to be understood in order to adequately comprehend contemporary environmental issues.

66. A second stream is unified around the theme of spatial distributions and their consequences, from the scale of the student to that of the world, so that similar concepts and types of explanation can be learned and then applied to new situations. These introduce students to the main spatial characteristics of Australia's population, economy and social wellbeing, . Another spatially focused unit is on the geographies of modern life, with a choice of topics that might particularly appeal to adolescent students, while being also studies of significant industries.

67. These two streams are complemented by a third which involves comparative case studies of the phenomena being studied in the environmental and spatial streams, both at the local scale and the national scale. These should go beyond a comparison of the individual phenomena being studied and be used to enable students to gain a more balanced understanding of selected other places and countries. Teaching should be structured in these years to build students' knowledge of those countries most important to Australia.

    Most units should also explore ethical questions and the practical applications of the knowledge gained, and develop students' understanding of active citizenship.

Years 7–10

Conceptual focus	Place	Environment	Space
Geographical knowledge and understanding: Year 7	Investigating the population and community structure of the neighbourhood Comparative analysis of the local place with other local-scale places	Investigating the environmental impact of housing and household consumption	Investigating the places and spaces that students use Investigating online spaces
Geographical knowledge and understanding: Years 8 and 9	Comparative analysis of places and countries; deeper study of selected countries	Understanding and explaining environmental systems and environmental change Exploring the concepts of environment, nature and wilderness Studying world biomes and their ecosystem health Investigating environmental resources and human dependence on them Exploring the perception and use of environmental resources Undertaking an in-depth study of water and one or more other resource	Investigating topics such as sport, tourism, surfing, popular culture, food, retailing, crime, and cyberspace Understanding the local economy Explaining the distribution of employment Identifying the effects of changing transport and communication technologies on local economies Explaining population distribution and urban concentration Explaining population mobility and its consequences
Geographical knowledge and understanding: Year 10		Understanding and investigating environmental sustainability Undertaking in-depth studies of one or more of climate change, urban environments, forests, land, and marine resources	Investigating migrant settlement Explaining the spatial pattern of economic and social wellbeing, and its consequences

Major concepts	• scale • behaviour • risk • power • linear and non-linear change	• sustainability • policy • representation • time–space compression • agglomeration and dispersal
Geographical inquiry skills	• measuring environmental, demographic, economic and social phenomena • using maps to develop and test generalisations • constructing and interpreting mental maps • constructing, interpreting and analysing choropleth maps • constructing, interpreting and analysing graphs and diagrams • statistical analysis • using computer mapping software to create statistical and other maps • interpreting simple remotely sensed images • understanding a GIS and its uses • evaluation of information • reflection	
Approaches	• human agency • scalar	• cultural/social constructivist

68. By the end of Year 10, students should have a sound knowledge of the distinctive way by which a geographer looks at and understands the world. This includes:

- an understanding of the uniqueness of each place, as well as the similarities between places
- an ability to think holistically in seeking answers to geographical questions

  an understanding of the place dependence of environmental and socioeconomic processes
- an understanding of the role of the biophysical environment and its resources in human life, and of the impact of humans on that environment
- an understanding of the significance of location

- an awareness of the interconnectedness of places, and of the consequences of these connections
- an ability to think about the world spatially.

The senior secondary years

69. The curriculum focus in the senior secondary years should be on extending and applying the two strands of the curriculum: geographical knowledge and understanding, and geographical inquiry and skills.

70. One aim of the senior curriculum is therefore to further develop students' knowledge of and ability to apply geographical inquiry, through a more advanced study of methods and skills, an exploration of more advanced ways of understanding and explaining, and a deeper engagement in decision making, evaluation and discussion of ethics and values. The teaching and learning of these aspects of the subject should be integrated into the units being studied, as in earlier years. A particular emphasis should be placed on the application of spatial technologies in spatial analysis, representation and modelling, and on more advanced methods of quantitative and qualitative analysis. All units must also include group or individual research as a way of developing competence in geographical inquiry. This must include the collection and analysis of information to answer a geographical question, and fieldwork must be included in all units where it is appropriate to the questions being studied.

71. A second aim of the senior secondary curriculum is to enable students to deepen their knowledge and understanding of geography through studies that extend the central themes of place, environment and space into topics not previously studied in depth. These should have the potential to raise significant questions to challenge students. They should have an applied focus on trends, planning, decision making, management and futures as this is appropriate for students nearing the end of their school years and approaching adulthood. To allow for the depth of study appropriate for the senior years, and to give schools the opportunity to select topics that fit their needs and interests, all units should contain options for in-depth study. All units should involve study at a range of scales, and not be confined to Australia.

72. It is proposed that there be one geography course, consisting of four units. One of these is focused on an independent or negotiated geographical investigation , and three on each of the central themes of place, space and environment. Units 1 and 2 would typically be taught in Year 11 and units 3 and 4 in Year 12. The final unit on sustaining places is intended to integrate much of the curriculum around a study of the cities, towns and regions in which students live, and to compare these with other places around the world.

73. For unit one the proposed focus is the environment. Studies would include an in-depth focus on one or more environments such as coasts, deserts, rivers, forests and urban environments. In particular, this unit would focus on environments at risk and risky environments. The unit would include the risk assessment and management associated with these environmental studies It would also include the study of one or more environmental hazards as well as the role of climate change

74. Unit two would involve an independent geographical project. The project would have students investigating an economic, cultural, political, social or environmental phenomena or issue from a geographical perspective.

75. For unit three, the focus will be on topics such as the changing spatial structure of the global economy, population movements, global resource consumption and the environmental consequences, global inequalities, cultural diversity and localism. Students will explore the concepts of global diversity and change through the lens of spatial analysis. This focus examines the environmental, social, political and economic factors that contribute to the diversity of both localised and globalised opportunities and choices that exist for people of different places..

76. Unit four involves studies of the sustainability and future of urban and rural places. This would include studies of growth and decline, environmental sustainability, urban and rural economic and social issues, regional development, the role of infrastructure, urban planning and management, community sustainability, and ways of creating resilient places. It focuses on the variety and complexity of communities across the world and locally. This study is done within the context of planning. Schools could choose to focus on large cities, or on regional and rural places, or on a combination of both.

Pedagogy

77. The emphasis in geographical education is on inquiry-based learning. This can be encouraged if the topics in the curriculum can be expressed as questions for investigation. Inquiry-based learning also requires methods of assessment that enable students to demonstrate their knowledge of skills and how to apply them, and their understanding of how to think geographically and how to do geography.

Links with environmental science

78. In the study of the biophysical environment, geography overlaps with science and environmental science, but it also complements these subjects by exploring additional questions. These include the study of geomorphology; climatology; the place dependence of environmental processes; and the effects of environmental change on places and regions; human perceptions and constructions of the environment and its resources; and explanations of environmental problems that involve social, economic and political factors as well as environmental processes.

79. In primary school, the teaching of biophysical geography should be integrated with the teaching of related topics in science, for the benefit of both students and teachers. In senior secondary school, the relationship of biophysical geography to the Earth and Environmental Science course will need to be considered.

Conclusion

80. The curriculum proposed in this paper is designed to give young people the geographical understanding needed to make sense of their world; a set of skills that will be useful in their future life; and an appreciation of the diversity, complexity, wonder and interdependence of places and their peoples. It will enable them to understand the

distinctiveness of Australia's biophysical and human geography, and the consequences of this distinctiveness. It will also give them knowledge of the world, and in particular of those countries of most significance to Australia. Above all, they will learn how to think geographically, how to find and evaluate new geographical knowledge, and how to be critical users of this knowledge in their adult life.

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81. This paper has built on several reports and a wide range of literature on geography, learning and the teaching of geography. The key reports and reviews are listed below, along with items referred to in the paper.

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