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The Vision of Geography Underlying the Australian Geography Curriculum

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Abstract

A common geography curriculum for Australian schools was approved in May 2013. This paper describes the conceptual and philosophical foundations of the curriculum through a discussion of its definition of geography, selection of concepts, integration of skills into the process of inquiry, and specification of learning about countries and continents, and of the perspectives that are stated or implied. It describes a view of geography that is eclectic yet emphasises the subject's distinctive ways of thinking. The paper also finds that the Australian curriculum differs from some other national curriculums in its definition, range and choice of concepts, and specification of place knowledge.

Keywords: Geographical education; curriculum; philosophy; concepts; international comparisons; Australia

Introduction

Historically the curriculum in Australian schools has been different in each state and territory, because in the Australian federation the states and territories are constitutionally responsible for education. However, in 2008 the Council of Australian Governments, which consists of the heads of the Commonwealth (i.e. national or federal), state and territory governments, agreed to work towards a common curriculum in some core subjects, after earlier attempts to achieve greater uniformity had failed. To implement this agreement a National Curriculum Board was established in 2009, which became the Australian Curriculum, Assessment and Reporting Authority (ACARA) in 2010 as its responsibilities expanded. ACARA's task is to oversee the development of a 'rigorous, world-class' national curriculum for all Australian students from Foundation (around age 5) to Year 12 (around age 17), in three phases. English, science, mathematics and history were in the first phase, which has been completed and is being implemented in some states and territories already. The Phase 2 subjects are geography, languages and the arts, while Phase 3 consists of health and physical education,

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information and communication technology, design and technology, civics and citizenship, and economics and business.

The new geography curriculum was approved in May 2013 and covers all the years of schooling from Foundation to Year 12. It can be found on the ACARA website at http://www.australiancurriculum.edu.au/Geography/Rationale. Work on it began in August 2009, and proceeded through several stages: the writing of a position paper on key issues, an initial advice paper, a shape paper, and successive drafts of the final curriculum. For the first three stages there was an advisory group, and for the last stage a changing group of advisors and writers. These groups are referred to in the paper as 'the group', but their composition changed between stages and over the last stage of writing. The author was a member of this group, first as Lead Writer and then as Writing Coach, so this paper is a personal reflection on the product of a group process. Another paper, on the influences on and debates over the content of the curriculum, will be published in *International Research in Geographical and Environmental Education* in 2014.

The paper identifies the vision of geography that informed the design of the new curriculum through a discussion of several key elements of its structure and content. Some brief comparisons are made with geography curriculums or standards in other countries, namely England Key Stage 3, Finland Grades 7-9, Hong Kong Secondary 1-3, Ontario Grades 7 and 8, Sweden, and the Second Edition of the US National Geography Standards. Note that at the time of writing (August 2013) the curriculum for England was about to be replaced.

Defining geography

Defining geography is difficult and contentious, because of the breadth of the subject and the diversity of its interests. Clifford, Holloway, Rice and Valentine (2009, xiii) write:

> *Defining the core of geography is harder than one might expect. Sociologists have society, biologists living things, economists the economy and physicists matter and energy. But what is at the core of geography?*

The group spent considerable time debating a definition, and in trying to reconcile the different ones found in the curriculum documents of the states and territories. After a wide review of the geographical literature the group settled on the following:

> *Geography is a structured way of exploring, analysing and understanding the characteristics of the places that make up our world, using the concepts of place, space, environment, interconnection, sustainability, scale and change.*

This definition of geography has several advantages. It responds to the natural curiosity of children about the places in their world, both those of their own direct experience and the places they experience through television, books and other media. It is intelligible to students, parents, teachers, politicians and the community generally because it has some similarities with popular perceptions of the subject (Bonnett, 2003). It identifies a distinctive area of study for geography, and one not shared with other school subjects. It also opens the curriculum to newer ways of studying places and their significance in human life, such as how people perceive places, the meanings they attach to them, how they experience them, and how their identity and culture is formed

by this experience. Finally, it is inclusive of the existing definitions in the curriculums of the states and territories, because to analyse and understand the characteristics of places requires a study of spatial distributions, physical and human environments, and the interactions between people and environments, and these are core elements in these definitions.

However, a 2008 survey of teachers (Berry and Smith, 2009) had found that many respondents felt that a definition of geography as the study of place or places was too narrow a view of the subject, and might require only a demonstration of descriptive knowledge about places or exclude the study of people and environments. The group tried to address these concerns in several ways. One was by including the words 'a structured way of exploring, analysing and understanding' in the definition, to make it clear that geography is much more than knowledge of places. Another was to describe the characteristics of places in the glossary as including:

> *… people, climate, production, landforms, built environment, soils, vegetation, communities, water resources, cultures, mineral resources and landscape. Some characteristics are tangible, such as rivers and buildings. Others are intangible, such as scenic quality and socioeconomic status.*

This made it clear that the study of places does not exclude the study of people and environments. The definition also contains the concept of space, and some advisors and teachers would probably have been happy if that was the only one mentioned, given the dominance of a spatial view of geography. However, the group decided to include all seven of the concepts selected, so as not to privilege any one of them. This reflected the view of many advisors that geography has a variety of ways of looking at the world, and that the curriculum should give attention to all of them.

International comparisons

A scan of several other national geography curriculums suggests that most have avoided formulating a direct definition of geography. Ontario is an exception, with its statement that 'Geography is the study of place'. Others describe what it means to be geographically informed (US National Geography Standards), what geography contributes to education (Key Stage 3, England), or the knowledge that geography teaches (Hong Kong, Finland and Sweden).

This was not an option in Australia, for two reasons. First, other subjects in the Australian school curriculum have definitions of what they study. History, for example, describes itself as a disciplined inquiry into the past, and science as an empirical way of answering interesting questions about the biological, physical and technological world. Second, because geography is frequently misunderstood we must be able to explain what it is, and how it differs from related school subjects like environmental science, biology and economics. This is essential if we are to present a strong narrative of the discipline, and such a narrative is necessary for the survival of the subject in schools as well as universities (Thrift in Harrison et al., 2004).

Aims

Another way in which the vision of geography in the curriculum can be identified is through the statement of aims, which sets out what geography contributes to the education of young Australians. These were debated and refined during the preparation

of the Shape Paper, and have remained essentially unchanged since that paper was published in January 2011. They are:

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

- *a sense of wonder, curiosity and respect about places, people, cultures and environments throughout the world*
- *a deep geographical knowledge of their own locality, Australia, the Asia-Pacific region and the world*
- *the ability to think geographically, using geographical concepts*
- *the capacity to be competent, critical and creative users of geographical inquiry methods and skills*
- *as informed, responsible and active citizens who can contribute to the development of an environmentally and economically sustainable, and socially just world.*

These reflect both the overall aims of the Australian curriculum and some specifically geographical ones. The group insisted that the first aim must be about wonder, curiosity and respect, because they thought that geography should be exciting and engage students both emotionally as well as intellectually. This aim has been the hardest to incorporate into the curriculum as it is not possible to specify that students will learn wonder or be curious. Instead we tried to write content that was about people's feelings about places and environments, and hoped that teachers would use these opportunities to explore the emotional side of geography.

Note that only one of the aims is about place knowledge, and the rest are about attitudes, understandings, skills and abilities. These are all connected, as wonder and respect support the attitudes needed for citizenship, which in turn depends on knowledge and understanding of the world, and the ability to think competently, critically and creatively.

International comparisons

The aims selected for the Australian geography curriculum are very similar to the goals described in the US *National Geography Standards* (Heffron and Downs, 2012, 7), and those in the curriculum guide for Hong Kong Secondary 1-3. They are more extensive and more specifically geographical than those for Ontario and England, and much less factual than those for Finland and Sweden. In relation to the first aim of 'wonder, curiosity and respect', curiosity and fascination are included in the US Standards as qualities that geography stimulates, as is wonder in the English Key Stage 3 and respect in Sweden, but only in Hong Kong are wonder and respect specific outcomes. This raises the question of the place of explicit statements of affective aims or outcomes in the formal curriculum. Is wonder, for example, something to be hoped for, or something to be aimed for, in the study of geography?

Concepts

The thinking underlying the curriculum is also revealed in the selection and description of the concepts thought to be fundamental to geographical understanding, which relates to the third aim of the curriculum. The ones selected by the group, after a long process

of research, discussion and consultation, are place, space, environment, interconnection, sustainability, scale and change. These are described at some length in a section of the curriculum document on Concepts for Geographical Understanding and in the glossary. In it we describe the concepts as:

> *... high level ideas or ways of thinking that can be applied across the subject to identify a question, guide an investigation, organise information, suggest an explanation or assist decision making. They are the key ideas involved in teaching students to think geographically.*

They have been hard to describe. At first we were describing them as objects of study; for example, we were defining the concept of place by a definition of a place, and the concept of space by a definition of space. A reading of an article by Tim Creswell (2008), in which he drew a distinction between places as objects of study and 'place' as a concept, suggested that we were missing something. The difference identified by Creswell was illustrated by one of the objections raised in consultations to the inclusion of 'environment' as a concept, which was that the environment is what geography studies, and not a concept. In the end we came to a majority conclusion that our key concepts were key concepts because they were mostly complex ideas that could not be easily defined, but only described by the ways of thinking they produced. This view was not unanimous, as some advisors argued for much more concrete descriptions of concepts by expressing them in ways that could be measured, while at least one would have liked us to go much deeper into newer and more abstract ways of thinking about place and space.

In the curriculum document each of the concepts has a general description, followed by a list of specific ways in which it is applied and developed in the curriculum. Each of these ways is an example of a geographical idea, understanding or method of analysis. Below is the example of the concept of space.

Space

> *The concept of space is about the significance of location and spatial distribution, and ways people organise and manage the spaces that we live in. In the F–10 Australian Curriculum: Geography, an understanding of the concept of space is developed in the following ways:*

- *The environmental and human characteristics of places are influenced by their location, but the effects of location and distance from other places on people are being reduced, though unequally, by improvements in transport and communication technologies.*
- *The individual characteristics of places form spatial distributions, and the analysis of these distributions contributes to geographical understanding. The distributions also have environmental, economic, social and political consequences.*
- *Spaces are perceived, structured, organised and managed by people, and can be designed and redesigned, to achieve particular purposes.*

> The glossary then describes the concept in more detail:

The concept of space includes location, spatial distribution and the organisation of space. Location plays an important role in determining the environmental characteristics of a place, the viability of an economic activity or the opportunities open to an individual, but the effects of location on human activities also depend on the infrastructure and technology that link places, and the way these are managed by businesses and governments.

Spatial distribution, the second element in the concept of space, underlies much geographical study. The geographical characteristics of places have distributions across space that form patterns, and the analysis of these patterns contributes to an understanding of the causes of these characteristics and of the form they take in particular places. Spatial distributions also have significant environmental, economic, social and political consequences. Students learn to identify and evaluate these consequences and the policies that could be adopted to respond to them.

The organisation of space concerns how it is perceived, structured, organised and managed by people and how this creates particular types of spaces. Early primary school students can investigate how the space within their classroom and their school grounds is organised for different purposes. Older students can investigate how urban planning organises the built environment, creates commercial, industrial, residential and green spaces, and manages the flows of goods and people between them.

This description has no definition of the concept of space, and instead breaks it into three more specific or 'operational' concepts. Each of these represents a geographical contribution to understanding. For example, spatial distributions are described as having two applications. One is to use them to analyse and suggest associations, relationships and explanations. The other is to examine the consequences or effects of particular spatial distributions, with the aim of demonstrating that they have environmental, economic, social and political significance.

I am not yet satisfied with the way the concepts are described and explained, and not sure that we have fully avoided the problem commented on by Creswell. On the other hand, I think the identification of the ways these concepts are used to investigate and understand the world by geographers is very useful. The 27 dot points in the curriculum document form a catalogue of ways of thinking geographically that are a guide for teachers on the broad understandings their students should be developing.

International comparisons

The concepts chosen for the Australian curriculum can be compared with those in the English Key Stage 3, Ontario Grades 7 and 8, Hong Kong Secondary 1-3 curriculums, and the US National Geography Standards, as set out in this table. While there is no specific list of concepts in the US Standards the Essential Elements under which the Standards are grouped are described as ideas that are 'central and necessary to an understanding of geography', and these, and one of the individual standards, are shown in the table. In the Ontario curriculum the concepts are described as themes.

Table 1.
Concepts by country

Australia	England Key Stage 3	Ontario Grades 7 and 8	Hong Kong Secondary 1-3	US National Geography Standards
Place	Place	Location/place Region	Place Region	Places and regions
Space	Space		Space	The world in spatial terms Human systems
Environment	Environmental interaction and sustainable development	Environment	Human-environment interaction	Physical systems Environment and society
Interconnection	Interdependence Physical and human processes	Interaction	Global interdependence	The patterns and networks of economic interdependence on Earth's surface
Sustainability	Environmental interaction and sustainable development		Sustainable development	
Scale	Scale			
Change		Movement		
	Cultural understanding and diversity			

The Australian choice of concepts differs from some of the other countries in the table in several ways.

1. Australia preferred 'sustainability' over 'sustainable development'. We felt that sustainability was a bigger concept than sustainable development, as it encompasses the sustainability of places (an important geographical aspect of sustainability) as well as of environmental functions, and because sustainable development is only a way of achieving sustainability (and a very contested way with multiple interpretations). For the same reason we did not link sustainability solely with environment, as in the English curriculum. There was pressure from some members of the group, and from some teachers, to expand the concept of sustainability further to include economic, social and cultural sustainability. This was resisted on the grounds that these forms of sustainability are often about desirable objectives like a strong economy, social justice, democratic governance and respect for cultural diversity that have nothing to do with the meaning of sustainability, and for which there are adequate terms already (Maude, 2012). Economic sustainability is in the aims, but only because ACARA did not accept

the group's decision to use the term 'economically resilient', which had been chosen as it was thought to be an aim that geography had something to say about.

2. Australia preferred 'interconnection' over 'interdependence'. This was partly because we felt that some of the interconnections between places were exploitative or one-sided rather than interdependent. We also thought that interconnection was the bigger concept, because it included physical and human processes (which are sets of cause and effect interconnections), and the very important geographical aim of holistic thinking, which involves the ability to see interconnections.

3. Australia does not list cultural understanding and diversity as a concept, but it is in ACARA's list of general capabilities that all curriculums must promote. I would also argue that cultural understanding and diversity is a much narrower concept than the others because it is mainly used by students to evaluate what they have found out about their world, and does not have the explanatory and analytical qualities that the other concepts possess.

4. A major difference between Australia and the US is over the term 'systems'. In the US Standards the concept of systems is used describe the whole of the content of physical and human geography, but in the Australian curriculum systems are only mentioned as part of the larger concept of interconnection, and are confined to environmental systems and coupled human-environment systems. The Australian group had some vigorous discussions about systems as a major concept, with some supporting the concept and other opposed. Those opposed argued that most human geographical phenomena do not behave like the components of a system, and that few human geographers now used a systems approach.

5. Only Australia has 'change' as a concept, but Ontario may be close with 'movement'. The group was strongly supportive of the inclusion of 'change', arguing that an understanding of change not only helped students to explain the present, but also to forecast the future, and to recognise that their world was constantly changing. It would be interesting to know why other curriculums did not select change as a concept.

There are therefore some similarities in the selection of concepts between Australia, Ontario, Hong Kong, the US and England, but also some significant differences that are worth exploring further. I think a key question is how to define a major concept. Gilbert (2011, 72) divides concepts into two types: descriptive or substantive concepts (like suburbs and rivers), and analytical or syntactical concepts (like spatial association and historical continuity). The concepts in the geography curriculums reviewed here are all of the second type, but I wonder if there is a difference within this type between very broad and abstract concepts like place and space, which are ways of thinking about the world that span many areas of geography, and narrower concepts like sustainable development (which is a type of economic and social development) or cultural understanding and diversity (which is a desirable outcome for a society). There are many lists of the key concepts in geography (examples include Clifford, Holloway, Rice and Valentine, 2009; Lambert and Morgan, 2010; and Jackson, 2006) but none that I have seen has a definition of a key concept, or criteria for their selection.

Skills

The fourth aim of the Australian curriculum is about the capacity to be competent, critical and creative users of geographical inquiry methods and skills. In the curriculum skills are embedded in the process of inquiry, rather than taught separately. This is to ensure that students learn geographical ways of finding out, such as the questions to ask and the ways of explaining. It is also to make the learning of skills more meaningful and interesting by teaching them when they are needed and therefore have an immediate application. For example, methods of collecting information can be learned when needed to find answers to a question, and mapping or graphing skills can be learned when needed to analyse or communicate that information. Internationally, skills are also integrated into an inquiry process in Hong Kong, the US Standards, England and perhaps Ontario, but stand alone in Finland and Sweden, whose curriculums have no mention of inquiry.

Place knowledge

One indicator of the concept of geography underlying a curriculum is the extent to which it emphasises learning about regions, countries and continents. Geographers have tended to reject the systematic study of regional geography, in both schools and universities, preferring to teach about places and countries through case studies of geographical processes and issues. Educational authorities and the public, on the other hand, generally consider the teaching of place knowledge to be one of the functions of geography in schools. The Australian curriculum group, and many teachers, initially resisted anything that looked like regional geography, even though this was the second aim of the curriculum, but some state authorities insisted that geography must teach about the countries of the world. The groups' answer was to insert a study of the world into the primary years, working out progressively from Australia to the neighbouring countries and then to each of the continents. In the secondary years there are case studies of themes in each unit that will enable students to learn more about particular regions or countries of the world. The locations of these case studies are prescribed to ensure coverage of the world and countries of particular significance to Australia, as well as to reduce repetition. This means that a limited form of regional geography will be taught in primary school and the case study method will be used in secondary school.

International comparisons

In its requirements for place knowledge Australia, perhaps surprisingly, will be specifying more than the other countries whose curriculums were examined except Finland, which also prescribes a study of the continents of the world. England specifies study of a range of places in the United Kingdom and the European Union in Key Stage 3, and the rest have no requirement for place knowledge except through case studies in Hong Kong. None of them specify case studies in the way the Australian curriculum does. The proposed new national curriculum for England, however, includes studies of the world's continents and countries (but sadly leaves out Australia, which is both a continent and a country), and this may represent the beginning of a swing back to a form of regional geography in schools.

Perspectives

Some countries describe the concept of geography underlying their standards or curriculums through their choice of perspectives. The US National Geography Standards is distinctive in its explicit discussion of geographical perspectives when it describes a perspective as 'a framework that can be used to interpret the meanings of experiences, events, places, persons, cultures and physical environments.' (Heffron and Downs, 2012, 17). It identifies the spatial and ecological perspectives as the key ones in geography, complemented by historical, economic, civic and cultural perspectives. Hong Kong also identifies geography as having a spatial and an ecological perspective, but has no discussion of what a perspective means. None of the other countries examined have perspectives.

The Australian curriculum takes an eclectic view of geography – it does not follow any one geographical school of thought but attempts to encompass many. In place of two perspectives it selects seven concepts, each of which may be considered a perspective. It recognises the spatial perspective in the ways that the concept of space is described, but the ecological perspective was thought to be too narrow in that it is confined to human-environment interactions. These interactions are important, but geographers also study the interactions between the biophysical characteristics of a place, such as the effects of climate on soils, and those between the human characteristics of a place, such as the effects of economic conditions on population mobility, and neither of these are human-environment interactions.

What does it mean to think geographically?

The second aim of the Australian geography curriculum is about the ability to think geographically. In the curriculum this is expressed through the descriptions of the concepts, because each concept has one or more ways of identifying what it means to have a geographical understanding and therefore to think geographically. These can be rephrased as the attributes of a geographically trained mind, and are summarised below, with each dot point implicitly starting with the stem 'a geographer has …'

Place

- a curiosity and wonder about the world and its diversity
- an understanding of the significance of 'place' and places in human life
- an interest in understanding and explaining why places are like they are, and why they are changing, and in using this knowledge to improve them
- an understanding of how to use a controlled comparison of places to investigate causal relationships
- a recognition that, because each place is unique in its characteristics, the outcomes of similar environmental and socioeconomic processes vary in different places, and similar problems may require different strategies in different places

Space

- an understanding of the effects of location, distance and proximity on human life
- an ability to think about the world spatially

- an understanding of how to use spatial distributions to investigate causal relationships
- an appreciation of the environmental, social, economic and political significance of spatial distributions
- an understanding that spaces are perceived, structured, organised and managed by people, and can be designed and redesigned to achieve particular purposes

Environment

- an understanding of the interconnectedness of the elements of the biophysical environment, and of the effects of human activities on those elements
- an understanding of the influence of the biophysical environment on human activities
- an understanding of the environmental functions that support human life and wellbeing

Interconnection

- an awareness of the interconnectedness of places, and of the consequences of these connections
- an understanding of cause and effect relationships within and between places
- an ability to think holistically in seeking answers to questions.

Sustainability

- an ability to use the concept of sustainability to evaluate the present and future condition of environments and places

Scale

- an understanding of the value of using different scales to explore relationships and explanations

Change

- an understanding of how to explain geographical phenomena by investigating how they have developed and changed over time
- an ability to use a knowledge of past and present change to look into the future

Collectively these statements sum up the understandings and abilities that students should develop from a study of geography. These are ways of thinking that can be used to identify a question, guide an investigation, organise information, suggest an explanation or assist decision making, as is stated in the curriculum document. A comparison of this list with those that could be developed for other geography curriculums might be instructive.

Conclusion

This paper has described the conceptual and philosophical underpinnings of the new Australian F-10 geography curriculum through its definition, concepts, specification of place knowledge, embedding of skills in inquiry, and stated or implied perspectives. These embody a vision of geographical education that emphasises the learning of

geographical ways of thinking at least as much as the learning of geographical knowledge. The paper has also made some brief comparisons with a small number of other national curriculums. The Australian curriculum differs from many of these in its definition, range and choice of concepts, and specification of place knowledge. The comparison has also identified some questions that would be worth pursuing. For example, should curriculums have a definition of geography? What is the nature of a major concept in geography, and why have different countries chosen different concepts? What is the role of place knowledge in a contemporary geography curriculum? Comparative studies of these questions could be rewarding.

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Biographical statements

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