Geographical thinking with the Australian Curriculum: Geography

AGTA Roadshow
26 November, 2015

Malcolm McInerney: AGTA Chair (2008-2013)
Monday, August 24, 2015

Geography at 12.4500° S, 130.8333° E on 29 August 2015

Darwin High School from above!

**Geographical Thinking workshop at Darwin High School

**Geography and Civics ad Citizenship workshop at Darwin High School

*Related sites to Geogaction blog*
Spatialworlds
GeogSpace
AC History Units
Geogaction
DECD Learning Resources for Australian Curriculum
DECD Achievement Standards Charts
AGTA’s PROFESSIONAL LEARNING RESOURCES


BEING A CITIZEN
RESOURCES FOR DEVELOPING CITIZENSHIP OPPORTUNITIES IN THE CLASSROOM

RESOURCES

- CIVICS AND CITIZENSHIP DEFINITIONS
- CURRICULUM DOCUMENTS
- PARLIAMENTS IN AUSTRALIA
- LAW AND HUMAN RIGHTS IN AUSTRALIA
- AUSTRALIAN CITIZEN POLITICS
- POLITICAL AUSTRALIA
- PROFESSIONAL LEARNING

ACTIVITIES

- CIVICS AND CITIZENSHIP
- BEING A CITIZEN ACTIVITIES
- ISSUES TO DEBATE
- MAPPING POLITICS
- EXPLORING DEMOCRACY
- STUDENT CITIZENSHIP ACTIVITIES

PREFACE FOR BEING A CITIZEN

"In a community, or like a ship, everyone ought to be prepared to join the helm." - Mark Twain, 1869-1870.

PARLIAMENTARY EDUCATION OFFICE

EXPLORE THE RESOURCES ON THE CD-ROM.

An AGTA Resource to Support Schools to Meet the Challenges of Teaching a 21st Century Geography Curriculum.

Supported by ESRI Australia

Produced by the Australian Geography Teachers’ Association (AGTA)

January 2011

A joint project of AGTA and SEDA

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Exploring 21st Century Geography

Thinking Geographically
“I’m a geographer, frankly, I’m proud of that fact even if I have to explain when I meet someone exactly what it is a geographer does.”

Random geographer blogger

“It is getting harder and harder in conversation to raise one or other of the most basic subjects in geography—agriculture, rivers and population—without a flicker of panic crossing the other person’s face. You are no longer talking about a neutral subject.”

Robert Butler in the “The Economist” 2010
Why the change!!

“No one feels smarter after learning by heart a list of all the capital cities of the world.

Teaching geography today needs to catch up with the actual complexity and interactivity of the world to become useful and recognised again.”

National Geographic  2013

http://www.youtube.com/watch?v=UF50wE1GFQ
Key professional learning questions for thinking

1. What is geographical thinking?

2. What makes geography geography?

3. What makes geography teaching geography teaching?


A WAY OF THINKING ABOUT GEOGRAPHICAL LEARNING

The vocabulary of geography
*The knowledge and skills of geography*

The geographical vocabulary is a means to an end and not an end in itself!

The grammar of geography
*The conceptual understandings involved in thinking geographically*
To explore for the future

A CONCEPT IS?

• A general idea derived from specific instances or occurrences
• Something formed in the mind, a thought or notion
• An abstract or psychological thing that can be understood, operate with and apply
• A tool of inquiry
• An aspect of thought
• A unit of thought in terms of what one thinks
• May lead into judgments, propositions or even theories
• Helps frame predictions
• Concepts occur within theories but a theory with general acceptance can become a concept
• Concepts have a tendency to be referred to in connection with the general rather than singular terms
• Are often used to organise/group and classify thoughts
• Concepts can be developed, changed, discovered and invented
• Are something understood, reasoned or imagined
Concepts and thinking

“Concepts are to us like the air we breathe. They are everywhere. They are essential to our lives, but we rarely notice them. Yet only when we have conceptualized a thing in some way, only then, can we think about it.”

http://www.criticalthinking.org/pages/thinking-with-concepts/525
Meaning making

“We approach virtually everything as something that can be given meaning by the power of our minds to create a conceptualization and to make inferences on the basis of it.”

http://www.criticalthinking.org/pages/thinking-with-concepts/525
All "content" involves concepts. There is no way to learn a body of content without learning the concepts which define and structure it. There is no way to learn a concept without learning how to use it in thinking something through. Hence, to learn the concept of democracy is to learn how to figure out whether some group is functioning democratically or not.

http://www.criticalthinking.org/pages/thinking-with-concepts/525
CREATING A SOUND BITE!

The need to articulate the nature of Geography – concisely but accurately for modern Geography.

Create an age-appropriate, engaging and student relevant sound bite of no more than two sentences for your students for when they ask “what is geographical thinking?”

A sound bite is a short clip of speech from a longer piece, often used to promote or exemplify the full length piece. A sound bite is characterised by a short phrase or sentence that captures the essence of what the speaker is trying to communicate.
The concepts are the lens through which students develop understandings in Geography
GEOGRAPHICAL THINKING

- Place: meaning, diversity, sustainability, identity, uniqueness, local-global, characteristics, intangible
- Space: location, human, pattern, distribution, natural, interconnection, trends, density, proximity, virtual, relative
- Interconnection: processes, Human-environment, links, associations, impact of change, system, flow, interdependence
- Change: system, change, futuristics, bio-sphere, hierarchies, sustainability, living, biodiversity, Non-living, interconnection, time, consistency, movement, pace, dynamic, zoom, measurement, directions, distance, space, maps
- Sustainability: equity, justice, human-physical, processes, sustainability, biosphere, ecology, Generational, living, local-global
- Environment: system, change, Human-physical, living, interconnection, change, system, biosphere, hierarchies, sustainability, living, biodiversity, Non-living, interconnection, time, consistency, movement, pace, dynamic, zoom, measurement, directions, distance, space, maps
The concept of environment refers to the biosphere including living and non-living elements. The environment has intrinsic value and is essential to, and interconnected with on-going human wellbeing. Environments which have been significantly altered and created by human activities such as rural or built environments (constructed urban places) are subsets of the bio-physical environment. Geographers also identify with and study social, cultural, economic and political environments.

http://www.bbc.co.uk/nature/humanplanetexplorer

http://www.youtube.com/watch_popup?v=Z0qGvC3vqaA
Interconnection

- Interconnection refers to the **linking of places, environments and spatial patterns** either by tangible links such as roads, railways or by intangible links such as political, economic systems or electronic systems.
- Interconnections are important in understanding why things are changing or need to be changed in different places or environments.
- Interconnections may occur between features of the physical environment (effect on water on soil), human environment (impact of political decision on industry) or between physical environment and human environment features (impact of water on cities).

https://www.youtube.com/watch?v=ysa5OBhXz-Q
• Places, environments and spatial patterns alter over time.
• Changes may be quite slow as is the movement of the tectonic plates or they might be quite rapid as the advancement of a bushfire.
• Places, environments and spatial patterns may be in a state of equilibrium or inertia with little change occurring over a long period of time until an event such as a flood, cyclone or political decision occurs, which rapidly alters the place, environments or patterns.
• Change is about the future as well as the past.
Impacts of Social Change

- Change in life expectancy over 80 years in Australia
The ritual of mating has changed. Two generations ago, getting married was the thing to do soon after leaving school. There is now a more considered process. The late teens and the 20s are spent trialling and testing before making a final decision on the partnership issue in the late 20s. Today's brides are older, wiser and more self-confident. The grooms are pushing 30. Same-sex partnerships have become ‘unexceptional’.

It is also the point at which couples want a bigger, better, “kidsier” house – often the detached, suburban-based dwelling. But not always.

Late 30, early 40s — when modern couples are most likely to divorce. Generally mum stays in the family home while dad opts for up an inner-city bachelor pad.

The 20s – Life-style orientated. Focused on travel and ‘going out’. Prefer living near to where they work and ‘close to the action’.

The 30s are a time of consolidation, of children, and of work for both partners.

Work pressures peak in the 40s.

After the family focus of the 40s comes the ‘empty-nestering’ of the 50s. Some choose to downsize to apartment living – driven by lifestyle factors.
The late 70s+. This is a space colonised by the pre-boomer the frugal generation. They remember WWII. They either fought in wars, recalled the Great Depression, and raised children in the pre-welfare world. They asked for and got nothing. Many cling to the family home until the nursing home becomes the only viable alternative.

The baby boomers are remaking the 60s. Gone are the cardigans, the day in the garden and lawn-bowls. A new narrative has been written on how to live this stage in the life cycle. They are busy spending their (often generous) superannuation benefits on travel and other lifestyle related activities. Many have elected to downsize to apartments (or other forms of medium density housing) that better matched their lifestyle aspirations. Many choose to remain engaged in the workforce on a part-time capacity.

Mid-late 50s the focus on work gives way to lifestyle considerations. Travel is de rigueur. Travel chat is uber de rigueur.

Mid-70s – Mobility issues limit the amount of travel. For many cruising becomes the only viable holiday option.
Sustainability addresses the **ongoing capacity of Earth to maintain all life.**
Sustainability is a broad social goal linking on-going natural environmental (ecological) wellbeing with human (social and economic) wellbeing.
Whilst focussing on the **environmental sustainability** of the natural world, geographers also talk about **social, economic and political sustainability** – the quadruple bottom-line.

http://www.youtube.com/watch?v=Z5LHwY8X_JI
Ecological Footprint Quiz

Ecological footprints measure humanity's demands on nature. Everything we do has consequences...

Ever wondered how much "nature" your lifestyle requires? You're about to find out. The Ecological Footprint Quiz estimates the amount of land and ocean area required to sustain your consumption patterns and absorb your wastes on an annual basis. After answering 27 easy questions you'll be able to compare your Ecological Footprint to others and learn how to reduce your impact on the Earth.

How BIG is Your Ecological Footprint?

Select language

Donate
Licensing
Educators


http://myfootprint.org/en/
Space

- Human and natural features have locations within space.
- Within a space we can locate human features, such as a town or a specific building.
- The world is organised spatially i.e. location, distribution and pattern.

http://www.qgis.org/en/site/

Where are the 4 corners of the earth
Maps of anything and everything!

24. A map of the countries that consume the most milk:

Getting started with a free and simple GIS program and data use

ArcGIS online

QGIS  http://qgis.org/
Introduction

In this 21st century, the use of modern information and communication technologies (ICTs) has greatly enhanced the excitement of geographical learning. This includes the use of communication networks, computers, software, digital data storage and audiovisual systems. Students can benefit greatly from appropriate use of ICTs, particularly geospatial technologies which support spatial thinking and also make the acquisition of knowledge more efficient and engaging.

Illustrations of practice materials provided are:

- Overview
- Illustration 1: Simple geospatial technologies
- Illustration 2: Data visualisation
- Illustration 3: Interactive geospatial technologies
- Illustration 4: Intermediate geospatial technologies
Scale

- Scale is about the **hierarchy of divisions** from the personal to the local, regional, national, world, regional, global and sometimes, universal.
- A map is a scaled snapshot of where we are looking at any time – the zoom snapshot.
This is data attached to place – we call it spatial data and it is the raw material for modern geography.

http://www.publicprofiler.org/
Place describes specific areas of the Earth’s surface, and range from a small place such as a classroom, through to a local area, to a country to a major world region.

- The uniqueness of places is closely linked to identity and culture.
- Geographers talk about a ‘sense of place’ and the varying of ‘perception of place’.
- The characteristics of a place 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, while others are intangible, such as wilderness and socioeconomic status.

http://vimeo.com/71032050
Many German Lutheran immigrants settled in our Valley from the early years of South Australia's history.

The first German Lutheran settlers arrived in South Australia under the leadership of Pastor August Kavel. These 'Old Lutherans' left Prussia in the 1830s seeking freedom of worship after Friedrich Wilhelm III forced the union of the Lutheran and Reformed churches and imposed a new Order of Service.

Kavel contacted George Fife Angas, a devout Christian, London merchant and chairman of the South Australian Company which had been set up to facilitate the settlement of the new colony. Angas saw Kavel and his people as being suitable settlers. He sponsored their migration in 1838-9 and helped them settle on fertile land he had purchased in the Barossa Valley.

The first Lutheran settlement was established at Bethany in 1842. Many more Lutherans followed. They were mostly farmers and tradespeople and their faith, industry and thrift established a successful stable society that continues to the present day.

The Lutheran Church still plays an important role in the life of the Barossa people. The unique architecture of the Lutheran churches is a feature of the Barossa landscape. Early church services were often accompanied by choirs and brass instruments, both of which are still played locally by J.

Although the G in the Barossa, settling at Lyndes scattered local Valley's develop...
Geography concepts

- Emphasises that no object of geographical study can be viewed in isolation.

- Is knowing where places and landscapes are located, why they are there and the patterns and distributions they create.

- Is about the way that geographical phenomena and problems can be examined at different spatial levels.

- Is the significance of places, what they are like and what they mean to people.

- Is about the significance of the environment in human life and the important interrelationships between humans & the environment.

- Is about the capacity of the environment to continue to support lives into the future.

- Is about explaining geographical phenomena by investigating how they have developed over time.
By the end of Year 8, students explain geographical processes that influence the characteristics of places and explain how places are perceived and valued differently. They explain interconnections within environments and between people and places and explain how they change places and environments. They propose explanations for spatial distributions and patterns among phenomena and identify associations between distribution patterns. They compare alternative strategies to a geographical challenge and propose a response, taking into account environmental, economic and social factors.

Students identify geographically significant questions from observations to frame an inquiry. They locate relevant information from a range of primary and secondary sources to answer inquiry questions. They represent data and the location and distribution of geographical phenomena in a range of appropriate graphic forms, including maps at different scales that conform to cartographic conventions. They analyse geographical data and other information to propose explanations for spatial patterns, trends and relationships and draw reasoned conclusions. Students present findings, arguments and ideas using relevant geographical terminology and graphic representations in a range of appropriate communication forms. They propose action in response to a geographical challenge taking account of environmental, economic and social considerations and predict the outcomes of their proposal.
HASS links to be made

History concepts

Civics and Citizenship concepts

Business and Economics concepts
Resources
About support units

Support units provide illustrations of practice designed to support teacher's professional learning and provide guidance, information and resources in eight areas of geographical education:

- Thinking geographically
- Why teach geography?
- Professional practice
- Fieldwork
- ICTs in geography
- Assessment in geography
- Language of geography
- Geographical inquiry

Each illustration is unique, and a variety of materials and styles are used. All illustrations provide information for teachers to support students' active engagement in learning.
Leading Learning
Making the Australian Curriculum work for us

- Why this approach? - our strategic intent
- What you value - finding the essence
- Tuning in - why the essence matters
- Bringing it to life - essence meets content
- Learning Design - activating TIE
- Into the classroom - who’s doing the thinking?
- Submit feedback
- Subscribe for updates

What you value - finding the essence

Every teacher has valuable skills and experience they bring to their teaching. It is important to ask ourselves what we believe each learning area is for. If we can identify why we teach what we teach, we can tailor our Learning Design to meet our goals. In this section teachers and leaders work together to identify what they really value for their students’ learning and to find this essence in the different learning areas.

1. Sound bites
   A video series capturing a range of voices—teachers, subject matter experts, and children—talking about what they think a particular learning area for

2. Wordle Explorer
   Exploring the Australian Curriculum through wordles generated for each learning area to find where our values are expressed

3. Learning Area Explorer
   An activity designed to help us find our values in the text of the Australian Curriculum learning areas

4. Talking Heads
   A video series of disciplinary experts discussing the shift of focus and valued learning in their relevant learning area of the Australian Curriculum

RATIONAL
Geographers have a structured way of exploring, analyzing, and understanding the characteristics of places that make up our world. Using the concepts of place, space, environment, interconnection, sustainability, scale, and change, it addresses the relationships between humans and the environment, and how these relationships influence the environmental characteristics of places and the management of spaces within them. The influence of places including Their location, the environment, and the management of spaces within them.

VALUES
- A sense of wonder, curiosity and respect for places, people, cultures and environments.
- A deep understanding of the interaction between places, people, cultures and environments.
- An appreciation of the diversity of the world's places, peoples, cultures, and environments.
- The ability to think critically, using geographical concepts and principles, and the capacity to develop problem-solving skills and abilities.
- The capacity to recognize, understand, and communicate about geographical inquiry and skills.

Organisation
Geography identifies the concepts of place, space, environment, interconnection, sustainability, scale, and change, as integral to the development of geographical understanding. These are high-level ideas or ways of thinking that can be applied across the subject to identify, question, explore, and communicate about geographical issues and problems.

Year 8 Achievement Standard
By the end of Year 8, students explain the characteristics of places in different locations at different scales. They describe the environment and identify the interconnections between places, people, and environments. They describe the location of selected countries in terms of place and environment. They describe the location of selected countries in terms of place and environment. They identify alternative ways to respond to a geographical challenge and identify the expected effects of their proposed actions.

Year 6 Content Descriptions
Geographical Knowledge and Understanding
- The location of major countries of Europe and North America in relation to Australia and the influence of people on the environmental characteristics of places in these countries.
- The influence of people, including Aboriginal and Torres Strait Islander Peoples, on the environmental characteristics of Australian places.
- The changing environment on the significance of places and the management of spaces within them.
- The relationship between natural features and the environments of communities and how people use and manage ecosystems.

Geographical Inquiry and Skills
- Observing, questioning, and planning.
- Developing geographical questions to investigate and plan inquiries.
- Collecting and organizing geographical data and information, using ethical protocols, from primary and secondary sources, including people, maps, photos, satellite images, maps, and tables.
- Evaluating the usefulness and representativeness of data in different forms, such as maps, photos, tables, graphs, and charts.
- Interpreting, analyzing, and communicating geographical findings and data, using digital and spatial technologies as appropriate.

Interpreting, analysing, and communicating geographical data and information, using digital and spatial technologies as appropriate.
Tuning in - why the essence matters

Leading Learning
Making the Australian Curriculum work for us

- Why this approach? - our strategic intent
- What you value - finding the essence
- Tuning in - why the essence matters
- Bringing it to life - essence meets content
- Learning Design - activating TIEL
- Into the classroom - who's doing the thinking?
- Submit feedback
- Subscribe for updates

1. The story of the learning areas
   A video animation series describing the essence of each learning area and how the components of the learning areas work together

2. Randomiser tutorial
   A video introduction to the Randomiser tool

3. Connecting content and essence
   A professional online learning tool called the 'randomiser' that provides thinking practice in viewing the content descriptions through the essence of the learning area

AGTA’s PROFESSIONAL LEARNING RESOURCES

AGTA’s PROFESSIONAL LEARNING PROGRAM AND RESOURCES


AGTA’s AC: Geography professional learning program
AGTA SKILLS BOOKS

Resources from the UK Geography Association

recommended by AGTA

http://www.geography.org.uk/

http://www.geography.org.uk/shop/
TEXTBOOKS

A useful resource for teachers but beware of text books containing blackline masters for students - loosely linked to the curriculum!

Cambridge University Press

https://www.cambridge.edu.au/education/search?q_subject=Humanities


https://www.cambridge.edu.au/education/search?q_subject=Humanities

Cambridge University Press

Oxford Big Ideas Geography/History 7 AC
Student Book + obook/assess
Secondary > Humanities

[2013]
ISBN: 9780195590137
Author(s): Mark Easton, Maggy Saldais
Price: $62.95 (AUD)
Format: Bundle

https://www.cambridge.edu.au/education/search?q_subject=Humanities
Discovering Geography
Implement the Australian Curriculum: Geography F–6 with ease


Australian Curriculum RIC Publications: F-6
Australian Curriculum Geography is a seven-book series linked to the requirements of the Australian National Curriculum for each stage of primary school from Foundation to Year 6.

This is a rich online resource about the geography of Greece. It consists of four sections: a Geography section that introduces Greece’s geographical features, seafaring tradition and establishment of colonies around the Mediterranean; a Story section that recounts 'The Odyssey' in an illustrated abridged version; an Explore section that features interactive maps addressing different aspects of the geography of classical and modern Greece; and a Challenge section where students explore an ancient Greek shipwreck and deduce the probable course of
http://www.agta.asn.au

Latest issue of AGTA’s Geographia

The July 2015 issue of AGTA’s newsletter Geographia is now available. Contents include

- Don Biddle Award
- Australian Curriculum
- AGTA members
- Tim Costello to stay
- AGTA conference
- AGTA website
- APPA/Aust. Curriculum
- Global poverty
- Competition/Big Week Out
- Geography Education
- Decadal Plan
- Around the affiliates
The Spatialworlds blog is a repository of teaching resources, images, commentary and website links for those interested in spatial education, spatial technology and geography in schools.

The app opportunity for the geography classroom


Related links to Spatialworlds
- Geogaction
- Spatialworlds website
- GeogSpace
- Australian Geography Teachers' Association website
- Geographical thinking Scoop.it
- Spatial literacy Scoop.it
- History and geography Scoop.it
- Spatial Education and technology Scoop.it

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