

Exciting your students in Geography

Aims, Inquiry, Skills, Content

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Inquiry

- Inquiry - creating excitement and the need to inquire
- Inquiry - digging deeper than the obvious
- Inquiry – going outside the classroom
- Inquiry – using technology to explore the world
- Inquiry – encouraging deeper thinking

Skills

- Skills – developing geography skills to help inquiry
- Skills – which skills at which levels?
- Skills – developing generic thinking skills
 - Analysis / relevance / reasoning / discrimination

Rationale and Aims of National Curriculum for Geography

- Rationale - 'A study of Geography develops students' **curiosity and wonder** about the diversity of the world's places and their peoples, cultures and environments'
- Aims – 'Develop a **sense of wonder and curiosity** about places, people, cultures and environments throughout the world'

What are your interests - ‘wonders and curiosities’?

- Maps?
- Travel?
- Reading?
- Bushwalking?
- Photography?
- Gardening?
- Weather?
- Animals and plants?
- Conservation?
- Influencing the local area?
- Other cultures?
- Interesting people and places?
- Environmental issues?

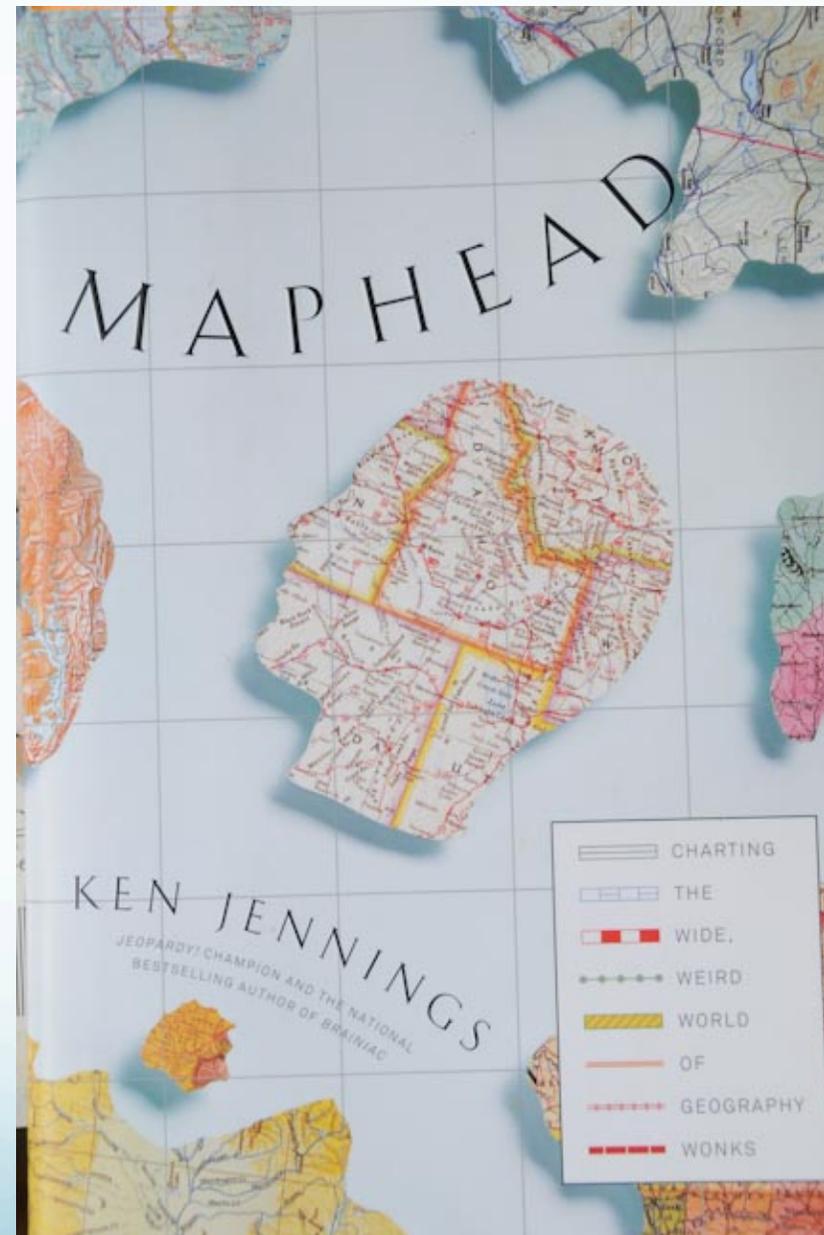
Good teaching

- Start with the child's interests and knowledge –
- BUT don't stop there!
- **Expand, extend, deepen**
- Use your own excitement, 'sense of wonder and curiosity' to excite students
- Use other students' curiosity to stimulate more students

Some interests as starting points for 'wonder and curiosity'

- Maps
- Video clips
- Photographing geographically
- Spatial and graphic technologies
- Travel
- Reading

I love
maps!



Imagine yourself here!



The World 1470 – Germanus after Ptolemy

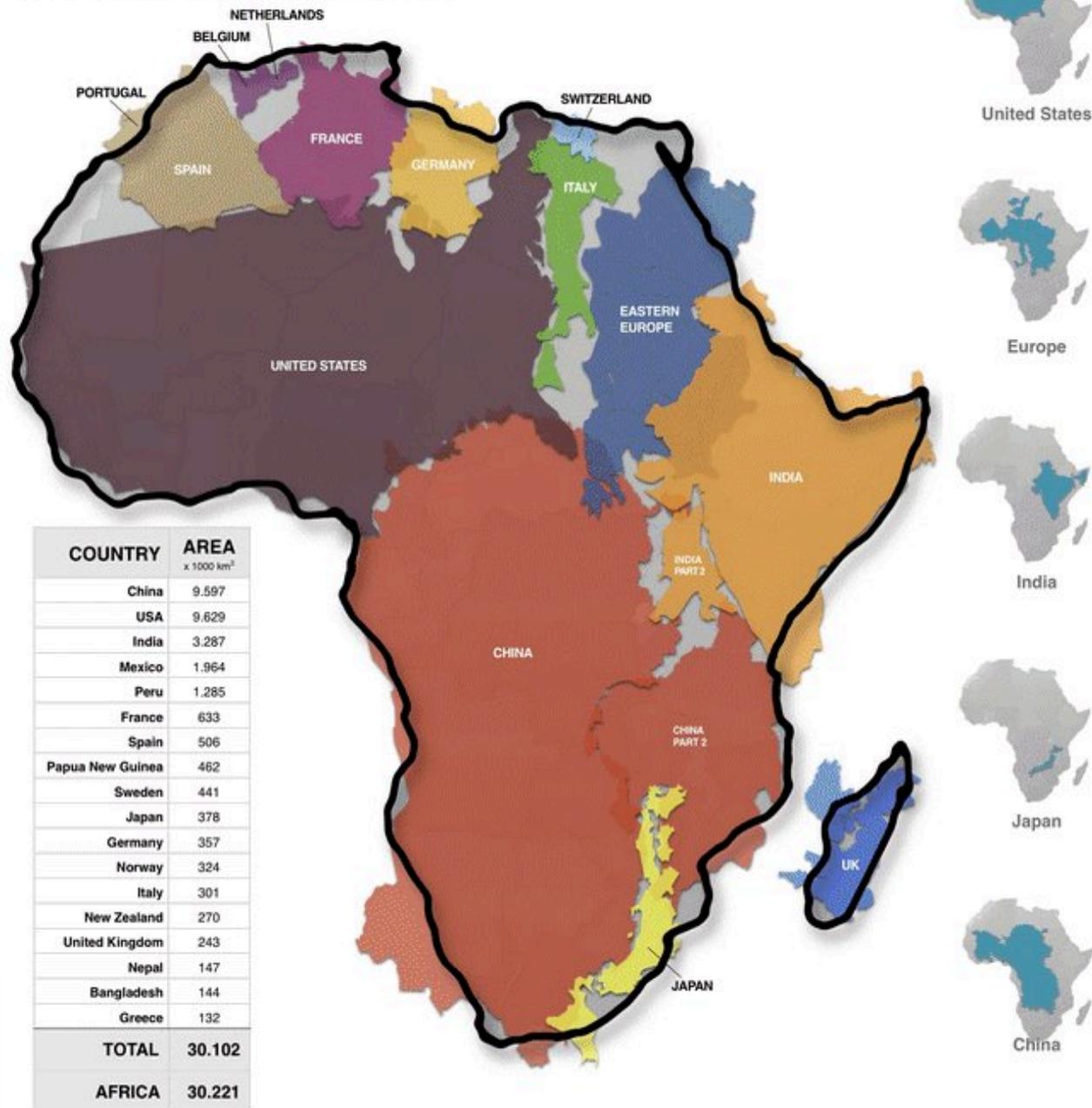


Fun maps



The True Size of Africa

A small contribution in the fight against rampant *Immappancy*, by Kai Krause
 Graphic layout for visualization only (some countries are cut and rotated)
 But the conclusions are very accurate: refer to table below for exact data



United States



Europe



India



Japan



China

Fictional maps – 100 acre wood



Video clips - *Youtube*

- Human Planet – desert fishing
- Rise of the continents – swimming in Victoria Falls
 - <https://www.youtube.com/watch?v=ue2gcyT4fc4>
- Supersized Earth – introduction
 - <https://www.youtube.com/watch?v=B-aI0WHuJHc>

Inquiring related to concepts

- Place – What characteristics make a particular place unique and attractive to millions of tourists?
- Place – What do I like about my place?



Space

- Space – Why are there such distinctively different suburbs and streets in my city?
- Space – How is space used in my street?

suburbs into new areas. Often they move into larger and better houses.



Environment

- Environment – Are the actions of people more important in causing bushfires than the temperature, winds, trees and lack of moisture?
- Environment – How do animals live in a desert?



Interconnection

- Interconnection – Why is Australia increasingly connected by trade, education and migration to China?
- Interconnection – Which places do I have connections with?



Sustainability

- Sustainability – Which forms of energy can be produced in a sustainable way?
- Sustainability – What better uses of water and power can be made in our school?



Scale

- Scale – How does the removal of natural vegetation in your local area have effects on far away areas?
- Scale – What do electronic maps show differently as I change their scale?



Change

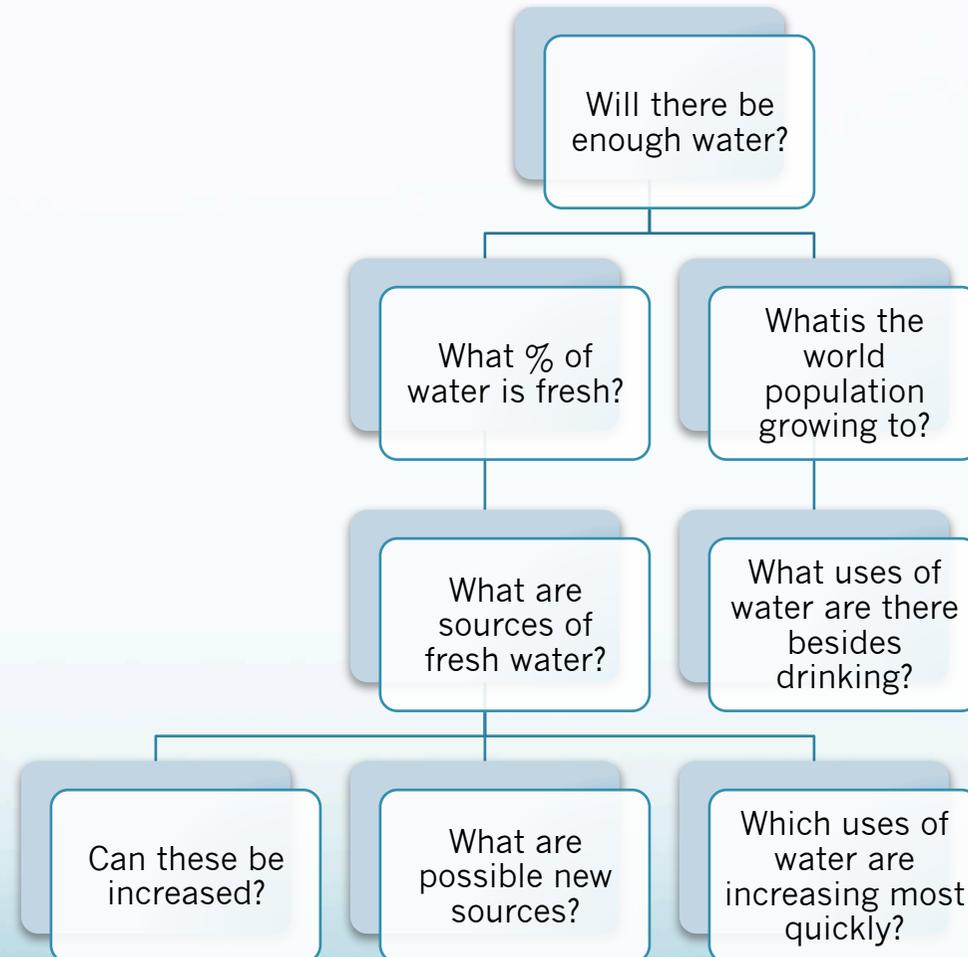
- Change – What causes technological change to be so different between different countries and communities?
- Change – What are the good and bad changes in my local area?



Inquiry – Digging deeper

- Writing inquiry questions from broad questions

Teasing out broad inquiry questions



An example of inquiry in Year 7: Water in the World

Stage of Inquiry	Investigating water scarcity	
Observing Questioning Planning	What is a definition of water scarcity? Is it all over Australia? Is it seasonal or permanent?	
Collecting Recording Evaluating Representing	Maps of Australia's climate Climate graphs Diagrams of the water cycle Weather maps Statistics	

An example from Year 7: Water in the World

Collecting
Recording
Evaluating
Representing

Maps of Australia's climate
Climate graphs
Diagrams of the water cycle
Weather maps
Statistics

Interpreting
Analysing
Concluding

Interpreting graphs
Transforming statistics to graphs

Communicating

Written report

Reflecting
Responding

Different values about water and its uses

Teasing out broad inquiry questions

Discuss one of these and suggest further smaller inquiry questions

- Year 4: Why do different animals live in different regions of the world?
- Year 5: In what ways do humans change their environments for better and worse?
- Year 6: What are Australia's global connections between people and places?

Inquiry – Going outside the classroom

- Lower Primary - slimy place, noisy place, quiet place, busy place, wet place, windy place - reasons why
- Mid Primary – features of a place – the character of the local area
- Upper Primary – different places, interesting places, well-known places
- Secondary – issues, proposed developments, environments, landscapes, townscapes

Types of Fieldwork

- Fieldwork based on collecting data
- Fieldwork based on hypotheses
- Fieldwork based on enquiry
- Fieldwork based on experiences

Fieldwork techniques

- Qualitative
 - Photographing,
 - Sketches and diagrams
 - Sketch maps
 - Interviews and questionnaires
 - Observations
- Quantitative
 - Counting and recording (statistical surveys)
 - Surveys of people
 - Questionnaires
 - Mapping landuse
 - River / coast / street surveys
 - Weather-related measurements

Photography in fieldwork

- Not just taking photographs – but PHOTOGRAPHING GEOGRAPHICALLY !
- Look for geographical characteristics
- Look for contrasts and juxtapositions
- Look for stories that the photo can tell
- Be careful with framing to emphasise the point

Framing



Juxtaposition



Telling a story



Geographical characteristics



Framing

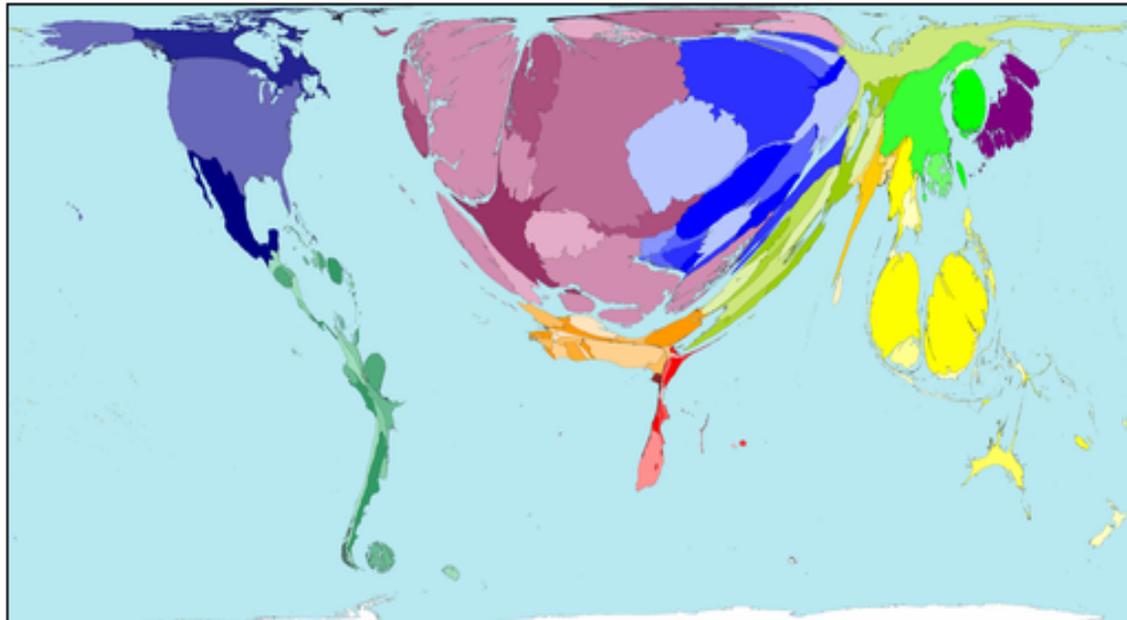


Telling a story



Using technology in inquiry

- Exploring the world with technology
 - Google Earth
 - WorldMapper
 - GapMinder



"Sixty nine percent of EU citizens indicated that travelling across EU borders is as easy as travelling in their own country." Elitsa Vucheva, 2005

The international tourists that made 665 million trips in 2003 were primarily residents of Western Europe, North America and Eastern Europe. Very few tourists came from Central Africa, South Eastern Africa and Southern Asia. International tourism includes both crossing into a neighbouring country and taking a trans-oceanic flight.

On average the residents of Antigua and Barbuda left their islands 3.66 times per year – at the other extreme residents of Angola left on average 0.0002 times per year. In other words less than 0.02% of the Angolan population made tourist visits abroad in 2003.

Territory size shows the proportion of the world international tourist trips made by residents of that territory abroad.



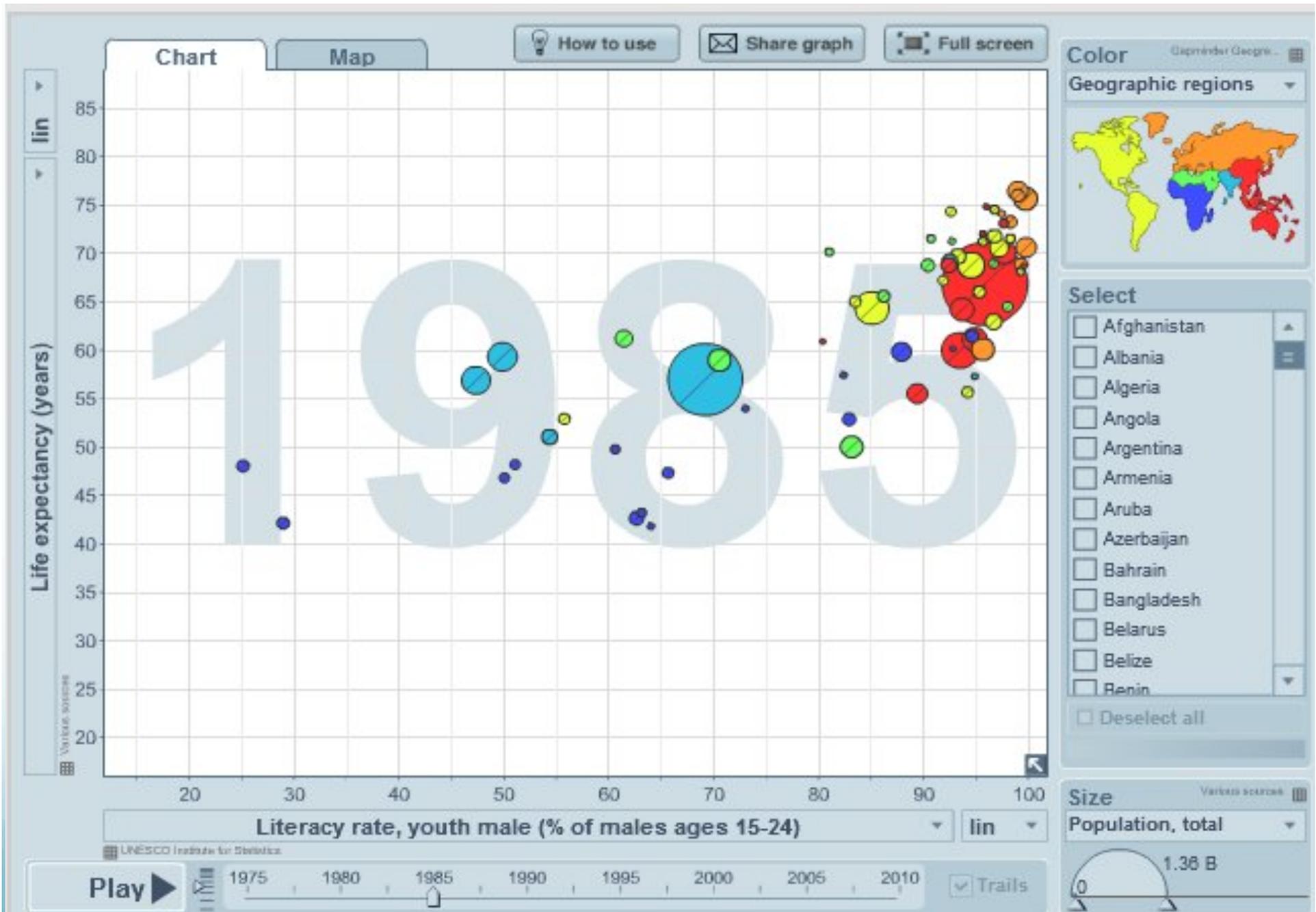
[Open PDF poster](#)

- [Open PDF poster](#), designed for printing. You need [Acrobat Reader](#).
- View [labelled territory map](#) or [population map](#) for comparison
- Data files: [Excel \(large with map\)](#), [Excel \(small no map\)](#), [Opendoc format \(see notes\)](#)
- [Technical notes for this data](#).



[Open Population Map comparison](#)

http://www.worldmapper.org/textindex/text_index.html



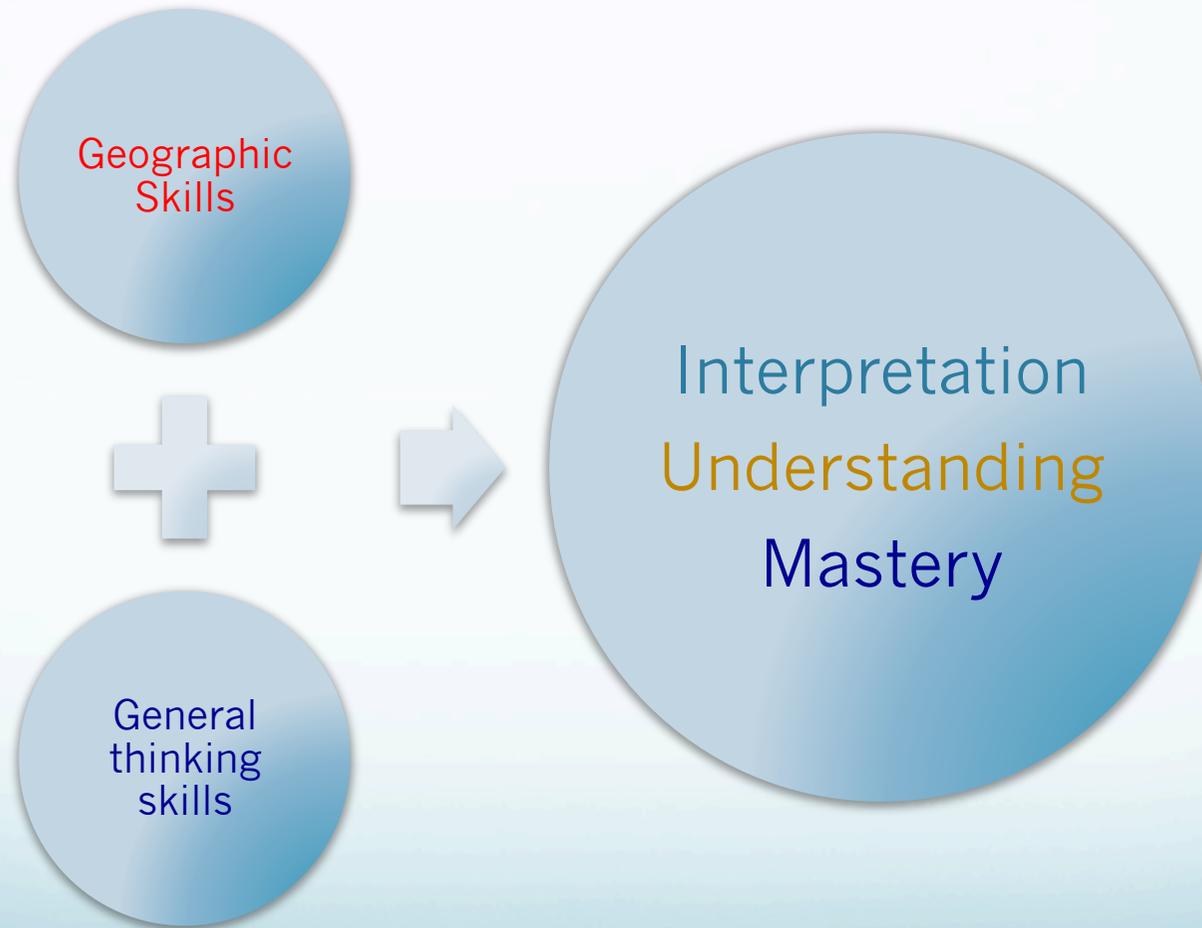
Gapminder

<http://www.gapminder.org>

The links between inquiries and skills

- To do an effective inquiry in Geography you need a range of skills.
- Some of these are generic skills that are used in any subjects.
- Some are skills that are more specific to Geography.
- All of these skills need to be learned and practised in a well-managed education.

Skills



Encouraging deeper thinking

- Analytical thinking
- Relevance
- Logical reasoning
- Discriminating
- Predicting
- Empathising

Developing analytical skills

- Read through the information about latitude and longitude.
- Analyse the information by breaking it into smaller pieces.
- Which pieces give you historical information?
- Which pieces inform you about the lines on maps?

Thinking Skills - Relevance

- **An inquiry into changes in Byron Bay**
- *Relevant and irrelevant facts. Sort these facts into two groups: relevant to the inquiry into changes / irrelevant to the inquiry into changes. Then sort the relevant facts into Most important / less important*

Thinking skills as part of Literacy

- **Explaining:** Reorder the information in the reading to write some brief notes that would help you explain the heritage features of North Adelaide to another person.
- **Analysing:** Break up the case study in reading into three or four smaller parts.
- **Seeing relevance:** Choose only the facts from reading which relate to 'the size of houses'
- **Logical reasoning:** Use the information in reading to explain in your own words with logical reasoning why the houses for workers were built on the lower land.

Thinking skills - photographs

- **Discriminating:**
- Look at the photograph which shows part of Sacramento in USA. Make three lists of objects fitting into each of these categories: Modern things, Old (nineteenth century) things, things which are made to look old but are really modern

Modern things, Old (nineteenth century) things, things which are made to look old but are really modern



Thinking skills - photographs

- **Predicting:**
- Look at the photograph which shows mesas in Monument Valley desert area of USA. Predict what this area might look like in 200 years and in 10,000 years.

Predict what this area might look like in 200 years and in 10, 000 years.



Thinking skills - photographs

- **Empathising:**
- Look at the photograph which shows peak hour traffic in a village on the River Elbe in Germany. Write what might be the thoughts of the car drivers, the house owners, and the tourists taking this photograph.

What might be the thoughts of the car drivers, the house owners, and the tourists taking this photograph.



Specific Geography Skills and Techniques

There are a group of skills which geographers use most often, and it is these skills which need to be practised and developed in Geography

- map skills
- field techniques,
- photographs,
- statistics,
- graphs,
- diagrams

Foundation year

- Pictorial maps and the terms direction, location and features.
- Aware that features can be represented on globes and map.

Year 1

- Respond to questions
- Work at the local scale when using pictorial maps and describing location and direction

Year 2

- Pose questions Use simple geographical terms.
- Represent features using tables and labelled maps.
- Describe places at different scales.

Year 3

- Pose simple geographical questions Use simple geographical terminology.
- Collect information
- Describe the characteristics of places at the local scale.
- Use simple graphs and labelled maps.
- Make a map with a title, north point and legend.
- Describe location using grid references and compass directions.
- Describe distributions.

Year 4

- Develop geographical questions Using geographical terminology
- Work at the National scale.
- Relative location.
- Identify patterns with the distribution of features.
- Make a simple graphic form and a large scale map.
- Record information/data from different sources.
- Make a map including scale and interpret distance between features on the map.
- Identify spatial distributions and simple patterns.

Year 5

- Collect and record information from a range of sources.
- Make small scale maps
- Identify spatial distributions, simple patterns and trends and infer relationships

Year 6

- Work at different scales (spatial levels).
- Use simple geographical terminology and graphical representations.
- Absolute location (latitude and longitude).
- Compare spatial distributions, patterns and trends.
- Infer relationships from the spatial distributions, patterns and trends.

Thinking Skills

- Explaining
- Analyzing
- Seeing relevance
- Creative thinking
- Discriminating
- Being constructively critical
- Logical reasoning
- Transforming information
 - (continued>)

Thinking skills (cont)

- Predicting
- Evaluating
- Empathising
- Synthesizing
- Conceptualising
- Identifying cause and effect
- Comparing
- Futures thinking

Putting inquiry/skills/content/ concepts together

- Year 5 – inquiry into the changing influence of humans on features of the local environment
- Year 6 – inquiry into differences in economic, demographic and social characteristics between countries

Content Year 5

- Major countries of Europe and North America
- Influence of people on environment and places
- Influence of environment on human characteristics
- Impact of bushfires or floods

Inquiry Year 5

- Inquiry into links between people and environment
 - How do people and environments influence one another?
 - How do people influence the human characteristics of places and the management of spaces within them?
 - How can the impact of bushfires or floods on people and places be reduced?

Skills for Year 5

- Locating places using atlas maps/Google maps
- Finding and evaluating written sources and reports
- Constructing large- and small-scale maps using map conventions
- Interpreting spatial and statistical data

Where now?

- Excite curiosity
- Promote thinking
- Link inquiry, skills and thinking together

Achievement standard Year 6

- By the end of Year 6, students explain the characteristics of diverse places in different locations at different scales from local to global.
- They describe the interconnections between people and places, identify factors that influence these interconnections and describe how they change places and affect people.
- They describe the location of selected countries in absolute and relative terms and identify and compare spatial distributions and patterns among phenomena.
- They identify and describe alternative views on how to respond to a geographical challenge and propose a response.
- Students develop geographical questions to frame an inquiry.
- They locate relevant information from a range of sources to answer inquiry questions.
- They represent data and the location of places and their characteristics in different graphic forms, including large-scale and small-scale maps that use cartographic conventions of border, source, scale, legend, title and north point.
- Students interpret data and other information to identify and compare spatial distributions, patterns and trends, infer relationships and draw conclusions.
- They present findings and ideas using geographical terminology and graphic representations in a range of communication forms.
- They propose action in response to a geographical challenge and describe the expected effects of their proposal.

Content Year 6

- Major countries of Asia
- Differences in economic, demographic and social characteristics between countries
- World's cultural diversity
- Events that connect people and places
- Australia's connections with other countries

Inquiry Year 6

- How do places, people and cultures differ across the world?
- What are Australia's global connections between people and places?
- How do people's connections to places affect their perception of them?

Skills Year 6

- Locating major countries of Asia and the globe as a whole
- Collecting numerical data showing diversity, processing it, displaying it, and interpreting it
- Recognising and describing spatial patterns using maps
- Presenting findings in a range of communication forms

