 Changing places

Stage 5 Geography

Key inquiry questions

* Why has the world become more urbanised?
* How does migration impact on the concentration of people into urban places?
* How does urbanisation change environments and places?
* What strategies are used to manage environmental change in urban places to enhance sustainability?

Overview

Students:

* examine the patterns and trends in population movements and the increasing urbanisation of countries
* discuss the reasons for internal and international migration patterns and the consequences of population movements, including the increased concentration of populations within countries
* examine strategies to create liveable and sustainable urban places, propose solutions and suggest opportunities for active citizenship.

Outcomes

A student:

* explains processes and influences that form and transform places and environments GE5-2
* analyses the effect of interactions and connections between people, places and environments GE5-3
* assesses management strategies for places and environments for their sustainability GE5-5
* acquires and processes geographical information by selecting and using appropriate and relevant geographical tools for inquiry GE5-7
* communicates geographical information to a range of audiences using a variety of strategies GE5-8

Outcomes and other syllabus material referenced in this document are from:

* [Geography K-10 Syllabus](http://syllabus.nesa.nsw.edu.au/hsie/geography-k10/) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2015

Teaching and learning activities

Inquiry questions

For each key inquiry question, students are encouraged to design their own inquiry questions as a subset in order to complete the geographical inquiry process which forms the bases of these teaching and learning sequences.

Assessment

The strategies require students to demonstrate their learning and are all either assessment for learning or assessment as learning activities. Some activities might be selected and included in a school assessment schedule for assessment of learning.

Syllabus references

Urban settlement patterns

Students:

* investigate differences in urban settlement patterns between Australia and another country, for example: (ACHGK055)
  + examination of urban settlements to determine patterns of concentration
  + explanation of factors influencing [urban concentration](http://syllabus.bos.nsw.edu.au/glossary/ge/urban-concentration/?ajax) e.g. [climate](http://syllabus.bos.nsw.edu.au/glossary/ge/climate/?ajax) and [topography](http://syllabus.bos.nsw.edu.au/glossary/ge/topography/?ajax), transportation networks, land use or [perceptions](http://syllabus.bos.nsw.edu.au/glossary/ge/perception/?ajax) of [liveability](http://syllabus.bos.nsw.edu.au/glossary/ge/liveability/?ajax)
  + assessment of the consequences of urban concentrations on the [characteristics](http://syllabus.bos.nsw.edu.au/glossary/ge/characteristics/?ajax), liveability and sustainability of places

Causes and consequences of urbanisation

Students:

* investigate the causes and consequences of [urbanisation](http://syllabus.bos.nsw.edu.au/glossary/ge/urbanisation/?ajax) with reference to ONE Asian country, for example: (ACHGK054)
  + identification of [spatial distribution](http://syllabus.bos.nsw.edu.au/glossary/ge/spatial-distribution/?ajax) patterns
  + description of the causes of urbanisation
  + examination of economic, social or environmental consequences of urbanisation

Internal migration

Students:

* investigate reasons for and effects of [internal migration](http://syllabus.bos.nsw.edu.au/glossary/ge/internal-migration/?ajax) in Australia and another country, for example: (ACHGK056, ACHGK057)
  + analysis of trends in temporary and permanent internal migration
  + discussion of economic, social or environmental consequences of internal migration on places of origin and destination

International migration

Students:

* investigate the reasons for and effects of [international migration](http://syllabus.bos.nsw.edu.au/glossary/ge/international-migration/?ajax) to Australia, for example: (ACHGK058)
  + analysis of international migration patterns
  + explanation of where and why international migrants settle within Australia
  + examination of characteristics and spatial patterns of Australia’s cultural diversity

Australia’s urban future

Students:

* investigate the management and planning of Australia’s urban future, for example: (ACHGK059)
  + description of Australia’s projected population growth
  + discussion of the implication of population forecasts for the future growth and sustainability of urban places
  + explanation of strategies used to create economically, socially and environmentally sustainable urban places
  + proposal of ways for individuals and communities to contribute to a sustainable urban future

Learning sequence 1

Teachers’ note

Urban settlement patterns are large permanent settlement, built up area with a relatively dense population compared to its hinterland

Key inquiry question

* Why has the world become more urbanised?
* How does migration impact on the concentration of people into urban places?

1.1 – Urbanisation of Asia, a case study of an urban area

Teachers’ note

* define essential terms, including urbanisation, urban settlement, population, population movements, migration patterns, liveability of urban places, sustainable of urban places
* form student groups, of six and allocate **one** Asian urban area (a large city or regional centre), for each group to investigate and report on as a part of developing an overview of Asia’s urban settlement patterns.

‘Hot Spot’ background

A national television network is seeking information about an Asian country’s patterns of urbanisation to feature in a new reality television show called ‘Hot Spot’. Hot Spot will highlight the distinctiveness of urban areas of the countries of Asia. A large media production company, who wants to tender for this show, has employed you and your classmates. Your managing director wants information about a country suitable to be the focus of their tender. You have been asked to form groups of six and to undertake a fact-finding mission about urbanisation in a country of Asia.

Each group is to design a two-page fact sheet on Asia’s urban settlement patterns, using the urban ‘focus’ area allocated.

Include the following information:

* the construction of a graph/s showing past, current and predicted trends for urban settlement patterns of Asia, in general, and your focus area in particular
* a brief written summary outlining the settlement patterns of the focus area (include information from the above graph and from additional statistics) from the last two decades, presently, as well as forecasting into the future.
* an explanation of local and national factors determining why the focus area has been built up (including climate, topography, transportation networks, land use and liveability) and how the natural environment has changed as a result of urbanisation of the focus area
* an outline of how changes in urban settlement patterns are reflected in the focus areas’ society more generally (consider the impacts on the nature of Asian communities and urbanisation).

A copy of each group's work will be distributed to all students.

Key inquiry question

* How does urbanisation change environments and places?
* What strategies are used to manage environmental change in urban places to enhance sustainability?

1.2 – Urbanisation in Australia

You have been successful in your application to feature in the reality television show. Your managing director has now asked that you source a case study of an urban area in Australia to feature on the television to show the distinct differences between Australia’s urban areas and those in Asia.

Your task is to prepare a four-page report on an Australian urban area, using graphs, maps and visual representations (with minimal writing), and the ‘Process for geographical inquiry’ to answer the following question:

‘What are the patterns, causes and consequences of urbanisation in [urban area in Australia]?’

In your report:

* Identify the spatial distribution patterns of Australia in general as compared to your ‘case study’ urban area within Australia and suggest reasons for differences.
* Describe the causes of urbanisation in Australia in general, and your case study urban area in particular.
* Examine the economic, social, environmental consequences of urbanisation both in Australia and your urban area.
* Identify strategies that are being used to manage environmental change in your urban area, and briefly indicate how these strategies aim to enhance sustainability of the environment.

Ensure that the information you have located is creditable. Acknowledge each step of the ‘Process for geographical inquiry’ in your report.

Internal migration

International migration

Learning sequence 2

(possible assessment task - see outcomes, rubric and marking criteria at the end of this document)

Teachers’ note

Introduce migration terminology. Undertake a class survey of the various places that individuals have lived. Plot each of these locations on a map, introducing the concepts of **internal and international migration**, and **push and pull factors**.

Internal and international migration

You have been asked to analyse the internal and international migration patterns of staff and students at your school and report to the principal about:

* where respondents have lived
* what has influenced the location/s they have lived in (i.e. connections to people, place and environments)
* why they are in their current location (i.e. push and pull factors)

To complete this you will first need to:

1. develop a questionnaire that you will carry out with a minimum of ten staff or students outside your classroom. Note that your questionnaire will need to go through a class “ethics committee” to ensure that the questions are suitable, and for approval to complete and administer the questionnaire. (Note: the teacher will be the ‘chair’ of the committee and will, with the class, develop a series of conditions that will need to be followed. These conditions include:
   * methodology (qualitative, quantitative, mixed methods research)
   * suitability of questions
2. administer the questionnaire - make sure there are no “double-ups” by ensuring those answering your questionnaire haven’t already done so and collate the information.
3. Present the information in the form of a succinct report using visual representations such as graphs, tables, maps or diagrams and information summarised to conclude analysis of findings.

Student note: Use the ‘Process for geographical inquiry’ to give a format to this task. Begin with the development of some related inquiry questions that you would like answered. These will form the basis of your questionnaire.

Australia’s urban future

Learning sequence 3

(Related to Learning Sequence I)

As part of the selection criteria for employees to work on the final tender, the managing director (teacher) requires a more detailed synthesis of the proposed management and planning of Australia’s urban future than was outlined in the group aspect of Learning Sequence I (above) in the form of an analysis (maximum of two pages).

To prepare the final tender you will need to:

* describe Australia’s projected population growth
* construct a flowchart to illustrate the factors impacting on Australia’s population growth
* comment on the overall implication of population forecasts for the future growth and sustainability of urban places in Australia.

Congratulations, you have been selected by the managing director to prepare a bid for “Hotter Spot: the future”. It is to be displayed on a website so that judges from around the world will be able to comment. Your bid will focus on a ‘**City for the future**’

Your task is to design a city for the future in Australia. You may design your city using technology, drawings or models. Prepare a two minute verbal presentation about your city for the future, including answering the following questions:

* What are three economic, social and environmental sustainability issues for your city, and what are your proposed solutions?
* What contributions will individuals and communities have to make to ensure the sustainability of your city for the future?
* What rules are you going to set for residents of your ‘city for the future’ related to liveability?

When designing your “City for the Future” you are in the excellent position of having no pricing constraints whatsoever.

Resources

* [United Nations Population Fund – news on urbanisation](http://www.unfpa.org/urbanization)
* [United Nations Department of Economic and Social Affairs Population Division: *World Urbanization Prospects, the 2014 revision*](http://esa.un.org/unpd/wup/)
* [State of Australian Cities 2014–2015 (Includes past reports from 2010)](https://infrastructure.gov.au/infrastructure/pab/soac/)
* [A national urban policy for a productive, sustainable and liveable future](https://infrastructure.gov.au/infrastructure/pab/files/Our_Cities_National_Urban_Policy_Paper_2011.pdf)

Geographical terminology

* urbanisation
* urban settlement
* population
* population movements
* migration patterns
* liveability of urban places
* sustainable of urban places
* spatial distribution patterns
* urban settlement patterns

Concepts, inquiry skills and tools

Geographical concepts

The following geographical concepts have been integrated into the teaching and learning sequence:

* Place – the reasons urban environments differ
* Space – how space is managed in different places
* Environment – the change to the natural environment as a result of urbanisation
* Interconnection – the links between population growth and liveability of an urban area
* Scale –the differences in urbanisation of Asia and Australia at a variety of scales
* Sustainability – how urban environments can be managed sustainably
* Change – the economic, social and environmental sustainability issues of a changing city; predictions for the future development and design of cities

Geographical inquiry skills

The following geographical inquiry skills have been integrated into the unit.

Acquiring geographical information

* develop geographically significant questions and plan an inquiry that identifies and applies appropriate geographical methodologies and concepts (ACHGS063, ACHGS072)
* collect, select, record and organise relevant data and geographical information, using ethical protocols, from a variety of appropriate primary data and secondary information sources (ACHGS064, ACHGS073)

Processing geographical information

* evaluate information sources for their reliability, bias and usefulness (ACHGS065, ACHGS074)
* represent multi-variable data in a range of appropriate forms, with and without the use of digital and spatial technologies (ACHGS065, ACHGS074)
* represent the spatial distribution of geographical phenomena on maps that conform to cartographic conventions, using spatial technologies as appropriate (ACHGS066, ACHGS075)
* evaluate multi-variable data and other geographical information using qualitative and quantitative methods and digital and spatial technologies as appropriate to make generalisations and inferences, propose explanations for patterns, trends, relationships and anomalies, and predict outcomes (ACHGS067, ACHGS076)
* apply geographical concepts to synthesise information from various sources and draw conclusions based on the analysis of data and information, taking into account alternative perspectives (ACHGS068, ACHGS077)
* identify how geographical information systems (GIS) might be used to analyse geographical data and make predictions (ACHGS069, ACHGS078)

Communicating geographical information

* present findings, arguments and explanations in a range of appropriate communication formsselected for their effectiveness and to suit audience and purpose, using relevant geographicalterminology and digital technologies as appropriate (ACHGS070, ACHGS079)
* reflect on and evaluate the findings of an inquiry to propose individual and collective action inresponse to a contemporary geographical challenge, taking account of environmental, economicand social considerations; and explain the predicted outcomes and consequences of theirproposal (ACHGS071, ACHGS080)

Geographical tools

The following geographical tools have been integrated into the unit.

Maps

* relief maps, political maps, topographic maps, choropleth maps, flowline maps, cadastral maps, thematic maps, isoline maps, land use maps, précis maps, special-purpose maps, cartograms, synoptic charts
* maps to identify direction, scale and distance, area and grid references, degrees and minutes of latitude and longitude, bearings, aspect, altitude, area, density, contour lines, gradient, local relief

Fieldwork

* observing, measuring, collecting and recording data, developing and conducting surveys and interviews
* fieldwork instruments such as weather instruments, vegetation identification charts, compasses, clinometers, GPS, GIS or remote sensing

Graphs and statistics

* data tables, pie graphs, column graphs, compound column graphs, line graphs, scatter graphs, climate graphs, population profiles, multiple tables and graphs presented on a geographical theme, statistics to find patterns and trends, and to account for change

Spatial technologies

* virtual maps, satellite images, global positioning systems (GPS), geographic information systems (GIS), remote sensing data, augmented reality

Visual representations

* photographs, aerial photographs, illustrations, flow charts, annotated diagrams, multimedia, field and photo sketches, cartoons, mind maps, web tools

Assessment task and rubric

Outcomes

* analyses the effect of interactions and connections between people, places and environments GE5-3
* acquires and processes geographical information by selecting and using appropriate and relevant geographical tools for inquiry GE5-7

Internal and international migration

You have been asked to analyse the internal and international migration patterns of staff and students at your school and report to the principal about:

* where respondents have lived
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1. develop a questionnaire that you will carry out with a minimum of ten staff or students outside your classroom. Note that your questionnaire will need to go through a class “ethics committee” to ensure that the questions are suitable, and for approval to complete and administer the questionnaire. Note – the teacher will be the ‘chair’ of the committee and will, with the class, develop a series of conditions that will need to be followed. These conditions include:
   * methodology (qualitative, quantitative, mixed methods research)
   * suitability of questions
2. administer the questionnaire - make sure there are no “double-ups” by ensuring those answering your questionnaire haven’t already done so and collate the information.
3. Present the information in the form of a succinct report using visual representations such as graphs, tables, maps or diagrams and information summarised to conclude analysis of findings.

Student note: Use the ‘Process for geographical inquiry’ to give a format to this task. Begin with the development of some related inquiry questions that you would like answered. These will form the basis of your questionnaire.

Rubric

9-10 marks

* Creates detailed survey, including highly relevant questions, demonstrating excellent understanding of migration patterns.
* Conducts and completes all surveys.
* Collates and presents relevant information in highly detailed graphs.
* Compares and contrasts information highly effectively.
* Maps all locations accurately.
* Analyses push and pull factors, providing multiple sources of evidence.
* Draws strong and succinct conclusions regarding connections to people, place and environments with supporting evidence.

7-8 marks

* Creates survey, including relevant questions, demonstrating good understanding of migration patterns.
* Conducts and completes all surveys.
* Collates and presents relevant information in detailed graphs.
* Compares and contrasts information well.
* Maps various locations accurately.
* Analyses push and pull factors, providing sources of evidence.
* Draws relevant conclusions regarding connections to people, place and environments with supporting evidence.

5-6 marks

* Creates survey, including some relevant questions, demonstrating some understanding of migration patterns.
* Conducts and completes most surveys.
* Collates and presents some relevant information in graphs.
* Compares and contrasts some information.
* Maps some locations accurately.
* Discusses push and pull factors.
* Draws some conclusions regarding connections to people, place and environments with supporting evidence.

3-4 marks

* Creates survey, including some relevant questions, demonstrating a basic understanding of migration patterns.
* Conducts and completes a few surveys.
* Collates and presents basic relevant information in graphs.
* Compares and contrasts basic information.
* Maps a few locations accurately.
* Discusses some push and pull factors.
* Draws basic conclusions regarding connections to people, place and environments with supporting evidence.

1-2 marks

* Creates survey, including few relevant questions, demonstrating limited understanding of migration patterns.
* Conducts and completes minimal surveys.
* Presents limited relevant information in graphs.
* Provides some information.
* Maps minimal locations accurately.
* Provides some information about push and pull factors.
* Draws limited conclusions regarding connections to people, place and environments with supporting evidence.