## Demonstrate geographic understanding of differences in development

Achievement Standard 91242 (Geography 2.3) requires understanding of the following aspects:

- characteristics of development
- different ways development can be measured
- factors contributing to differences in development
- strategies for reducing the differences in development.

### **Choice of case study**

The case study must refer to communities, areas, or countries across the globe at different stages of development. You can study differences in development within one country (e.g. Tanzania or South Africa, or even the USA) or compare countries in different stages of development; another approach is to match the case study with the aspect of development you are studying.

To describe differences in development, you need to:

- know how levels of development of countries are categorised such as developed and developing
- know terms such as More Economically Developed Countries (MEDCs) and Less Economically
   Developed Countries (LEDCs)
- understand terms such as standard of living and quality of life.

Characteristics of development refer to descriptions of development based on economic, social and political factors and features that are indicators of development.

Indicators are tools used to measure development, such as literacy rate or GDP.

- **Economic indicators** relate to money, income and production.
- Social indicators relate to people, such as population (birth and death rates, age structure), health (infant
  mortality, life expectancy and population per doctor) and education (% literacy, school enrolment, school
  retention rates).

#### **Characteristics of development**

Development is a process of change that involves an improvement in the quality of life or standard of living as perceived by the people undergoing change. It is usually focused on reducing poverty.

#### **Perception of development**

The meaning a particular person attaches to the term *development* depends on their subjective view of the world.

People view development based on their life view and values. Their perspective can be economic (money and material wealth), human (social and cultural elements such as people's needs (e.g. employment), nutrition, education, leisure and safety as well as political and cultural freedom, health, gender and the environment.

# **Activity: Characteristics of development**

What concept underpins the term *development*, and why?
 Why is the concept *perception* important in the definition of development?
 Explain *development* in the geographical sense of the word.

## Standard of living and quality of life

**Standard of living** refers to the quality and quantity of goods and services available. **Quality of life** refers to the general well-being of individuals and societies.

More economically developed countries (MEDCs) have high levels of development and a high standard of living. Less economically developed countries (LEDCs) have low levels of development based on economic indicators such as GDP.

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## **Activity: Standards of living**

1.	Explain the difference between standard of living and quality of life.			
2.	Why is 'quality of life' considered to be subjective?			
3.	Explain the characteristics of MEDCs and LEDCs.			

4. Study the photographs showing housing in different countries, and provide evidence from the photographs that these are examples of low-income housing.





Figure 1

Figure 2

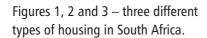




Figure 3



Figure 4, village housing in Fiji



Figure 5, beach fale in Samoa

## Ways development can be measured

**Objective** or **quantitative indicators** are based upon collected and processed data include economic indicators (most widely used), human development indicators and composite (or multidimensional) indicators.

Qualitative or subjective indicators are considered 'less scientific'; recently, greater use has been made of them.

**Multidimensional indices**, like the United Nations Development Programme's (UNDP) Human Development Index (HDI) or the Multidimensional Poverty Index (MPI) are used to rank countries.

Activity:	Indicators
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1.	Define indicators.		
2.	What are the main uses of geographic indicators?		
3.	Name the two main types of indicator.		
4.	Define quantitative indicators.		
5.	Give three advantages of using <i>quantitative indicators</i> .		
6.	Give three limitations of using <i>quantitative indicators</i> .		

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Gross Domestic Product (GDP) is the value of all goods and services produced in a country, usually measured in US\$ and calculated per capita (i.e. per person).

Gross National Product (GNP) is the same as GDP but GNP also includes goods and services produced by a country overseas.

Income per capita is:  $\frac{GDF}{\text{number of people in the country}}$ 

# **Activity: Quantitative indicators and economic indicators**

List the three main types of quantitative indicator.
Define economic indicators.
Fully explain the limitations of using GDP to measure levels of development. Use detailed evidence to suppo
your answer.

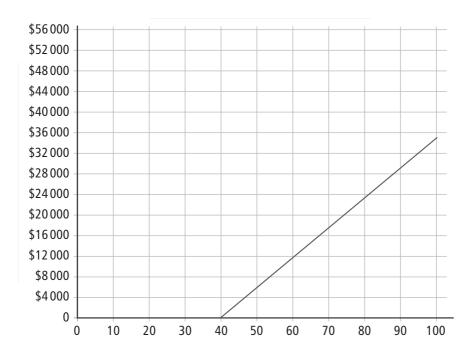
**4. a.** Complete the following scatter graph using the data in the table.

Note the following:

- · a trend line has been added for you
- you are to also label the axes and give the graph a title.

Country	% adult literacy	GDP per person
Canada	99	52 000
China	94	6 800
Colombia	93	7 900
Egypt	73	3 300
India	63	1 500
Italy	99	34 600
Liberia	61	500
Sierra Leone	42	800
Singapore	96	55 200
UK	99	39 300
USA	99	53 100

Sources: The World Bank (data.worldbank.org); United Nations (data.un.org)



- b. Comment on the trend shown by the graph.
- c. i. Name two outliers on the graph that have low income per capita but high adult literacy rates.
  - **ii.** What do the outliers show about factors other than adult literacy being associated with income per capita?

## **Human development indicators**

#### **Demographic indicators**

Demographic indicators include birth and death rates, population totals, rural/urban ratios, population ratios, life expectancy at birth, infant mortality rate, and population growth rate.

#### **Educational indicators**

Educational indicators are linked to GDP and the percentage of GDP spent on education. Education is a gateway to development as it leads to better-paid jobs and increased standards of living.

#### **Health indicators**

Health indicators are linked to GDP and government spending (e.g. percentage of households with access to clean water, number of doctors per 1 000 of the population).

## **Activity: Human development indicators**

- 1. Place each of the following human development indicators in the right place in the table.
  - Access to safe water
  - Age structure
  - Birth rate
  - Death rate
  - Doctors/1 000 people
  - · Education for females
  - Food supply adequacy and value (e.g. total calorie intake and total protein intake)

- Hospital beds/1 000 people
- Households with clean water
- Households with sewage disposal
- Internet access
- Literacy rate
- Primary education enrolment
- Secondary education enrolment

Demographic indicator	Educational indicator	Health indicator

2.	Exp a.	lain how the following indicators show levels of development.  Demographic indicator of birth rate.
	b.	Educational indicator of <i>literacy rates</i> .
	C.	Health indicator of number of hospital beds per 1 000 of the population.

**3. a.** Fill in the gaps in the following table.

b.

2012 population structures as %	Country			
of total population	Malawi	USA	Qatar	
0–14 years		20%	12.5%	
15–24 years	28.5%	13.7%	13.9%	
25–54 years	20.6%	40.2%		
55–64 years	3.6%	12.3%	3.3%	
65 years and over	2.7%		0.8	

,					
Which country or countries has/have a high percentage of dependants? Explain your answer.					

## **Composite indicators**

#### **Physical Quality of Life Index**

The Physical Quality of Life Index (PQLI) is based on the average of three indicators — basic literacy, infant mortality and life expectancy. Each indicator has a scale of 0 to 100.

The PQLI has now been replaced by the Human Development Index (HDI).

#### **Human Development Index**

The HDI is a composite measure of economic and social welfare based upon life expectancy, literacy and purchasing power.

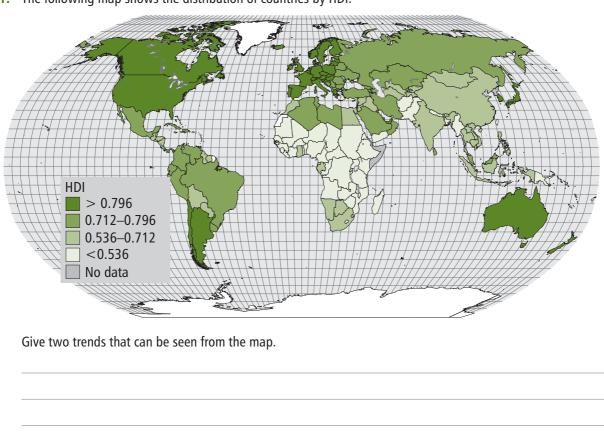
The HDI has shifted the focus of development from considering mainly economic policies in terms of national income to people-centred policies.

#### **Components of the Human Development Index (HDI)**

The HDI has three dimensions and four indicators.

## **Activity: HDI interpretation**

1. The following map shows the distribution of countries by HDI.

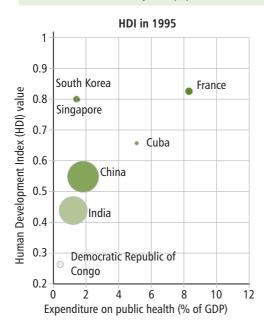


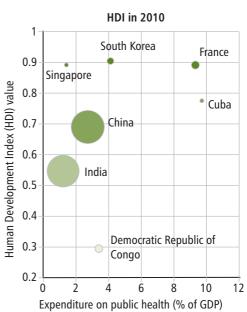
2. Two graphs – showing HDI in 1995 and 2010 – for selected countries follow.

The following key applies to both graphs.

Key

Scale of colour: darkest – high HDI, lightest – low HDI Circle size indicates country total population size





Study the graphs and answer the following questions.

- a. What general trend in the HDI can you identify?
- **b.** What general trend in the expenditure on health as a percentage of the GDP can you identify in the time from 1995 to 2010? Explain your answer.

- **c.** List two countries that have made increases in the HDI of about 0.1; show your 'working'.
- **d.** List two countries that have made increases in the HDI of about 0.2; show your 'working'.
- e. What correlation can you identify between HDI and expenditure on health as a percentage of the GDP? Explain your answer.

# **A**nswers

#### Achievement Standard 91240 (Geography 2.1)

There are no answers to any of the Activities associated with AS 91240 (Geography 2.1) – all answers are student-centred responses.

#### Achievement Standard 91242 (Geography 2.3)

#### Activity: Characteristics of development (page 38)

- Change underpins development; the meaning of development is 'to change'.
- Perception is important as how a person describing development sees the world is what defines the outcome of that development.
- Answer could include: Development is about material wealth / quality of life / living sustainably.

#### Activity: Standards of living (page 38)

- Standard of living refers purely to income and access to means to
  meet material needs, while quality of life refers to the well-being of
  individuals or societies and includes not only economic indicators but
  also whether emotional and social needs are being met (such as social
  belonging, recreation).
- Quality of life depends on the perceptions of the person expressing an opinion; it is subjective because quality of life often changes with personal circumstances.
- Answer could include: MEDCs have high levels of development and a high standard of living at which people can achieve their material needs. All four sectors of the economy (primary, secondary, tertiary and quaternary) are well developed.
  - LEDCs have low levels of development based on economic indicators such as GDP.
  - LEDCs have not reached the level of the developed countries at present, as there are barriers to development, which can include a lack of cultural resources, a lack of economic resources, trade barriers and/or neo-colonialism.
- 4. In Figure 1 the houses are all the same, are mass produced and an unsealed road runs alongside the houses. In Figures 2 and 3 there are piles of rubbish and the houses are small and made of cheap materials. In Figure 4 the house is made of rusted corrugated iron.
  In Figure 5 the house is an open simple structure made of wood and thatching.

#### **Activity: Indicators** (page 40)

- 'Tools used to measure the level of development of a community, area or country.'
- Allow comparisons to be drawn between areas or comparison within an area over time.
- 3. Quantitative/objective indicators and qualitative/subjective indicators.

- 4. Data can be collected (counted) and processed, e.g. literacy rate.
- Easily measured because the result is in numbers and therefore easily graphed.
  - Use of numbers means that the data are more easily mapped or graphed to allow comparisons between regions.
  - · Broad patterns of development can be identified.
  - Changes in patterns can be identified over time.
- Figures are averages for a country and this hides disparities between different areas of a country.
  - Different data collection methods make it harder to compare countries.
  - If, over time, data collection varies, this makes trends hard to define as the statistics cannot be compared over the years.
  - · Time delays in the release of statistics.

# Activity: Quantitative indicators and economic indicators (page 41)

- 1. Economic, demographic, social and multidimensional or composite.
- Economic indicators are measures associated with money and earnings. Material well-being was initially measured by income or GDP and then developed to include income per capita.
- 3. GDP is a single indicator designed to measure production by a country or region, and for that reason it measures only money as this is an economic measure. GDP does not tell how the money is spread, for GDP is an average figure of total money earned from production across the population of the country. The GDP per capita of Qatar is US\$93 400; Qatar is an oil-rich state. This does not necessarily indicate the social and health-related well-being of the people or the money they actually earn for a variety of jobs. Another problem with GDP is that although the GDP per capita of the USA is \$53 100, 15% of the population or 49 million people live below the poverty line and there are 9 million millionaires, or 5% of the population. The \$53 100 average does not show this pattern of uneven distribution of wealth in the USA. Another problem with GDP is that it only counts earnings from the formal economy and not the informal economy (such as the contribution of home makers and subsistence farmers). In a country like Malawi, 90% of the population are involved in agriculture, of which a large proportion is subsistence agriculture to meet the dietary needs of subsistence farmers' families. Subsistence agriculture is an economic gain to the country but is not recorded in GDP figures. Another disadvantage of using GDP is that it measures economic development only in terms of money but does not take into account social or environmental costs (such as pollution). In Britain, working hours of many workers have increased to an estimated 48 hours or more per week. This is a social cost to their families and communities.

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