Teaching notes

Using this issue

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These notes are intended for use with GEOGRAPHY REVIEW Vol. 27, No. 1. They suggest ways in which you might develop further some of the articles in the magazine with your A-level and diploma students.

Urban change in Moscow (pp. 2–5)

This article provides students with a useful urban case study. Most geography courses, however, require students to study cities ‘at different levels of economic development’. This begs the question: does Moscow provide us with a case study of a developed world or developing world city?

Possible follow-up activities

1. Getting students to think about how Moscow should be categorised (in accordance with their exam specification) is an interesting synoptic task for them. Here are some possible avenues for inquiry and discussion:
   - From a development studies perspective, how does the World Bank categorise Russia, and why? (Students will discover that Russia was categorised as a high-income country in 2012.)
   - From a demography perspective, male life expectancy is only 62, lower than in some middle-income countries like Brazil. Students could also investigate what stage of demographic transition Russia has entered.
   - From an economics viewpoint, Russia is one of the ‘BRIC’ group and is therefore regarded as being an ‘emerging’ (rather than developed) economy by many.
   - From a superpowers perspective, Russia is the only country with a similar nuclear capability to the USA (a legacy of the cold war).

Clearly, there is no definitive answer here, although many people would take the World Bank categorisation as being definitive (and it would be good practice to mention this if using Moscow as an example of a ‘developed’ city in an actual exam, to justify the choice made).

2. Students might also want to investigate the post-Soviet sources of wealth for the people who are gentrifying parts of Moscow. What industries do they work in and who are their employers?

Everybody’s talking about… Consumption (pp. 9–11)

The concept of consumption, this article argues, is a cornerstone for synoptic geography. This is because pressure on the Earth’s resources increasingly comes from changing lifestyles, rather than growing numbers of people.
Possible follow-up activities

1. The illustration below could be a good starting point for exploring the geographical connections between rising wealth and pressure on resources. Are there any missing connections that could be added to the diagram? Are any of the pressures especially worrying, or threatening for sustainable development?

![Diagram](image)

*Figure 1 Globalisation’s relationship with twenty-first-century challenges whose solutions require political cooperation at a global level*

2. Students can be encouraged to think critically about what view geographers should take when examining two interrelated ethical concerns: first, the need to eradicate global poverty and, second, the need to protect the environment. Several decades ago, the goal of making poverty history seemed a long way off. As a result, few people seriously envisaged a world where billions of people would become ‘middle class’. Now this is actually starting to happening, an inescapable truth is becoming clear. Across the planet, people in all societies aspire to become consumers. Can the Earth’s environmental systems cope with this increased pressure? What is a realistic viewpoint?

Practise exam questions can be built around the illustrations included with the article, as shown below.

Figure 2 The global growth of the ‘consuming class’, 1820–2025

(1) Study Figure 2.
(a) Describe how Figure 2 provides evidence for global poverty reduction between 1970 and 2010. [4 marks]
(b) Suggest how the changes shown could exacerbate two serious environmental challenges. [4+4 marks]

Tip
For part (a), you should ideally apply graphical skills to the data shown in way that distinguishes between trends in absolute and relative poverty over time. The total number of people is changing but so too is the ratio between the very poor and the more well-off. In part (b), you should try to provide some detailed information that supports the two cases you make. You may choose biodiversity, water scarcity or the approach of peak oil (which is an acceptable interpretation of ‘environmental challenge’). Try using back issues of GEOGRAPHY REVIEW to find some supporting facts!

Amrum: an island under threat (pp. 12–16)

This article looks at the multiple causes of sea-level rises and can help students focus on the processes that often operate side-by-side to create complex regional and global patterns of advancing and retreating coasts.

Possible follow-up activities
1 Get students to fill in a table or matrix (see below for a suggestion — students should ring the correct word in each cell) to show how the combined effects of eustatic and isostatic changes can lead to a variety of relative sea-level changes. They could also try to match the following present-day locations to the top half of the table: Bangladesh, Arran island (Scotland), Amrum, southern England.
Present day

<table>
<thead>
<tr>
<th></th>
<th>Eustatic fall or rise?</th>
<th>Isostatic fall or rise?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Above-average sea-level rise</strong></td>
<td>Fall/rise</td>
<td>Fall/rise</td>
</tr>
<tr>
<td><strong>Below-average sea-level rise</strong></td>
<td>Fall/rise</td>
<td>Fall/rise</td>
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</tbody>
</table>

**Last glacial maximum**

<table>
<thead>
<tr>
<th></th>
<th>Eustatic fall or rise?</th>
<th>Isostatic fall or rise?</th>
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<td>Fall/rise</td>
<td>Fall/rise</td>
</tr>
</tbody>
</table>

2 The illustration showing salt water intrusion (p. 15, reproduced below) is useful for students following a number of different courses, including the IB diploma. It could be used as the stimulus for a short essay question such as:

‘Explain how human factors contribute to the salinization of coastal areas’.

*Figure 3 Salt-water intrusion*

**Tip**

There are both local factors and global factors to include in the answer, if anthropogenic carbon emissions are included as part of the discussion.
Development update The role of the media (pp. 16–19)

This thought-provoking column focuses on traditional, rather than ‘new’ media, reminding us of the pivotal role that television and radio can play in the social and political development process. It is a stretching piece that will help illustrate to students how the ‘multi-strand’ development process works (see below). Far too often, exam candidates rehearse an answer in which they assert that development has ‘many connected elements’, yet fail to demonstrate this in the main body of their essays. This article provides much-needed support.

Figure 4 The development cable

Possible follow-up activities

1. Students could draw a web diagram that shows how different ‘aspects’ of development are connected with one another in this article (this would also serve as a plan for the essay Gill Miller proposes in Question 4).

As a starting point, some economic development may bring the initial conditions needed for state-run or privately-owned media to start to operate (in terms of the start-up costs that must be met for infrastructure development and construction and management of television studios). At the same time citizens may need to have reached a sufficient level of income to be able to subscribe to some services.

The media can then become a powerful agent for social development. In the past, media in the UK and the USA tackled many forms of prejudice (for example, television programmes in the 1960s sometimes played an important role in championing mixed-race marriages, or in tackling homophobia, racism and sexism). In a similar way, might the media in some countries, such as Pakistan, be helping change social attitudes towards equality for women? This is a theme well worth investigating.

Finally, as the article explains, the media can play an important role in building democracy and leading political development, for example by publicising elections or reporting on corruption.
In addition to the interesting case studies mentioned in the article, here is a suggestion for media research that allows some interesting conceptual links to be explored.

- A recent satire on celebrity fundraising comes in the form of the spoof film ‘Africa for Norway’. How are the media being used here, in the context of development studies? What purpose do the filmmakers have in mind? Who are the filmmakers and what was their source of funding? These are all questions worth asking! [http://www.africafornorway.no/](http://www.africafornorway.no/)

**IB geography examination tip**

At Higher Level, the IB course includes Paper 3: global interactions. Students are required to examine the importance of different types of global flow, including flows of information, as well as the cultural diffusion process. Clearly, this article could be used to support teaching and learning of these topics. It would be interesting to see whether the media in developing countries are helping to preserve traditional culture, promote more modern (or ‘Westernised’ traits), or a hybrid of both.

**News watch Frack attack (pp. 20–21)**

Fracking — or hydraulic fracturing — is an important development in energy supply, but one that is hardly mentioned in most examination specifications (because fracking only really ‘came of age’ around the time that current courses were written). This is an area of study where teachers cannot always rely on textbooks. Hopefully this ‘News watch’ feature provides a helpful ‘jump on’ point for teachers wanting to update what they teach.

**Possible follow-up activities**

1. As the feature itself suggests, the question of whether societies should make shale gas part of their energy mix is a difficult one to answer and requires students to consider several lines of argument before arriving at a viewpoint. As useful exam preparation, here is an essay question students can use to try to improve their procedural knowledge of essay writing. They should devise a plan that makes plenty of linkages with the top-level mark band for their particular course.

   **Increased use of shale gas is the best way to meet global energy security concerns.** Discuss.

   - What is meant by ‘increased use of shale gas’? Will it be a major or minor part of the energy mix? Does the statement suggest substituting coal with shale gas, or using shale gas instead of renewables and/or nuclear? A good answer will question the scale of increased use suggested by the statement.

   - This is the key concept the essay is based around. So what does it mean? And what time-scale do these ‘concerns’ relate to? The next decade, or the next century? This is something you should be thinking about early on in the planning stage.

   - The ‘discuss’ command requires a balanced answer where views are put forward both in support of and against the statement. At A2, ideally you should aim for a conclusion that agrees or disagrees the statement (rather than hedging you bets and ending with ‘maybe it is, maybe it isn’t, as there are costs and benefits’).

   - Best in whose view? Citizens? Governments? Businesses? Environmentalists who are concerned with climate change? What other different perspectives can we look at the question from? A top band response will provide a clear account of the different stakeholders whose views need to be discussed.
2 Practise exam questions can be built around the illustrations included with the feature, as shown below.

Figure 5 US natural gas production

(2) Study Figure 5.
(a) Describe the actual and projected trends shown in Figure 5. [4 marks]
(b) Suggest three reasons for the trends shown. [6 marks]

Tip
For part (a), you should pay attention to the command to look at ‘actual and projected’ trends and be clear about which is which. For part (b), reasons for the trends can relate to:

- supply (peak oil concerns)
- demand (rising energy use in BRIC nations etc.)
- economics (the growing profitability of exploiting shale gas if oil prices rise)
- technology (the ability to actually extract shale gas)
- governance (domestic shale-gas reserves replace dependence on imported oil for the USA).

The Jurassic coast: extreme weather and erosion in 2012 (pp. 22–26)
Possible follow-up activities
1 The UNESCO designation as a World Heritage site has provided the Jurassic coastline with some interesting governance challenges. In a parallel case study, a Suffolk home owner has been prosecuted for building his own cliff defences in an area where Natural England wants the sea to erode naturally so that new fossils are exposed. Students can find out more about this at:
What do students think about this as a citizenship issue: should people be allowed to protect their homes?

The photographs included in this article provide excellent examples for use if you want to help students improve their ability to produce field sketches, especially the example below.

Rock fall at Church Cliffs, Lyme Regis, 2008

**Environment today Seoul (pp. 28–29)**

This article details the amazing progress made towards improving environmental quality in a major megacity, Seoul. It is the capital city of South Korea, a developed country that, mere decades ago, was still a developing country.

**Possible follow-up activities**

1. Interesting comparisons can be drawn with the environmental challenges currently faced by Chinese city planners. Could Seoul offer lessons for China? In the news recently are reports that:

   - pollution in China is now so bad that it reduces life expectancy by 5 years: [http://www.guardian.co.uk/environment/2013/jul/08/northern-china-air-pollution-life-expectancy](http://www.guardian.co.uk/environment/2013/jul/08/northern-china-air-pollution-life-expectancy)

   - foreign workers are leaving Beijing, so fearful are they of the health effects of the pollution there: [http://www.csmonitor.com/World/Asia-Pacific/2013/0404/Beijing-is-booming-but-talent-is-leaving-due-to-bad-air](http://www.csmonitor.com/World/Asia-Pacific/2013/0404/Beijing-is-booming-but-talent-is-leaving-due-to-bad-air)

   - air pollution from China has spread to Japan: [http://www.japantimes.co.jp/life/2013/02/05/environment/chinas-thick-smog-settling-over-japan/](http://www.japantimes.co.jp/life/2013/02/05/environment/chinas-thick-smog-settling-over-japan/)
The article illustrations and tables can all be used to serve as resources for practise exam questions about urban sustainability. Here is a suggestion, based on the IB syllabus.

Table 1 Parks and green spaces per head of population in selected cities

<table>
<thead>
<tr>
<th>City</th>
<th>Green space per capita (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toronto</td>
<td>29.7</td>
</tr>
<tr>
<td>Berlin</td>
<td>24.5</td>
</tr>
<tr>
<td>London</td>
<td>24.2</td>
</tr>
<tr>
<td>Paris</td>
<td>10.4</td>
</tr>
<tr>
<td>New York</td>
<td>10.3</td>
</tr>
<tr>
<td>Seoul</td>
<td>5.2</td>
</tr>
</tbody>
</table>

(3) Study Table 1.

(a) Describe the variations in green space shown for these cities. [3 marks]

(b) Suggest three reasons for the variations you have described. [2+2+2 marks]

**Tip**

For part (b), you could consider reasons such as:

- the age of the city (old cities in developed countries may have ‘reclaimed’ more green space)
- the speed of growth (were planning measures originally in place?)
- the growth pattern (were surviving parks ‘swallowed up’ by the city as it grew, as was true of London?)
- economic reasons (green spaces may have been created to help boost post-industrial employment, based around tourism or a sporting event)

While it may be easy to gain a mark for a basic idea, in each case students need to make sure they can also gain an ‘extension’ mark.

**Rural rebranding: a case study from Shropshire (pp. 30–34)**

**Possible follow-up activities**

One of the most interesting features of rebranding case studies is the broader economic context of austerity in which we now find ourselves in the UK. Some people in Ludlow are struggling to make
ends meet, as is the case elsewhere in the UK, especially in the midlands (where Ludlow is situated) and the north. For instance, this report suggests the number of people in Ludlow who are dependent on food banks has grown significantly since 2005: [http://www.shropshirestar.com/news/2013/04/29/soaring-demand-for-shropshire-food-banks/](http://www.shropshirestar.com/news/2013/04/29/soaring-demand-for-shropshire-food-banks/)

However, this must be set against a context of much greater difficulties being experienced in other UK towns. In general, places with high levels of public-sector employment are experiencing the worst rises in unemployment. It may be that settlements which have successfully rebranded, such as Ludlow, have proved to be more resilient due to greater private-sector job creation prior to the economic downturn in 2008/09. For more on economic resilience, take a look at Vol. 25, No. 2 of GEOGRAPHY REVIEW.

**Practical geography Rivers fieldwork: using the Bradshaw model (pp. 35–37)**

**Possible follow-up activities**

Bradshaw’s is an important model for geography teachers, as it often forms the basis for physical geography fieldwork. However, a frequent complaint heard from coursework moderators and fieldwork examiners is that insufficient attention is paid to the statistical rules that need to be adhered to in order to either ‘disprove’ or ‘prove’ the model to be correct.

Questions to discuss with a class include:

- How many sites need to be visited if the Spearman test is going to be applied to the data? (As a rule, we should be thinking in terms of double figures for a meaningful analysis.)

- How large a section of river needs to be surveyed? (Are ten sites along the same single 2 km-long stretch of a much longer river likely to show the general trends suggested by the model?)

- If, say, ten sites are chosen 2 km apart along a 20-km river, then this is a promising start. But if one site is a riffle, another a deep pool, another a braided section, then do you expect your data to correspond with what the model suggests? Which criteria might correspond, and which might not? How might you adapt your fieldwork to take into account any such local variability in channel geomorphology?

**Why is there horsemeat in our food? (pp. 38–41)**

This is an interesting contemporary case study which links well with certain articles from Volume 26 of GEOGRAPHY REVIEW. It is relevant for studies of globalisation (TNCs and supply networks), trade blocs (the consequences of free trade) and health studies (obesity, malnutrition and diseases of affluence).

**Possible follow-up activities**

Refer back to the article ‘Globalisation: a risky business’ in GEOGRAPHY REVIEW Vol. 25, No. 4. What is meant by a ‘reputational hazard risk’? Why are TNCs likely to seek improved knowledge of their own supply chain geographies following the horsemeat scandal?

**IB geography examination tip**

The IB course includes Paper 2 option: food and health. Students are required to examine trends in food supply and nutrition. The article illustrations can all be used to serve as resources for practise IB exam questions. Here is a suggestion.
Study Figure 6

(a) Describe the trends shown in adult obesity between 1995 and 2010. [4 marks]
(b) Suggest three reasons for the trends you have described. [2+2+2 marks]

Tip
For part (b), you could consider factors that drive increased consumption, such as the decisions made by fast-food and ready-meal providers in terms of the portion size (and calories) they provide. Or there are lifestyle reasons, such as the shift to sedentary post-industrial office work. There is also improved healthcare for dealing with ailments associated with obesity, such as heart problems or diabetes. What other explanations are possible? The article gives you some ideas if you read it carefully.