Lesson Two:
The Sharqiya Climate

Royal Geographical Society with IBG
Advancing geography and geographical learning

Objectives

- To know a number of features relating to the Sharqiya climate.
- To be able to present climate data in ways other than through a climate graph.
- To understand how land and sea breezes work and the effect they have on the eastern Omani coast.

Context and Rationale

The past shaping of the Sharqiya landscape and its future development are much connected to the climate of the region. Giving students opportunities to explore the desert climate allows them to draw comparisons with the UK climate as well as other ecosystems they may have studied. The lesson will test their ability to read simple data as well as present such information in new and interesting ways. Studying the effect of land and sea breezes will develop students' understanding of settlement patterns on the eastern Omani coast.

This lesson is also presented as a walk-through PowerPoint presentation (Lesson Two Walkthrough).

Starter

Students can be shown *UK climate graph presentation* and given some data from it via *UK climate data*. Students then have to work out how to read a climate graph and then attempt to explain this to the person next to them. One set of students can be picked to present to the class their step-by-step guide to reading a climate graph. Given *Sharqiya climate graph* and presented with *Sharqiya climate data presentation*, students should aim to complete the climate graph accurately.

Body

Using *GMDA analysis framework presentation* students should then be able to describe the climate of the Sharqiya Sands region. Verbally or in written form, students might also be able to suggest some key differences between this desert climate and that of the UK (or to another ecosystem, such as that of rainforests they may have already studied). It is important for teachers to emphasise that the defining feature of a desert is its dryness (fewer than 250mm of precipitation a year) rather than its temperature.

Students can then be shown *Sample Sharqiya wind data*. They can complete a 'think, pair, share' exercise about how they could present this data in an interesting way. After two minutes of discussion time, students are introduced to *Data presentation hints presentation* and asked how they might use them to present data. Teachers should have graph paper, *Wind rose template* and *Oman map template* on hand and see what methods they are able to execute with minimal teacher influence or guidance. Students can then give feedback to the class and justify the data presentation method they have chosen.

Plenary

Briefly introduce students to the key understanding of land and sea breezes using *Explaining land and sea breezes presentation*. Students should then hypothesise the effect these breezes would have on the east coast of Oman. They can do this by annotating *Comparing two cities* which shows data for Al Ashkharah on the coast and Nizwa further inland.

Homework or Extension / Enrichment Tasks

Students should restudy the wind speed and wind direction data they have presented. By thinking about the average force of the prevailing wind, students should try to find a connection between this data and the shape of the dune landscape further inland.