



## **A free-to-download geoscience textbook for 16 year olds in your country/region?**

Chris King  
Wells, United Kingdom (chrisjhking36@gmail.com)

A free-to-download textbook is being developed by the International Geoscience Education Organisation (IGEO) together with the International Union of Geological Sciences Commission on Geoscience Education (IUGS-COGE). The textbook has been devised for able 16-year old students and their teachers, to support the International Geoscience Syllabus published recently by IGEO/IUGS-COGE (at [http://www.igeoscienced.org/?page\\_id=269](http://www.igeoscienced.org/?page_id=269)). The first version of the textbook to be developed is the 'international version', with international photos and international 'interest boxes' which extend the syllabus into interest areas to engage and enthuse readers. It is written in accessible English, has been checked by experts and has 70,000 words, 60 diagrams, 500 photos and 60 'interest boxes'.

The book has the following content:

.....  
Exploring Geoscience – across the globe: contents

### 0. Why explore geoscience?

#### 1. Earth as a changing system

- 1.1. Attributes
- 1.2. Interaction
- 1.3. Feedback
- 1.4. Processes and products
- 1.5. Energy sources

#### 2. Earth is a system within the solar system within the universe

- 2.1. Origins
- 2.2. The Sun
- 2.3. Sun, Earth and moon

#### 3. Earth is a system which has changed over time

- 3.1. Geological time span
- 3.2. Relative dating
- 3.3. Absolute dating
- 3.4. Rates of processes

#### 4. Earth's system comprises interacting spheres

- 4.1. Geosphere
- 4.2. Hydrosphere
- 4.3. Atmosphere
- 4.4. Biosphere

#### 5. Earth's system produces resources

- 5.1. Raw materials and fossil fuels
- 5.2. Power supplies
- 6. Human/earth system interactions

- 6.1. Natural hazards
- 6.2. Environmental issues
- 6.3. Impact on human history

- 7. Earth's system is explored through fieldwork and practical work
  - 7.1. Observation, measurement and recording
  - 7.2. Synthesis of observations
  - 7.3. Investigation and hypothesis-testing
- .....

After publication of the 'International version', colleagues around the world are invited to develop versions for their own regions/countries, by replacing the photos with local ones and by replacing or adding to the 'interest boxes' with local examples. They may also wish to translate the text into their own languages. These regionalised versions can then also be posted for free download on the IGEO website. Currently versions for Brazil, England, Italy, Scotland and Spain are planned.

A companion book is also under preparation, keyed into the chapter headings, suggesting 'hands-on' and 'minds-on' teaching ideas and strategies (for example, the activities at [www.earthlearningidea.com](http://www.earthlearningidea.com)), with questions for students to consolidate and extend their understanding.

Both the syllabus and the textbook have been developed by voluntary effort, which is why they are free to download.

If you are willing to prepare a 'regionalised' version for your own country or region and have it checked by local experts, we will fully acknowledge your contribution, add it to the IGEO website for free download, and pay you exactly the same as we get paid ourselves – i.e. 'nothing at all'. Please join us in extending this new up-to-date geoscience education resource for schools as widely as possible.