

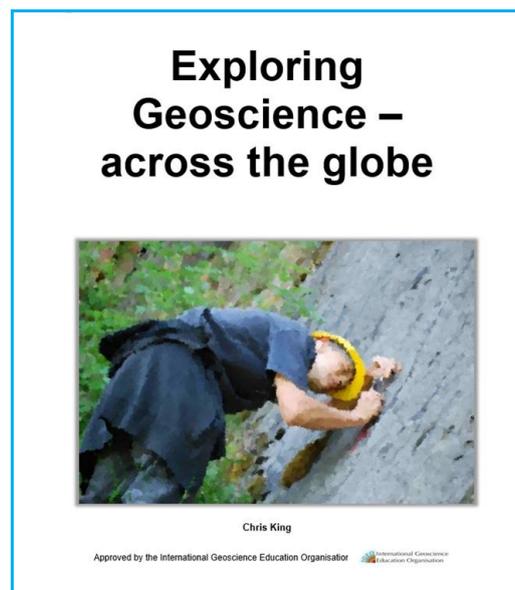


IUGS Commission on Geoscience Education, Training & Technology Transfer (COGE)

The international geoscience textbook

(by Chris King, IUGS-COGE Chair)

When the International Geoscience Education Organisation (IGEO - affiliated to the IUGS - International Union of Geological Sciences) was asked a few years ago what geoscience should be included in the curriculum of countries which had no geoscience – they had no ready answer. As a result, the International Geoscience Syllabus was developed, based on the best what was taught in countries across the world at the time. The syllabus was published in 2014 on the IGEO website at http://www.igeosced.org/?page_id=269 and an article on the syllabus was published in Episodes (King C., 2015) The international geoscience school syllabus and its development. *Episodes international journal of geoscience*, 38.1, 57-74).

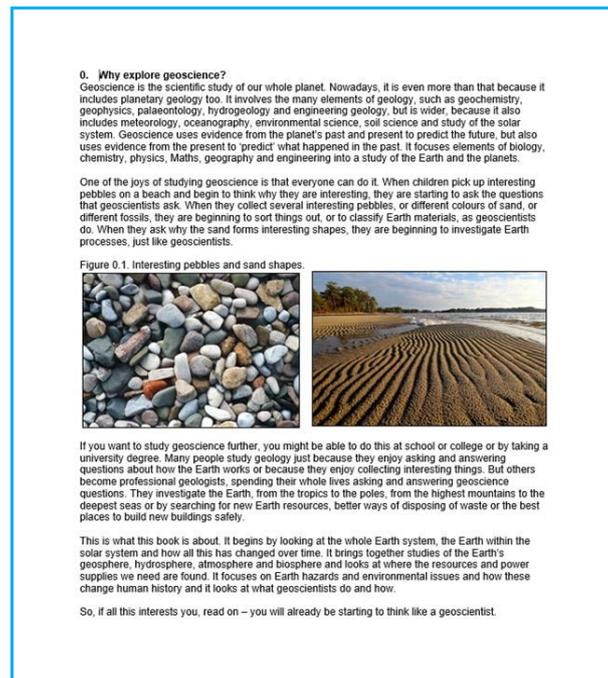


Cover of the international version of the textbook.

When the syllabus was launched, at the GeoSciEd VII conference in Hyderabad, India in 2014, a proposal was made that a textbook should be prepared to support the syllabus. This proposal was further developed at the International Geological Congress in Cape Town in 2016 and since then, the international textbook has been under preparation.

A first version has been written in English, using photographs drawn from across the globe and 'interest boxes' of examples of interesting geoscience phenomena – this is the 'international version'. The international version should be published online for free download in time for a launch at the Resources for Future Generations (RFG) conference in Vancouver in June and GeoSciEd VIII in Brazil in July 2018.

Then it is planned that this version will be taken by colleagues around the world and ‘regionalised’ for their own regions and countries by adding photographs and ‘interest boxes’. From their own region – whilst translating the text into their own language, if necessary. In this way, versions appropriate for different countries, regions, states and even cities will be developed, for free-to-download publication. So, an open source textbook will be developed for a range of countries and languages across the world, for direct use by pupils and school teachers and as a source of authoritative Earth science information for textbook-writers in those countries where there are few high-quality teaching resources (the recent international survey of geoscience education, reported in a previous IUGS bulletin, has found the geoscience teaching resources across the world are often poor in quality).



Introductory chapter of the geoscience textbook.

At the time of writing (April 2018):

- the text of the corrected draft is being proof-read and corrected;
- the diagrams are being drawn;
- the diagrams are being re-drawn professionally;
- the geoscience communicator Iain Stewart has agreed to write a preface;
- formal endorsement/approval of or support for the textbook has been given by the IGEO and is being sought from the International Union of Geological Sciences (IUGS), the European Geosciences Union (EGU) and the American Geophysical Union (AGU).

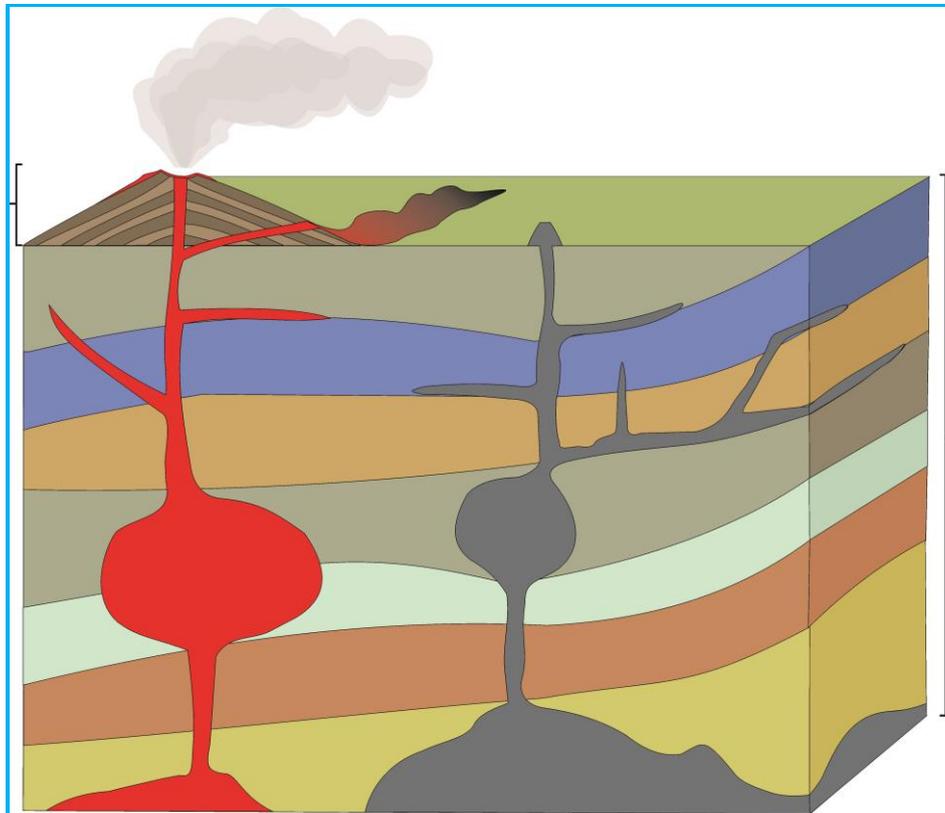
The draft has the following approximate vital statistics:

- 230 A4 pages;
- 70,000 words;
- 100 diagrams;
- 500 photographs;
- 60 ‘interest boxes’ of interesting information, going beyond the syllabus;
- a glossary of 160 terms.

When the ‘international version’ has been published, work will begin on the companion volume. This will be keyed into the chapter headings, suggesting ‘hands-on’ and ‘minds-on’ teaching ideas

and strategies (for example, the activities at www.earthlearningidea.com), with questions for students, to consolidate and extend their understanding. This companion volume has deliberately been developed separately, so that the text of the textbook is not broken up by the materials in the companion volume, and the companion can readily be updated without disturbing the pagination or the formatting of the textbook. This will allow new teaching ideas and questioning to be easily added at any stage. The companion volume can also readily be linked to the translations of the textbook that are developed.

Then colleagues across the world are invited to 'regionalise' and translate the textbook for use in their own regions or countries. They should replace the photos with local ones and replace or add to the 'interest boxes' with local examples, and translate the text into their own language, if necessary. In this way they will be able to develop a geoscience textbook for regions that may never previously have had such a textbook. Meanwhile textbook-writers across the world will have an authoritative source to refer to when developing their own textbooks and teaching materials. If you are interested in being involved, please contact Chris King at: chris@earthlearningidea.com for more details. Currently, there is interest in developing versions for Brazil, Catalonia, England, Italy, Scotland, Spain and Wales.



One of the textbook diagrams – drawn with no labels to assist the translators.