Water – Humanity's Project: media collection for the classroom

By Siemens AG

Reviewed by Michalis Hadjimarcou, Cyprus

Water – Humanity's Project is a CD-ROM containing a collection of about 300 pieces of media that examine water as an element of daily life as well as an important local and global issue. The collection is suitable for students and teachers of all levels.

The CD-ROM gives rapid access to contemporary, interactive lesson material. The media can be used for lesson preparation or direct application in the classroom. The selection is huge, in both the types of media and their content. It includes text files (fact sheets, worksheets, and lesson suggestions), photos, graphics, videos, animated materials and presentations. Subject categories include various aspects of water use – such as for drinking, in agriculture and industry, and in power generation – as well as topics such as water shortage and waste, and water's future. There is something useful for every science/ technology classroom (biology, chemistry, physics, geography, technology, information and communication technology and mechanics) as well as for humanities and social sciences.

The CD-ROM is relatively easy to use, thanks to its simple on-screen instructions. Navigation through the large collection of media is made easy by sort and search functions which allow quick access to specific items selected by either type or name. Another valuable tool is the specific information available for each item in the collection. This includes the name and type of media, a brief description, the relevant subjects (e.g. sciences, physics or technology), main headings, relevant school level and subjects, and possible areas of use (e.g. information sheets, lesson preparation).

Some of the media are very simple and thus easy to incorporate into teaching. For example, the diagram showing the tetrahedral structure of the water molecule and the formation of the dipole can easily be used either in information sheets for students or for presentation by the teacher when explaining the physiochemical properties of water in a science/technology lesson.

Other items are more elaborate and will require a specifically structured lesson in order to be used. One example is the functional diagram of a sewage plant, in which all the possible stations in the plant are shown. This detailed diagram can be valuable when studying water as a waste product as it allows examination of the mechanical, biological and physiochemical treatment of water. Of course, the study of this subject is relatively complicated, as it must take into consideration several other factors including the influence that the plant has on the local environment, the willingness of the local community to accept the plant in their area, and the usefulness of producing irrigation water in that location.

It would be possible to give the students access to the CD-ROM and have them work on projects that could be as varied in content and type as the media themselves. Furthermore, since the media topics range from science and technology to sociology and political science, the opportunity exists for interdisciplinary teaching.

It is unlikely that any teacher would be able to use the entire media collection. Furthermore, some of the items (such as the water cycle) are likely to appear in standard textbooks. But the majority of the items are either the types of materials that most teachers would like to use but don't have the time to prepare or look for, or material that teachers never realised could be useful in their teaching.

Details

Publisher: Siemens AG Publication year: 2007 ISBN: 9780520202771

Ordering

The CD-Rom can be ordered free of charge by teachers. See: www.generation21.siemens.de/ generation21/international/pages/ school_projects/media-collection.jsp

er 🚯 🖃