# Didactic Atlas of the National Geographic Institute of Spain

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#### **Abstract:**

The National Geographic Institute of Spain (IGN) has launched The Didactic Atlas of IGN, a new Open Educational Resource (OER) for the teaching community that consists of a set of materials to support the teaching of geography at Secondary and High School.

The contents of the Didactic Atlas are based on the National Atlas of Spain and other materials from the IGN, adapted to the didactic context and the educational levels. It has been created considering the curriculum of the Spanish educational system for the subject of geography.

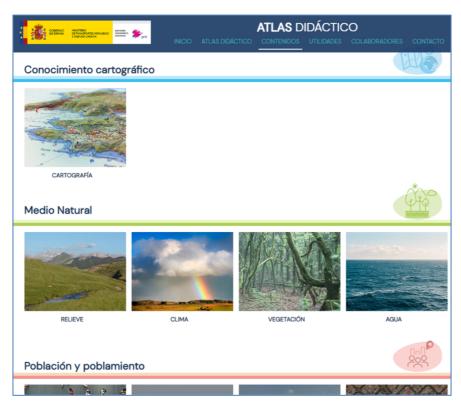


Figure 1. Image of part of the Content of the Didactic Atlas of the IGN.

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It is structured into 15 topics grouped into 5 thematic blocks as follows:

## I Cartographic knowledge:

1. The representation of the territory in plans and maps

### II Natural environment

- 2. The great units of the Spanish relief
- 3. The climatic variety of Spain
- 4. The distribution of vegetation in Spain
- 5. The waters in Spain

## III Population and settlement

- 6. Population: Who are we and where do Spaniards live?
- 7. People on the move: migratory movements in Spain.
- 8. The characteristics of Spanish cities in their urban plan
- 9. Spain: a network of cities in a mostly rural territory

## IV Economic activities and infrastructures

- 10. Agricultural uses in Spain
- 11. Location of the Spanish industry
- 12. Spatial analysis of the main economic sector in Spain: services

### V Territorial structure

- 13. Characteristics of Spanish landscapes
- 14. Origin and development of the current Spanish territorial organization
- 15. The international relations of Spain in the world

The theoretical basis has been developed in collaboration with the Didactic of Geography Group of the Spanish Association of Geography. More than 60 secondary, high school and university teachers from practically all the Spanish regions have participated assembled in 16 working groups. They were coordinated by a manager group made up of teachers, and by professionals from the National Geographic Institute.

The focus of this Didactic Atlas is placed on interactive cartography, which allows students to navigate, combine different layers of geographic information, consult the associated alphanumeric and thematic information, and create their own maps. The interactive maps are available through two types of map viewers: A wide variety of qualitative maps from the National Atlas of Spain and new derived ones published through web services in a web map application. Quantitative maps of the National Atlas of Spain are accessible through the Interactive Atlas of Spain, a useful tool already available.

Apart from theory and maps, the Didactic Atlas includes multimedia contents, didactic activities with feedback, and games to put in practice the knowledges acquired. The objective is to support the self-learning of geography, and to promote the use of Geographic Information Systems (GIS).

The software used to develop the platform with all the contents is eXeLearning, which is a free software tool under GPL-2 licence to create educational resources, which allows the reusing of materials so that the teachers can download the materials and adapt them to their own classes.

The Didactic Atlas is available in Spanish at Educa IGN, the IGN website for educational resources, and soon it will be available in English. As it is an Open Educational Resource (OER), it is offered for free, under an open license that permits user, adaptation, and redistribution by others with no restrictions, respecting and mentioning the authorship of the work.