

The Role of Maps in Japanese High School Geography Textbooks

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Abstract:

In Japan, “Geography” has become a compulsory subject on high school since 2022 (Ida, et al. 2015). High school “Geography” has three topics: 1) The modern world as seen through maps and GIS, 2) International understanding and international cooperation, and 3) Sustainable regional development and us (MEXT 2018). The contents of 1) provide students with the knowledge and skills to understand and use of maps and geographic information systems. It also provides students with the way of the gathering and reading of geographic information. Through these contents, students foster their spatial thinking and expressions skills with maps.

The aim of this study is to discuss the map skills that is brought up through “Geography”. Topographical maps and GSI maps (Geographical Survey Institute) are used in the textbooks. I examine these maps in the “Geography” textbooks. Authors of “Geography” textbooks write the textbooks according with the “Courses of Study” for “Geography”. The “Courses of Study” for “Geography” was constituted by MEXT (MEXT 2018). Students use textbooks but don’t read the “Course of Study”. These textbooks are important to discuss the students’ learning of map skills. The textbooks create the framework for students to learn geography. Many textbooks use GSI maps so that this report focuses on situations in which GSI maps are used and what kind of issues to be solved with maps.

Geographical Survey Institute maps are used in textbooks on the first part and the last part of the textbooks. The “Geography” textbook is described in the order of 1) to 3). GSI maps are used in the section 1) and 3). The one of the popular textbooks for students is Teikokushoin textbook. The numbers of GSI maps in the textbook is 1) 12 maps, 2) 0 maps, and 3) 16 maps. What kind of skills are developed with these maps?

In 3) Sustainable regional development and us, students learn the natural environment, disaster prevention, and daily activity space. GSI maps were used on learning disaster prevention. Maps were important when considering disasters. Japan has many disasters so that disaster prevention with maps are important and there are a lot of samples to learn the disasters. Textbooks have many examples of disaster learning with maps. 3) also covers the use of maps in regional surveys and the regional planning. The regional planning is not only present but also near future of the region. However, most of the regional issues are disaster prevention even though there are lot of issues of regional planning. It is easier tasks to conduct disaster prevention learning class than regional planning class with maps. The map numbers in textbooks indicate it.

The maps in the textbook are classified into 5 groups according to the purpose of the map usage. 5 groups are “General Map”, “Landform”, “Disaster prevention”, “Land use”, “Regional planning” (Table 1).

The purpose of Maps	Number of Maps
General map	7
Landform	7
Disaster prevention	8
Land use	3
Regional Planning	3

Table 1 The classification of the textbook maps according to the purposes of maps

From Table 1, the most common purpose of the maps is disaster prevention. The landform has similar purposes. There are fewer maps for land use and regional planning. Students have a lot of chances to learn the disaster prevention with the maps in the textbook. But there are fewer chances to learn regional planning with map through the textbook.

In “Geography” textbooks from 2022, the main skill in using Geographical Survey Institute maps is the skill of thinking about disasters. Although maps can be used in a variety of situations, they are not used in situations other than disasters to think about the region. Maps are a tool to discuss the future of a region, but the GSI maps in the textbook are often used in the obvious situation of disasters.

Map is a kind of decision-making tool. It should be used not only on disaster but also other situations. Other situation and scene should be taken in textbooks to develop students’ map usage skills and think the region spatially.

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