Chapter 5 Textbook Approval System and Geography Textbooks in Japan

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Abstract In this chapter, the author describes procedures of the textbook approval system and geography textbooks used in Japan's schools. Geography content within textbooks and skills required at each grade level are further explained to provide a picture of geography education in the country.

Keywords Geography education • Geography textbooks in school education • Japanese education • Textbook approval system

5.1 Introduction

To understand education in a country, textbooks can be an indicator and a data source for research. In Japan, most textbooks are written in Japanese. This language barrier may deter foreign scholars interested in the country's geography education. The author argues that it is worthwhile to implement a textbook system and textbooks in Japan that are in English.

The aim of this chapter is to provide information about the textbook approval system in Japan and to summarize textbook content to show the landscape of geography education in schools. First, the author explains the textbook approval system for school education and then introduce contents and skills required at each school level that meet the National Curriculum Standards.

In Japan, geography education starts from Social Studies in third grade and continues to the senior high school level. Here, the describes textbooks used from third to sixth grades in elementary schools and in junior and senior high schools.

5.2 Textbook Approval System in Japan

5.2.1 History and Procedure

All textbooks used in Japanese schools are published by private publishers after passing a textbook examination set by the Ministry of Education, Culture, Sports, Science, and Technology (MEXT). This is the textbook approval system established by the School Education Law in 1947 (MOFA 2005).

The process of textbook development and approval involves the following steps: writing and editing, screening, approval, publishing, and distribution. First, a publisher gathers together academics and school teachers. They read the Japanese national curriculum and standards for textbook examination before beginning to write a textbook. Following this, teachers discuss content with other members and editors during the writing process. The publisher submits a sample to MEXT. The Textbook Approval Research Council examines the text according to the Textbook Examination Standards. At the same time, textbook research officers from MEXT cross-reference samples with published standards. If the textbook does not meet a standard, MEXT requests revisions. The publisher resubmits a revised version, at which time the Textbook Approval and Research Council decides whether to recommend the textbook as appropriate learning material. The final decision rests with MEXT, who issues the approval. The entire textbook approval process is lengthy; most textbook projects take at least 3 years from the formation of the writing committee to actual use of the book in classrooms (MOFA 2005).

Textbooks are printed and distributed by many publishers, but the final decision on which books to use depends on local boards of education for public schools. For private schools, this decision is made independently. The local education boards and private schools notify MEXT of their textbook choices and the number of students who will use them. Publishers are ordered by the Minister to print enough copies to fulfill the total orders from all parts of the country. Figure 5.1 illustrates the process and actors involved.

Textbooks are provided to all students at compulsory school levels (elementary and junior high schools) for free, but students at the senior high level buy their own textbooks.

5.2.2 National Curriculum Standards and Textbook Approval System

The education content in Japan is defined in the *Gakushu Shido Yoryo* (National Curriculum Standards). The National Curriculum Standards are the education standards defined by the government. General rules in the National Curiculum Standards at each school level state that teachers must organize the education

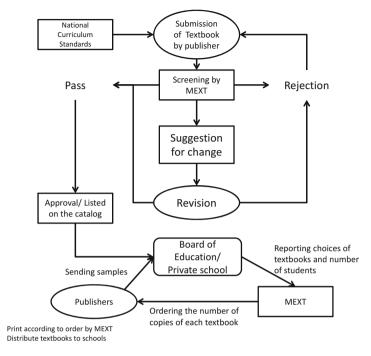


Fig. 5.1 Textbook approval system in Japan

curriculum in accord with the National Curriculum Standards. The latest national curriculum was introduced in elementary schools in 2011, in junior high schools in 2012, and in senior high schools in 2013.

The National Curriculum Standards are issued 3 or 4 years before introduction into schools. Soon after these curricula are published, publishers produce new textbooks that align with the examination before the new curriculum is implemented.

After publishing an approved textbook, the publisher begins work on the next edition of the textbook and publishes it 4 years later. This cycle of publication is also set by law.

5.3 Geography Textbooks in Japan's School Education

This section examines elementary school geography textbooks from Tokyo Shoseki, a publisher with the largest market share in Social Studies textbooks. Another publisher targeting secondary schools is Teikoku Shoin, with a market share exceeding 90 % in atlases and the largest share in secondary level geography textbooks (Watanabe 2011).

5.3.1 Textbook Formats

At the elementary school level, geography is part of Social Studies. One set of Social Studies textbooks (two volumes) are used in the third and fourth grades. In the fifth and sixth grades, one set of textbooks (two volumes) are provided for each year. Social Studies (geography area) in junior high schools and Geography A and Geography B in senior high schools require one textbook each. Book size in elementary schools is A4-size wide (210 mm) and B5-size long (257 mm). Since B5 size is common in Japanese schools, there are many textbooks and handouts of this size. Geography textbooks for secondary schools are also B5 size (182×257 mm).

The Volume One Social Studies textbook for the third and fourth grades is 108 pages in length and Volume Two is 162 pages. The fifth grade Volume One is 100 pages, and Volume Two has 116 pages. The sixth grade textbooks are 152 pages for Volume One and only 80 pages for Volume Two. The textbook in junior high school is 280 pages, and those of Geography A and B are 214 and 342 pages, respectively (Table 5.1). These textbooks are neither too large nor too heavy for students to carry back and forth between school and home.

Figure 5.2 shows the covers of these textbooks. All books are printed in color and include numerous maps, figures, and pictures. In addition to Social Studies

School level	Elementary school						Junior high school	Senior high	school
Grade (Age)	3 (9)	4 (10) 5 (11) 6 (12)			1–3 (13–15)	1–3 (16–18)			
Subject	Social Studies						Social	Geography	Geography
	Vol. 1	Vol. 2	Vol. 1	Vol. 2	Vol. 1	Vol. 2	Studies	A	В
							(geography)		
Size	210×257 mm				182×257 mm	1			
Page	108	162	100	116	152	80	280	214	342

Table 5.1 Textbook formats at each school level



Fig. 5.2 Textbooks for geography in primary and secondary education (from left: Kita et al. 2012c; Nakamura et al. 2012; Arai et al. 2013 and Katahira et al. 2013)

textbooks, supplementary reading material dedicated to local municipality and prefecture issues is provided to third and fourth grade students by the local government. All students receive an atlas at every school level.

5.3.2 Textbooks for Primary Education

Geography is included in Social Studies at the primary education level. Students study Geography-related units mainly in the third, fourth, and fifth grades. Some geographic elements, such as comparative studies between Japan and another country or leaning about global issues, also appear in sixth grade.

The National Curriculum Standards for elementary school sets common objectives for grades 3 through 6, including the use of maps, globes, and statistics, and development of skills for thinking about social phenomena, their characteristics and interactions, and for expression of student ideas and research results (MEXT 2008b).

The National Curriculum Standards explain learning outcomes at each grade level. All textbooks are designed to achieve these objectives and include learning elements in the curriculum standard.

In the third and fourth grades, students conduct research in their community and begin to have deeper interests in their local area and prefecture. The term "local area" in this chapter refers to city and township levels. Fifth grade students will have a wider view of the entire nation, and students begin to learn and think about the entire world in sixth grade.

Students in the third and fourth grades conduct field surveys to learn more about the area surrounding their school and the town or city that they inhabit. They also become familiar with businesses and industries in their community by speaking to workers. Elementary students acquire basic knowledge of disasters, disaster prevention, and various systems (urban, water, and waste disposal). Students also learn about their prefecture through research and data collection. Table 5.2 summarizes content covered at the third and fourth grade levels.

Most teachers cannot use the third and fourth grade social studies textbooks for local studies, because these books use examples taken from select cities and prefectures. Since teachers use their own local community in class, they must develop similar content for their own areas. Teachers use textbook examples as a model for student activities and expected outcomes.

In the third and fourth grades, the teaching method is for students to learn from experiences such as field surveys. Therefore, skills in these grades emphasize surveying methods, including interviews. Many types of map-reading skills and graphicacy are included in a section called Interpretation Skills. These skills include how to read maps, graphs, and tables. Map reading includes reading contour lines, topographic relief, and land use. More generally, use of an atlas is also taught. Therefore, text-books are designed to include appropriate examples for local studies as well as some important geographic skills for students to acquire and use (Fig. 5.3).

Table 5.2 Contents of Social Studies textbook used in third and fourth grades of elementary school

Chapter	Section	Points	
My town, town	Around school	Field research	
for everybody	Condition of the city		
Workers and	Staff in a store	Characteristics of our community	
our lives	Farmers' life	and people's lives	
Changing life	Antique tools and old life	Change of people's lives	
	Tradition to posterity	Learn history in local community	
Protection of	Protection from fire Disaster prevention educa		
our life	Protection from accidents and incidents		
To our better	Where does water come from?	Urban system knowledge	
life	Disposal and reuse of waste		
Development of country	Irrigation network(s) in the mountains	Local history	
Our prefecture	Location of prefecture	Characteristics of the prefecture	
	Regional characteristics and people's lives		
	Prefecture connecting to the world		

Kita et al. (2012a, b)



Fig. 5.3 Pages from Social Studies textbook for third and fourth grade (section entitled "Around school") (Kita et al. 2012b)

In the fifth grade, students learn about Japan including its natural environment (e.g., landforms and climates), industries (e.g., agriculture, fishery, and manufacturing), and acquire information about society's role in environmental conservation (Table 5.3). The most common teaching method is for students to read maps, graphs, and figures.

Chapter	Section	Points	
Our national land	Japan in the world	Understanding of natural	
	Features of landscape and people's lives	environment in Japan	
	Characteristics of climate and people's lives		
Our lives and food	Rice: Shonai plain	Agriculture and fisheries	
	Fishery: Shizuoka		
	Food industry and our future		
Our lives and	Automotive manufacture	Industry in Japan	
manufacturing	Manufacturing industry and industrial area		
industry	Manufacturing industry and trade		
Information society	Information industry and our lives	Information society	
and our lives	Information changing society	Information literacy	
	How to utilize information		
Our lives and	Our lives and forests	Environment conservation	
environment	We save the environment	and disaster prevention	
	Obviate natural disasters		

Table 5.3 Contents of Social Studies textbook used in fifth grade of elementary school

Kita et al. (2012c, d)



Fig. 5.4 Pages from Social Studies textbook for fifth grade (section entitled "Characteristics of climate and people's lives in Japan") (Kita et al. 2012d)

Many basic map-related skills are presented in the textbook for fifth grade students. Furthermore, use of the globe and interpretation of aerial photos are skills that students must acquire. These map reading skills underpin the next stage, in which students extract information from maps. Textbook content explains geographic facts, using photos and figures (Fig. 5.4).

Chapter	Section	
1. History in Japan (History)	Jomon period to tumulus period/Building emperor-centered country/Generation of warriors/Muromachi culture/Warring states period to Edo period/Culture and new education in Edo/Meiji restoration/Japan toward the world/Protracted war and people's lives/To new Japan, peaceful Japan	
2. Our lives and politics	Politics make our wish come true	
(Politics)	Constitution of Japan and our lives	
3. Japan in the world (Peace education and Geography)	Countries with ties to Japan U.S., Korea, China and Saudi Arabia	
	Our future and role of Japan in the world	

Table 5.4 Contents of Social Studies textbook used in sixth grade of elementary school

Kita et al. (2012e, f)

As students advance in grade level, required skills change from simply *reading* maps, graphs, and figures to *interpreting* maps or other figures and using them to inform their research or study. Equally important from the third through fifth grades are students' communication skills for arguing why their findings are important.

In the sixth grade, textbooks treat history from past to present and politics in Japan. The last section includes cultural geography of countries around the world (Table 5.4). This chapter includes peace education, since it is very important for students to think about how they can contribute to global society. This geographic content is very similar to what junior high school students study. This part may be good practice for sixth grade students to discover what they will learn in the next stage of education.

5.3.3 Geography Textbooks in Secondary School Education

5.3.3.1 Objectives of Geography Education and Textbooks in Junior High Schools

At the junior high school level, Geography is still a part of Social Studies. The main objective of Social Studies in the National Curriculum Standards is to help students "look wider and raise awareness of society, think from various perspectives using various data, understand and love our own nation and history, establish a basis for citizens to live in a global society, and make a peaceful and democratic nation and society" (MEXT 2008a, p. 31).

Table 5.5 shows the content of a textbook for junior high students. This book is normally used for 2 years. The geography curriculum in junior high school is designed for students to think about geographic phenomena from multiple perspectives. Students learn about and compare the world with Japan through their own research.

Geography in junior high school is focused on regional geography, so the curriculum emphasizes the understanding of differences and similarities in the world,

Table 5.5 Contents of a textbook of Social Studies (Geography area)

Chapte	er and sections
1. Wo	orld Geography
_	The appearance of the Earth
	Continents, oceans, regional classification, major countries, longitude and latitude, globe and map, brief map
_	Life in the world
	Pacific Ocean islands, Siberia, Arabian Peninsula, Andes: houses, clothes, food and religion
_	Natural environment, history and cultural background, industry
	Asia, Europe, Africa, North America, South America, Oceania
-	Research on another country
	Decide on a country or region and a theme, collect source material, analyze data and make a presentation
2. Ge	ography of Japan
_	Appearance of Japan
	Location, territory, prefectures, regions
_	Comparison between Japan and the world: characteristics of natural environment
	Mountains, plains, seashore and ocean current, natural disaster and prevention, population, natural resources and industry
_	Geography in each region of Japan
	Natural environment and energy in Kyushu, transportation in Chugoku/Shikoku, environmental issues and preservation in Kinki, industry in Chubu, cities and population in Kanto, life and culture in Tohoku, history in Hokkaido
_	Research on an area
	Set up a hypothesis, conduct fieldwork using topographic maps, summarize results and

Nakamura et al. (2012)

make a presentation

as well as knowledge of and finding the uniqueness of Japan through learning about the natural environment, population, energy and relationships among regions. The National Curriculum Standards includes learning about the natural environment, history, industry, environmental protection, population and cities, life and culture, and relations between seven Japanese regions. The textbook focuses on one topic for each region.

The content of geography in junior high school mainly includes the explanation of locations and characteristics in the world and Japan. Therefore, teachers tend to give passive lessons focusing on rote memorization. This is the image of geography education in the country, which has often been criticized for this pedagogy. In response to these criticisms, many questions have been inserted into textbooks. These questions mainly ask students why a phenomenon is observed or occurs, revealing the most important way of thinking in geography education. For these reasons, most textbook pages are designed to include a substantial number of questions, maps, and graphs to support the development of student geographical thinking (Fig. 5.5).



Fig. 5.5 Pages from Social Studies (geography area) textbook for junior high school (section entitled "Characteristics of natural resources and industry: Energy production and consumption in Japan") (Nakamura et al. 2012)

5.3.3.2 Geography and Textbooks in Senior High School

In senior high education, geography belongs to the Geography and History subject category, and there are two subjects, Geography A and Geography B. Geography A is two credits, consisting of 70 lesson hours (two lesson hours per week). Geography B is four credits and 140 lesson hours (four lesson hours per week).

The common goals of these subjects are to consider various geographical issues in the world, to cultivate geographic points of view and ways of thinking, and to develop awareness for living responsibly in global society. The difference between these subjects is the approach to teaching. In Geography A, teachers impart characteristics of world regions, whereas Geography B teachers explain geographic phenomena using theories of systematic geography or by using regional geographic points of view.

The difference in these approaches is reflected in the content of each textbook. In the textbook of Geography A, many types of lifestyles across the world are explained from the viewpoint of landscape, climate, industry, and cultural differences. Many topics overlap with content in junior high school geography (Table 5.6).

The big difference between these two geography subjects is how phenomena observed in the world are explained. In the Geography A textbook, many pictures of

Pa	rt	Cł	napter	Section	Points
of and	Appearance of the world	1.	Contemporary society seen from globe and maps	Locations on the Earth and countries	Latitude and longitude, time zone, territory
	and global issues			Globalized world	Relationship between Japan and other countries
		2.	Environments around people's lives	Environmental factors to affect people's lives	In various regions in the world and Japan
				People's lives and landscape, climate, industry and culture	
		3.	Lives and cultures in the world	China, Korea, Southeast Asia, India, Central Asia/West Asia/ North Africa, Sub-Sahara Africa, Europe, Russia, U.S., Latin America, Australia	Explaining dominant landscapes, climate, culture and industries in each region
			Global issues with us	Complicated global issues Environmental issues, resource and energy problem, population problem, food issues, urban problem	Learning from examples from the world
2. Issues		1.	Various maps close to our lives	Maps and characteristics	Knowing maps and GIS
	in local area			GIS and technology for GIS	
				Utilization of GIS technology and maps	
				Creating different maps for different purposes	
		2.	Natural environment and disaster prevention in Japan	Natural environment in Japan	Thinking of disasters
				Volcanos, earthquake, wind and flood damage and disaster prevention	and what we can do fo disaster prevention
				Considering disaster prevention in the local area	
		3.	Finding issues and area research	Deciding a topic, conducting research in local area and making a presentation	Nourishing research and communication skills

Table 5.6 Contents of Geography A textbook in senior high education

Arai et al. (2013)

landscapes and people are used for additional explanation, with brief text. In contrast, the Geography B textbook explains the phenomena and theories in depth, illustrated with pictures, maps, graphs and flowcharts (Fig. 5.6).

The Geography B lessons are designed for students to obtain a geographical way of thinking and to consider why different phenomena are seen. This departs from the traditional image of geography as a rote-learning subject. Students and teachers must adapt to the subject to develop geographical thinking and related skills.

The Geography B textbook begins with concepts of geographic information, GIS mapping software, longitude and latitude, and time zone difference (Table 5.7).



Fig. 5.6 Pages from textbooks for Geography A and Geography B (section entitled "Landscape in Japan"): Geography B uses two pages to explain the same topic explained on one page in Geography A (Arai et al. 2013) and Katahira et al. 2013)

Table 5.7 Contents of Geography B textbook in senior high education

Part	Chapter	Section
1. Various maps	1. Geographic	Maps in contemporary world
and geographic	information and	Types and usage of maps
skills	maps	Mapping geographic data
	2. Utilization of maps	and regional research
2. Seeing	1. Natural	Landforms in the world
contemporary	environment	Climate in the world
issues from the		Characteristics of nature and lives in Japan
viewpoint of systematic		Environmental issues
geography	2. Resource and	Development and change of industry
8-8-1	industry	Agriculture, fishery and forestry in the world
		Food problem
		World energy and mineral resources
		Resource and energy problems
		Industries in the world
		Tertiary industry
		Transportation and communication connecting to the world
		Trade and economic zone in contemporary society
	3. Population, rural	World population
	and urban areas	Population issues
		Rural and urban areas
		Urban and settlement problems
	4. Lives, cultures,	Life and cultures
	ethnic groups and	Ethnic groups and religions
	religions	Nations in the contemporary world
		Ethnic and territorial problems

(continued)

Part	Chapter	Section	
3. Geography in	1. Regional	Classifiation of regions	
regions of the contemporary	classification in the contemporary world	Regional classification in different scales	
world	2. Regions in the contemporary world	Thinking from a regional geographical point of view	
		East Asia, Southeast Asia, South Asia, West and Central Asia, North and Sub-Sahara Africa, Europe, Russia, Anglo-America, Latin America, Oceania	
	3. Japan and the contemp	porary world	

Table 5.7 (continued)

Katahira et al. (2013)

Topics on systematic geography, phenomena and theories of landforms, climate, industries, population, rural and urban areas, culture, and religion are explained using figures and graphs. The section on regional geography begins by defining a theme, followed by explanation of characteristics using a regional geographic perspective for each classified region.

The National Curriculum Standards for senior high school, issued by MEXT in 2009, mentions the use of information and telecommunications networks. Specifically, GIS is mentioned as a tool to collect and analyze data using maps and spatial statistics. To comply with the curriculum standard, teachers must use GIS in geography classes. Hence, textbooks in both Geography A and B devote a couple of pages to GIS.

5.4 Conclusion

This chapter briefly introduces the textbook approval system in Japan, as well as content and skills in the latest geography textbooks from primary to senior high school education levels.

In Japan, all textbooks are developed by private publishers. MEXT screens textbooks to ensure that they are written in accordance with the National Curriculum Standards. After screening, only approved textbooks can be published and distributed free of charge to all students in elementary through junior high schools, and for sale to senior high school students.

In primary schools, geography education begins with a focus on the local community around the school. Textbooks deal with a range of topics, from gradually widening scales of city, prefecture, Japan, and the world. In secondary education, textbooks guide student thinking about Japan within the world, to interest them in various issues in the country and worldwide. These textbooks are aesthetically attractive and colorful, displaying fundamental skills of geography. The ideal of geography education can be found in these textbooks. Although their quality is not always matched by that in classroom teaching, good textbooks certainly contribute to effective class instruction.

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