

Amish Education

4. Analysis of geography textbooks

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Abstract

The purpose of this research is to analyze the relationship between lifestyle and information. We have investigated the relationship of them in modern society and Amish society by analyzing school textbooks as an important role of media. This paper analyzed the geography textbooks used in Amish schools and compared them with those of American. The method used for the analysis is to classify the contents of Amish and American geography textbooks according to the "National Standards for Geography" of United States.

As a result, American textbooks tend to deal all standards constantly compared to those of Amish and they also deal world countries. On the other hand, Amish textbooks for the third and fourth grades are written in story and more contents are about lifestyles of people. Therefore Amish study the way of life through geography rather than learning skills and techniques such as map making and obtain information from maps.

Key Words: Amish, education, textbooks, geography

1. Introduction

We have investigated the relationship between lifestyle and information in modern society with the idea that information is significant in determining our lifestyle¹⁾²⁾. As the relationship between lifestyle and information is clear in Amish society, we analyzed the role of media in Amish society. In Amish society, their main sources of information are from their members of the community, written materials, and eight years education. We have focused on the role of education and investigated textbooks used at Amish schools as their common media. In the previous investigations, we have analyzed the health, arithmetic and history textbooks at Amish schools⁴⁾⁵⁾⁶⁾ and compared them with those of American or Japanese textbooks.

This paper analyzes their geography textbooks by comparing them with American textbooks to find out the characteristics of the Amish information through their educations.

2. The method of analyzing geography textbooks^{7)~10)}

This paper analyzes Amish geography textbooks with the comparison of American geography textbooks by using American national standards. In America, "The National Geography Standard" (1994) is adopted. We have analyzed the contents of Amish and American geography textbooks by this standard.

"The National Geography Standard"¹⁰⁾ is adopted in 1994 as "Goals 2000: Educate America Act (Public Law 103-227)". This "Goals 2000" is said to be the culmination of a decade of reform in geography education. These geography standards identify what American students should learn. Each States and school districts promote original reform toward the achievement of their own standards¹⁰⁾. "Geography for Life" is the name of "National Geography Standards 1994". The purpose of standards for geography is to bring all students up to internationally competitive levels to meet the demands of a new age and a different world. The standards specify the essential subject matter, skills, and perspectives that all students should have in order to attain high levels of competency¹⁰⁾.

In this standard, the subject matter of geography is divided into six essential elements which are "The World in Spatial Terms", "Places and Regions", "Physical Systems", "Human Systems", "Environment and Society", and "The Uses of Geography". Each elements have own purpose and contains several standards altogether eighteen standards. Six elements and its eighteen standards of "National Geography Standards" are explained as follows.

①The World in Spatial Terms

Geography is the study to learn the relationship between people, places, and environments by mapping information about them into a spatial context. In this element, there are three standards that person should know and understand. They are how to use maps and other geographic representations, tool, and technologies to acquire, process, and report information from a spatial perspective, how to use mental maps to organize information about people, places, and environments in a spatial context, and how to analyze the spatial organization of people, places, and environments on Earth's surface.

②Places and Regions

The identities and lives of individuals and peoples are rooted in particular places and in those human constructs called regions. The geographically informed person knows and understands following three standards. They are the physical and human characteristics of places, that people create regions to interpret Earth's complexity and how culture and experience influence people's perceptions of Places and Regions.

③Physical Systems

Physical processes shape Earth's surface and interact with plant and animal life to create, sustain, and modify ecosystems. The geographically informed person knows and understands following two standards. They are the physical processes that shape the patterns of Earth's surface, and the characteristics and spatial distribution of ecosystems on Earth's surface.

④Human Systems

People are central to geography in that human activities help shape Earth's surface, human settlements and structures are part of Earth's surface, and humans compete for control of Earth's surface. The geographically informed person knows and understands following five standards. They are the characteristics, distribution, and migration of human populations on Earth's surface, the characteristics, distribution, and complexity of Earth's cultural mosaics, the patterns and networks of economic interdependence on Earth's surface, the processes, patterns, and functions of human settlement and how the forces of cooperation and conflict among people influence the division and control of Earth's surface.

⑤Environment and Society

The physical environment is modified by human activities, largely as a consequence of the ways in which human societies value and use Earth's natural resources, and human activities are also influenced by Earth's physical features and processes. The geographically informed person knows and understands following three standards. They are how human actions modify the physical environment, how physical system affects Human Systems, and the changes that occur in the meaning, use, distribution, and importance of resources.

⑥The Uses of Geography

Knowledge of geography enables to develop an understanding of the relationships between people, places, and environments over time, that is, of Earth as it was, is, and might be. The geographically informed person knows and understands following two standards. They are how to apply geography to interpret the the past and how to apply geography to interpret the present and plan for the future.

3. Analysis of geography textbooks in Amish school^{11)~14)}

(1) The geography textbooks in Amish school

We have analyzed the contents of Amish geography textbooks (Photo 1), and compared them with those of American geography textbooks. The four Amish textbooks for geography education used for

the analysis are for students from the second-third grade to the seventh-eighth grade. Table 1 shows the title and the contents of Amish textbooks. The volume of the textbooks for the second-third and fourth grade are almost the same, however, there are only three chapters in the third grade textbooks compared to the fourth grade which contains thirteen chapters. Both of two textbooks for the fifth-sixth and seventh-eighth have twenty-three chapters and their pages are almost the same.

"Starter Geography"⁽¹¹⁾ is the textbook for lower grades such as the second and the third grades and is a reprinted textbook of "Our Homes and Our



Photo 1. Amish geography textbooks

Table 1. Title and the contents of Amish geography textbooks

Grade	Title	Pages	Contents	first edition
2,3	Starter Geography	192	3 chapters	N.A
4	Our Big World	198	13 chapters, Glossary, Index	1968
5,6	The American Continents	382	23 chapters, Facts for Reference, Glossary Index	1968
7,8	Old World Lands	358	23 chapters, Facts for Reference, Glossary, Index	1968

N.A: Not available

Table 2. Content headings of Amish geography textbooks

Grade 2,3

Our Homes and Our Neighbors	
Daniel and Penny and Their Indian Friends	Looking For A New Home
	Indian Country
	In Eagle Tail's Village
	Homes Of Other American Indians
	A Warm Welcome For The Settlers
	The Corn Feast
	Hunting For Food In The Deep Woods
	Two Sheep And A Cow
	New Clothes For Daniel And Penny
	The Shoemaker Comes
	Busy Indian Children
	A Log Cabin School
	Going From Place To Place
	The Very First Store
The Log Cabin Village Grows	
When Our Grandfathers Were Boys	The City Of Rivertown
	A Ride Behind Black Beauty
	On Rivertown Streets
	Steamboat Is A-Coming!
	Puffing Engines
	Welcome To Jack's House
	Ann's Letter
	Jack And Ann Take A Walk
	A Trip To A Store
	Jack And Ann Meet A Miller
	A Stop At The Bakery
	Machines! Machines! Machines!
	On Ann's Farm
	Wonderful Wires!
	Buffalo Bill Comes To Town
	Our Wonderful, Wonderful Country
The Place Where We Live	In Our Own Part Of The United States
	Pictures and Maps

Grade 4

Our Big World	
Getting Ready For Our World Journey	We Visit a Famous City
	We Learn More about Map Signs
	We Use Map of Our Country
	We Meet Our Glove Guide
	Exploring for Yourselfes
In Iceland And The Arctic Ocean	An Island Country
	In the Arctic
	Exploring for Yourselfes
From North To South In Norway	In the Far North
	South along the Coast
	From Sea to Sea
	Exploring for Yourselfes
In The Netherlands	Below Sea Level
	Farm Scenes and Farm Life
	How Ships and Planes Help the Netherlands
	Exploring for Yourselfes
In Switzerland	Mountain Farmers
	Summer and Winter in the Village
	Travelers in Switzerland
	Swiss City Workers
	Exploring for Yourselfes
A Mediterranean Trip	A Farm Village in Southern Spain
	Along the Coast of Southern Italy
	A Look at Northern Italy
	In Southern Greece
	Exploring for Yourselfes
South Along The Nile	In the Greatest Desert in the World
	In the Long Oasis of the Nile
	South from the Great Dams
	Exploring for Yourselfes
In The Land Of The Congo	A Congo Village
	Forest Work and Travel
	Congo Boats and a River Journey
	Exploring for Yourselfes
From The Equator To The South Pole	South to Capetown
	On to Antarctica
	Exploring for Yourselfes
In Australia And India	Here and There in the Smallest Continent
	In the Peninsula of India
	Exploring for Yourselfes
On To Hong Kong And Japan	In Hong Kong
	From South to North in Japan
	Exploring for Yourselfes
From The Far North To Cape Horn	Along the Coast of Alaska and Canada
	Warm Lands and Hot Lands
	Far South of the Equator
	Exploring for Yourselfes
Looking At The World With "New Eyes"	Back in Our Own Country
	We Live in a Changing World
	Exploring for Yourselfes
Glossary	
Index	

Grade 5,6 (1)

Grade 5,6 (2)

The American Continents		13. Living In The West	The Rockies and the Dry Lands
1. A Look At The United State	Building a New Country		The Pacific Northwest
	The United States Today		California
Introducing: Northeastern United States		From the United States to the World	
2. In The Early Days	Farmers and Fishermen	14. Distant Parts Of Our Country	Alaska
	Trade and Manufacturing		Hawaii
	A Gateway to the West		Puerto Rico
	Traveling on the Erie Canal		The Virgin Islands
	Great City on Manhattan Island		The Canal Zone
3. New England	An Industrial Revolution		Many Lands - One Land
	A Giant Workshop	15. The United States And The World	
	Today's Fishermen		
4. Middle Atlantic Seaboard	Farming for the Cities	Introducing: Canada	
	Forests, Mines, and Tourists	16. Canada	The Maritime Provinces
	New York is Many Things		French Canada
	Washington, D.C		Main Street of Canada
Other Great Cities	Mineral Treasures		
5. The Appalachian Mountains	Outside the Cities		The Prairie Provinces
	Connections		British Columbia
	Treasure from a Barrier		The Great Forest
	Making Iron and Steel		The Treeless North
6. The Old South And The New	Cities, Steel, and Power		Canada - a Great Trader
	Forests and Farms	Introducing: Latin America	
		17. Neighbors In Latin America	Middle America
Introducing: The South		18. Mexico	The Dry North
7. The Cotton Belt And The Gulf	The Spaniards Came First		A Trip to Mexico City
	The English in Virginia		The Heart of Mexico
	Swamps, Plantations, and a Port		The Southern Mountains
	Crossing a Mountain Barrier		Eastern Lowlands
	The Land of Cotton	Mexico Is Changing	
8. Settlers In The Middle West	River Highways and Cities	19. Central America	Guatemala and El Salvador
	Cotton Country		Honduras and British Honduras
	Tobacco Country		Nicaragua
	The Southern Appalachians		Costa Rica
	Factories and Cities		Panama
	Florida and the Gulf South		Six Countries in One
9. Farmers In The Middle West	Islands of Farm Land	20. The West Indies	Cuba
	Underground Treasure		Haiti and the Dominican Republic
			Jamaica, the Bahamas, and the Antilles
Introducing: The Middle West		21. Along The Andes	Colombia
10. Towns And Cities In The Middle West	Highway to the West		Venezuela
	The Unknown Prairie		Ecuador
	The Great Lakes and Their Cities	Peru	
11. The Great Plains	The Changing Corn Belt		Bolivia
	The Dairy Belt	22. Brazil And The Guianas	Southeastern Brazil
	Forests in the North		Northeastern Brazil
Iron Ore and the Great Lakes	The Amazon and Interior Brazil		
12. The West - Land Of Promise	Factories that Use Steel		The Guianas
	Other Mines, Cities, and Factories	23. Southern Lands	Argentina
	Chicago: Factories and Transport		Uruguay and Paraguay
	Famous Routes Used in New Ways		Chile
Introducing: The Great Plains		Facts for Reference	
13. Living In The West	From Fur Traders to Cattlemen	Glossary	
	Farmers and their Problems	Index	
	Using the Land Today		
	Rivers and Cities of the Plains		
Introducing: The West			
14. Distant Parts Of Our Country	Settling the West		
	The Promise of Oregon		
	Oasis between the Great Mountains		
	Gold in the West		
	Bringing East and West Together		
	Three Lands in One		

Grade 7,8 (1)

Grade 7,8 (2)

Old World Lands		12. Southeast Asia	The Philippines
Preface			Indonesia
Acknowledgments			Burma and Thailand
1. Landmarks In The Old World	Landmarks in Place		Vietnam, Laos, and Cambodia
	Landmarks in Time		Singapore and Malaysia
Introducing: Europe and the Soviet Union		13. China	Hong Kong, Southern Port
2. Europe And The Soviet Union			Farmers of South China
3. The British Isles	London		Cities of South China
	How Britain Lives		Farmers in North China
	Farms in England		Cities and Industries of North China
	The Central Manufacturing District		Manchuria, Old and New
	Wales		Western China - Deserts and Mountains
	Scotland		The Years Ahead
	Ireland		
	The Sea and Britain	14. Mongolia and Korea	Mongolia
4. Scandinavia And Finland	Norway		North and South Korea
	Sweden	15. Japan	Using Natural Resources
	Finland		Factories and Cities
	Denmark		Japan and the Future
		Introducing: Australia, New Zealand, Antarctica	
5. France, Belgium, Netherlands	France	16. Australia, New Zealand, Antarctica	Australia
	Belgium		New Zealand
	The Netherlands		Antarctica
6. Germany, Austria, Switzerland	Germany	Introducing: Africa	
	Austria	17. Landmarks In Africa	
	Switzerland	18. The Sahara and Egypt	The Sahara
7. Southern Europe	Portugal		Egypt
	Spain	19. The Atlas Lands	
	Italy	20. Lowlands Near The Equator	Along the Gulf of Guinea
	Greece		The Republic of the Congo
8. Eastern Europe	Poland		Looking at Them All
	Czechoslovakia	21. Eastern Africa	Etiopia, Land of Isolation
	Hungary		East Africa
	Rumania	22. Southern Africa	Republic of South Africa
	The Danube River		Zambia, Rhodesia, and Malawi
	Bulgaria		Other Lands in Southern Africa
	Albania		Looking at Africa
Yugoslavia	Looking at the Whole World		
9. The Soviet Union	Russia, Old and New	23. Change, Interdependence, And Freedom	
	How the People Live	Fact for Reference	
	The Government and the Farmer	Glossary	
	Regions of Agriculture	Index	
	Forest Workers and Fishermen		
	Mines, Cities, Factories		
	The Soviet Union and the World		
Introducing: Southern and Eastern Asia			
10. Southwest Asia	Turkey		
	Syria and Lebanon		
	Israel		
	Jordan and Iraq		
	Saudi Arabia		
11. India, Pakistan, Ceylon	Iran and Afghanistan		
	Pakistan, East and West		
	India		
	Ceylon		
	Looking Ahead		

Neighbors" (published by American Book Company) by Gordonville Print Shop. This textbook is re-edited by Amish for Amish schools. This textbook deals a home geography. The aim of this textbook is to understand their home environment and appreciate the basic needs. This contains several stories which deal the importance of neighborly co-operation and dependence on others. Also it contains simple geographical concepts such as weather and climate, land and water forms. This book deals history of Indians and the pioneers, and mechanized society of 20th century. There are many illustrations but no pictures.

"Our Big World"¹²⁾ is a textbook for the fourth grade which revised and reprinted in 1990 and 1996 by Gordonville Print Shop. This textbook is also published by Silver Burdett & Ginn Company in 1968 and Gordonville Print Shop obtains the permission to print and use it in Amish schools. This is very famous as "Ginn series" for geography textbooks. This textbook contains the stories of people all over the world in order to teach pupil to acquire geographic understandings of the world.

"The American Continents"¹³⁾ is a textbook for the fifth-sixth grade and also first published in 1968 by Silver Burdett & Ginn Company, and Gordonville Print Shop obtains the permission to print and use it in Amish schools. It is revised and reprinted in 1990 by Gordonville Print Shop. This textbook has two functions such as providing clear, significant geographic insight into the people of the New World and the lands in which they live and binging pupil's general geographic skills and understandings. It only deals the American geography.

"Old World Lands"¹⁴⁾ is a textbook for the seventh-eighth grade and also first published in 1968 by Silver Burdett & Ginn Company, and Gordonville Print Shop revised and reprinted it in 1997. This textbook aims at teaching pupils to see how human being lives in different environment in the Old World. It also teaches children that the lives of the present generation have close relation to the past generation.

Table 2 shows the content headings of Amish geography textbooks.

(2) Classification of content headings by eighteen standards

In order to clarify the contents, we reclassified the content headings according to "The National Geography Standard 1994". They are ①The World in Spatial Terms 1 ②The World in Spatial Terms 2 ③The World in Spatial Terms 3 ④Places and Regions 1 ⑤Places and Regions 2 ⑥Places and Regions 3 ⑦Physical Systems 1 ⑧Physical Systems 2 ⑨Human Systems 1 ⑩Human Systems 2 ⑪Human Systems 3 ⑫Human Systems 4 ⑬Human Systems 5 ⑭Environment and Society 1 ⑮Environment and Society 2 ⑯Environment and Society 3 ⑰The Uses of Geography 1 ⑱The Uses of Geography 2.

Table 3 shows the re-classification of content headings of Amish geography textbooks by these eighteen standards.

(3) The characteristics of percentage rate

We count content headings of each standard in the table and calculate the percentage as shown in table 4. It is clear that the issue of "Places and Regions 1" is of the highest priority (21.9%) and "Human Systems 3" (17.3%) and "Human Systems 2" (11.7%) follow. On the other hand, standard of "The World in Spatial Terms 2" and "The Uses of Geography" only show very small percentages (0.1%). Therefore, Amish geography textbooks focus on rather life of people than studying spatial ideas and skills of using geography. The tendency of study is similar between the textbooks of fifth-sixth grade and the seventh-eighth grade. Students in higher grades learn geography with the standards of "The World in Spatial Terms 3", "Places and Regions 1", "Human Systems 1", "Human Systems 2", "Human Systems 3", and "Environment and Society 3".

(4) The characteristics of the content by eighteen standards

①The World in Spatial Terms 1

This standard focuses on the use of maps as a geographical tool. This standard is only dealt in

Table 3. Classification of content headings of Amish geography textbooks (1)

Geography Standard	Grade 2,3 Our Homes and Our Neighbors	Grade 4 Our Big World	Grade 5,6 The American Continents	Grade 7,8 Old World Lands
The World in Spatial Terms 1	Pictures and Maps	We Visit a Famous City We Learn More about Map Signs We Use Map of Our Country We Meet Our Globe Guide Exploring for Yourselfes Below Sea Level		
The World in Spatial Terms 2	Pictures and Maps			
The World in Spatial Terms 3	Looking For A New Home	We Use Map of Our Country We Meet Our Globe Guide Exploring for Yourselfes Exploring for Yourselfes In the Far North Exploring for Yourselfes Exploring for Yourselfes Exploring for Yourselfes A Farm Village in Southern Spain In Southern Greece Exploring for Yourselfes In the Lost Oasis of the Nile Exploring for Yourselfes Forest Work and Travel Exploring for Yourselfes Here and There in the Smallest Continent In the Peninsula of India Exploring for Yourselfes Exploring for Yourselfes Exploring for Yourselfes	1. A Look At The United States Building a New Country 3. New England 4. Middle Atlantic Seaboard 5. The Appalachian Mountains 6. The Old South And The New 7. The Cotton Belt And The Guff Tobacco Country The Southern Apalachians Underground Treasure 8. Settlers In The Middle West 9. Farmers In The Middle West The Chansinz Corn Belt Factories that Use Steel 11. The Great Plains Farmers and their Problems Using the Land Today 12. The West - Land Of Promise The Promise of Oregon Gold in the West The Rockies and the Dry Lands California 14. Distant Parts Of Our Country Alaska Hawaii Puerto Rico The Canal Zone 15. The United States And The World The Maritime Provinces French Canada 17. Neighbors In Latin America Middle America 18. Mexico The Dry North Colombia 22. Brazil And The Guianas Southeastern Brazil Argentina	1. Landmarks In The Old World Landmarks in Place Landmarks in Time 2. Europe And The Soviet Union 3. The British Isles 4. Scandinavia And Finland France Germany Italy 8. Eastern Europe Poland Russia, Old and New 10. Southwest Asia Israel 11. India, Pakistan, Ceylon The Philippines 13. China Hong Kong, Southern Port Farmers of South China Using Natural Resources Factories and Cities 16. Australia, New Zealand, Antarctica Australia Antarctica 17. Landmarks In Africa Along the Gulf of Guinea Republic of South Africa
Places and Regions 1	Looking For A New Home The Corn Feast The Log Cabin Village Grows	We Visit a Famous City We Learn More about Map Signs We Use Map of Our Country An Island Country In the Arctic In the Far North South along the Coast From Sea to Sea Exploring for Yourselfes Below Sea Level Farm Scenes and Farm Life Mountain Farmers Summer and Winter in the Village Travelers in Switzerland A Farm Village in Southern Spain Along the Coast of Southern Italy A Look at Northern Italy In Southern Greece In the Grassest Desert in the World In the Lone Oasis of the Nile South from the Great Dams A Conao Village Forest Work and Travel Conao Boats and a River Journey South to Casetown On to Antarctica Here and There in the Smallest Continent In the Peninsula of India From South to North in Japan Along the Coast of Alaska and Canada Warm Lands and Hot Lands Far South of the Equator Back in Our Own Country	Building a New Country A Gateway to the West Traveling on the Erie Canal Great City on Manhattan Island Today's Fishermen Farming for the Cities Forests, Mines, and Tourists New York is Many Things Washington, D.C. Cities, Steel, and Power Forests and Farms 6. The Old South And The New The Smeadirs Come First The English in Virginia Swamps, Plantations, and a Port Crossing a Mountain Barrier The Land of Cotton River Highways and Cities 7. The Cotton Belt And The Guff Cotton Country Tobacco Country Factories and Cities Florida and the Guff South Islands of Farm Land Underground Treasure 8. Settlers In The Middle West Highway to the West The Unknown Prairie The Great Lakes and Their Cities The Great Lakes and Their Cities 9. Farmers In The Middle West The Chansinz Corn Belt The Dairy Belt Forests in the North 10. Towns And Cities In The Middle West Iron Ore and the Great Lakes Factories that Use Steel Other Mines, Cities, and Factories Famous Routes Used in New Ways 11. The Great Plains From Fur Traders to Cattlemen Farmers and their Problems Using the Land Today Rivers and Cities of the Plains 12. The West - Land Of Promise Settling the West The Promise of Oregon Oasis between the Great Mountains Gold in the West Three Lands in One 13. Living In The West The Rockies and the Dry Lands The Pacific Northwest California Alaska Hawaii Puerto Rico The Virgin Islands The Canal Zone Many Lands - One Land 15. The United States And The World 16. Canada The Maritime Provinces French Canada Main Street of Canada Mineral Treasures The Prairie Provinces British Columbia The Great Forest The Treeless North 17. Neighbors In Latin America Middle America The Dry North The Heart of Mexico City The Southern Mountains Eastern Lowlands Mexico Is Chansinz Guatemala and El Salvador Honduras and British Honduras Nicaragua Costa Rica Panama 20. The West Indies Cuba Haiti and the Dominican Republic Jamaica, the Bahamas, and the Antilles 21. Along The Andes	Landmarks in Place Landmarks in Time 2. Europe And The Soviet Union 3. The British Isles London Farms in England Wales Scotland Ireland 4. Scandinavia And Finland Norway Sweden Finland Denmark 5. France, Belgium, Netherlands France Belgium The Netherlands 6. Germany, Austria, Switzerland Germany Austria Switzerland 7. Southern Europe Portugal Spain Italy Greece 8. Eastern Europe Poland Czechoslovakia Hungary Rumania The Danube River Gulfers Albania Yugoslavia 9. The Soviet Union Russia, Old and New How the People Live Regions of Agriculture Forest Workers and Fishermen The Soviet Union and the World 10. Southwest Asia Turkey Syria and Lebanon Israel Jordan and Iraq Saudi Arabia Iran and Afghanistan 11. India, Pakistan, Ceylon Pakistan, East and West India Ceylon 12. Southeast Asia The Philippines Indonesia Buma and Thailand Vietnam, Laos, and Cambodia Singapore and Malaisia 13. China Hong Kong, Southern Port Farmers of South China Cities of South China Farmers in North China Cities and Industries of North China Manchuria, Old and New 14. Monasia and Korea Monasia North and South Korea 15. Japan Using Natural Resources Australia New Zealand Antarctica 17. Landmarks In Africa 18. The Sahara and Eavot Eavot 19. The Atlas Lands 20. Lowlands Near The Equator Along the Gulf of Guinea The Republic of the Conao 21. Eastern Africa Etiopia, Land of Isolation East Africa 22. Southern Africa Republic of South Africa Zambia, Rhodesia, and Malawi

Table 3. Classification of content headings of Amish geography textbooks (2)

Geography Standard	Grade 2,3	Grade 4	Grade 5,6	Grade 7,8
Places and Regions 1	Our Homes and Our Neighbors	Our Big World	The American Continents Colombia Venezuela Ecuador Peru Bolivia 22. Brazil And The Guianas Southeastern Brazil Northeastern Brazil The Amazon and Interior Brazil The Guianas 23. Southern Lands Argentina Uruguay and Paraguay Chile Facts for Reference	Old World Lands Other Lands in Southern Africa Looking at Africa 23. Chinese, Interdependence, And Freedom Fact for Reference
Places and Regions 2	The City Of Rivertown In Our Own Part Of The United	Exploring for Yourselfs		Landmarks in Place
Places and Regions 3	A Warm Welcome For The Settlers Busv Indian Children	A Farm Villaze in Southern Spain In the Lonz Oasis of the Nile In Hong Konz We Live in a Charsuzia World	Building a New Countrv The Unknown Prairie French Canada	Rumenia 11. India, Pakistan, Cevlon The Philipones 13. China Hong Konz, Southern Port North and South Korea Japan and the Future 18. Australia, New Zealand, Antarctica New Zealand East Africa Republic of South Africa Other Lands in Southern Africa
Physical Systems 1		Below Sea Level Here and There in the Smallest Continent	Using the Land Today The Rockies and the Dry Lands Alaska The Great Forest	Norwey Russia, Old and New Jordan and Iraq 13. China Farmers in North China Australia 23. Chinese, Interdependence, And Freedom
Physical Systems 2	Huntinz For Food In The Deep Wood	We Use Mao of Our Countrv An Island Countrv Along the Coast of Southern Italy South from the Great Dams A Congo Villaze Forest Work and Travel On to Antarctica Far South of the Equator	Tobacco Countrv Peru	Cevlon Western China - Deserts and Mountains Monsolia Australia Antarctica East Africa
Human Systems 1	Looking For A New Home The Lox Cabin Villaze Grows	A Look at Northern Italy	The United States Today Washington, D.C. Other Great Cities River Highways and Cities Florida and the Gulf South The Great Lakes and Their Cities 11. The Great Plains 12. The West - Land Of Promise Gold in the West The Rockies and the Dry Lands California Many Lands - One Land 15. The United States And The World 16. Canada Middle America 18. Mexico The Heart of Mexico City Nicaragua 20. The West Indies Jameica, the Bahamas, and the Antilles Ecuador Southeastern Brazil Argentina Facts for Reference	2. Europe And The Soviet Union 3. The British Isles Scotland Norway France Belgium Germany Austria Spain Italy Czechoslovakia Hungary Rumenia Yuzoslavia Russia, Old and New 10. Southwest Asia Israel Pakistan, East and West India The Philipones Indonesia Burma and Thailand Vietnam, Laos, and Cambodia Singapore and Malaysia 13. China Cities of South China Cities and Industries of North China Manchuria, Old and New Monsolia 15. Japan Factories and Cities Australia New Zealand Egypt 19. The Atlas Lands 20. Lowlands Near The Equator Along the Gulf of Guinea East Africa Republic of South Africa Zambia, Rhodesia, and Malawi Fact for Reference
Human Systems 2	Looking For A New Home In Eagle Tail's Villaze Homes Of Other American Indians A Warm Welcome For The Settlers The Corn Feast Huntinz For Food In The Deep Wood New Clothes For Daniel And Panny The Shoemaker Comes Busv Indian Children The Lox Cabin Villaze Grows A Ride Behind Black Bessuy On Rivertown Streets Steamboat Is A-Cominz! Puffinz Engines Ann's Letter Jack And Ann Take A Walk A Trip To A Stone Jack And Ann Meet A Miller A Stop At The Bakery Machines! Machines! Machines! Our Wonderful, Wonderful Country Wonderful Wires! Buffalo Bill Comes To Tom Our Wonderful, Wonderful Country In Our Own Part Of The United	An Island Countrv South along the Coast Exploring for Yourselfs Farm Scenes and Farm Life Travelers in Switzerland Along the Coast of Southern Italy A Look at Northern Italy In the Greatest Desert in the World In the Lonz Oasis of the Nile A Congo Villaze Congo Boats and a River Journey Here and There in the Smallest Continent In the Peninsula of India In Hong Konz From South to North in Japan	Farmers and Fishermen New York is Meny Thinzs Outside the Cities Connections Swamps, Plantations, and a Port River Highways and Cities Cotton Countrv Factories and Cities Chicago: Factories and Transport From Fur Traders to Cattleman Using the Land Today Settling the West The Promise of Oregon Oasis between the Great Mountains Gold in the West Alaska Hawaii 15. The United States And The World 16. Canada The Maritime Provinces French Canada The Treeless North 17. Neighbors in Latin America The Southern Mountains Haiti and the Dominican Republic Ecuador Peru 22. Brazil And The Guianas The Amazon and Interior Brazil Argentina	2. Europe And The Soviet Union Ireland 4. Scandinavia And Finland Denmark France Belgium Austria Italy Czechoslovakia Hungary Rumenia Yuzoslavia Russia, Old and New How the People Live The Government and the Farmer Mines, Cities, Factories The Soviet Union and the World 10. Southwest Asia Turkey Saudi Arabia 11. India, Pakistan, Cevlon Pakistan, East and West India Looking Ahead The Philipones Indonesia Burma and Thailand Vietnam, Laos, and Cambodia Singapore and Malaysia 13. China Hong Konz, Southern Port Farmers of South China Cities of South China Farmers in North China Manchuria, Old and New The Years Ahead Monsolia North and South Korea 15. Japan Using Natural Resources Australia New Zealand 17. Landmarks in Africa The Sahara Egypt

Table 3. Classification of content headings of Amish geography textbooks (3)

Geography Standard	Grade 2,3 Our Homes and Our Neighbors	Grade 4 Our Big World	Grade 5,6 The American Continents	Grade 7,8 Old World Lands
Human Systems 2				19. The Atlas Lands 23. Lowlands Near The Equator Along the Gulf of Guinea The Republic of the Congo Ethiopia, Land of Isolation East Africa Republic of South Africa Zambia, Rhodesia, and Malawi
Human Systems 3	Two Sheep And A Cow The Shoemaker Comes Going From Place To Place The Very First Store On River-town Streets Puffing Engines A Trip To A Store A Stop At The Bakery On Anna's Farm Wonderful Wires! Buffalo Bill Comes To Town	South along the Coast From Sea to Sea Farm Scenes and Farm Life How Ships and Planes Help the Netherlands Swiss City Workers A Look at Northern Italy In Southern Greece Forest Work and Travel Congo Boats and a River Journey South to Capetown Here and There in the Smallest Continent In the Peninsula of India In Hong Kong From South to North in Japan Back in Our Own Country	Trade and Manufacturing Great City on Manhattan Island An Industrial Revolution A Giant Workshop Today's Fishermen Farming for the Cities Forests, Mines, and Tourists New York is Many Things Washington, D.C. Other Great Cities Outside the Cities Connections Making Iron and Steel Cities, Steel, and Power Forests and Farms The English in Virginia Crossing a Mountain Barrier The Land of Cotton River Highways and Cities Tobacco Country The Southern Appalachians Factories and Cities Underground Treasure The Unknown Prairie The Great Lakes and Their Cities 9. Farmers in The Middle West The Chertown Corn Belt The Dairy Belt 10. Towns And Cities In The Middle West Iron Ore and the Great Lakes Factories that Use Steel Other Mines, Cities, and Factories Chicago Factories and Transport Famous Routes Used in New Ways From Fur Traders to Cattlemen Farmers and their Problems Using the Land Today Rivers and Cities of the Plains Settling the West The Promise of Oregon Gold in the West The Rockies and the Dry Lands The Pacific Northwest California Alaska Hawaii Puerto Rico The Virgin Islands The Canal Zone 15. The United States And The World The Maritime Provinces Main Street of Canada The Prairie Provinces British Columbia The Great Forest Canada - a Great Trader The Dry North A Trip to Mexico City The Heart of Mexico Mexico Is Changing Guatemala and El Salvador Honduras and British Honduras Costa Rica Panama Six Countries in One Cuba Haiti and the Dominican Republic Jamaica, the Bahamas, and the Antilles Colombia Peru Bolivia 22. Brazil And The Guianas Southeastern Brazil The Amazon and Interior Brazil The Guianas Uruguay and Paraguay Chile	Landmarks in Time The Central Manufacturing District Wales Scotland Ireland Norway Sweden Finland Denmark France Belgium The Netherlands 5. Germany, Austria, Switzerland Germany Austria Switzerland Portugal Spain Italy Greece 8. Eastern Europe Poland Czechoslovakia Hungary Rumania The Danube River Albania Yugoslavia Russia, Old and New How the People Live The Government and the Farmer Reasons of Agriculture Mines, Cities, Factories The Soviet Union and the World 10. Southwest Asia Turkey Syria and Lebanon Israel Jordan and Iraq Saudi Arabia Iran and Afghanistan 11. India, Pakistan, Ceylon Pakistan, East and West India Ceylon Looking Ahead The Philippines Indonesia Burma and Thailand Vietnam, Laos, and Cambodia Singapore and Malaysia 13. China Farmers of South China Cities of South China Farmers in North China Cities and Industries of North China Manchuria, Old and New Western China - Deserts and Mountains The Years Ahead Monrovia North and South Korea Using Natural Resources Factories and Cities Japan and the Future Australia New Zealand The Sahara Egypt 19. The Atlas Lands Along the Gulf of Guinea The Republic of the Congo Looking at Them All Ethiopia, Land of Isolation East Africa Republic of South Africa Zambia, Rhodesia, and Malawi Other Lands in Southern Africa Looking at Africa
Human Systems 4	Looking For A New Home In Eagle Tail's Village Homes Of Other American Indians A Warm Welcome For The Settlers A Log Cabin School The Log Cabin Village Grows Welcome To Jack's House Our Wonderful, Wonderful Country In Our Own Part Of The United	An Island Country In the Far North Farm Scenes and Farm Life In Southern Greece In the Greatest Desert in the World In the Long Oasis of the Nile South from the Great Dams A Congo Village Here and There in the Smallest Continent in the Peninsula of India In Hong Kong From South to North in Japan Along the Coast of Alaska and Canada Warm Lands and Hot Lands	Farming for the Cities The Land of Cotton Puerto Rico French Canada The Heart of Mexico Guatemala and El Salvador The Amazon and Interior Brazil	The Government and the Farmer Syria and Lebanon Indonesia Western China - Deserts and Mountains Monrovia North and South Korea 20. Lowlands Near The Equator The Republic of the Congo
Human Systems 5	Indian Country	On to Antarctica We Live in a Changing World	2. In The Early Days A Gateway to the West Connections The Spaniards Come First Crossing a Mountain Barrier The Land of Cotton River Highways and Cities The Southern Appalachians Factories and Cities The Chertown Corn Belt Settling the West Gold in the West Bringing East and West Together Hawaii Puerto Rico The Virgin Islands 15. The United States And The World The Treeless North 17. Neighbors In Latin America 19. Central America Nicaragua Six Countries in One	Landmarks in Time Denmark Germany Hungary Bulgaria Russia, Old and New 10. Southwest Asia 11. India, Pakistan, Ceylon Vietnam, Laos, and Cambodia 13. China Hong Kong, Southern Port Manchuria, Old and New North and South Korea 15. Japan Australia Antarctica 17. Landmarks In Africa
Environment and Society 1	Indian Country		The Southern Appalachians Islands of Farm Land The Unknown Prairie Using the Land Today Oasis between the Great Mountains California	Poland Reasons of Agriculture Farmers in North China North and South Korea Republic of South Africa 23. Change, Interdependence, And Freedom

Table 3. Classification of content headings of Amish geography textbooks (4)

Geography Standard	Grade 2,3	Grade 4	Grade 5,6	Grade 7,8
Environment and Society 2	<p>Our Homes and Our Neighbors</p> <p>Homes Of Other American Indians</p> <p>A Warm Welcome For The Settlers</p> <p>The Corn Feast</p> <p>Busy Indian Children</p> <p>A Log Cabin School</p> <p>Goin' From Place To Place</p>	<p>Our Big World</p> <p>South along the Coast</p> <p>Below Sea Level</p> <p>Farm Scenes and Farm Life</p> <p>A Farm Village in Southern Spain</p> <p>In Southern Greece</p> <p>In the Greatest Desert in the World</p> <p>In the Lonesome Oasis of the Nile</p> <p>South from the Great Dams</p> <p>Conco Boats and a River Journey</p> <p>In Hong Kong</p> <p>From South to North in Japan</p> <p>Warm Lands and Hot Lands</p>	<p>The American Continents</p> <p>Trade and Manufacturing</p> <p>Traveling on the Erie Canal</p> <p>Farming for the Cities</p> <p>Forests, Mines, and Tourists</p> <p>Cities, Steel, and Power</p> <p>Forests and Farms</p> <p>The English in Virginia</p> <p>Crossing a Mountain Barrier</p> <p>The Land of Cotton</p> <p>River Highways and Cities</p> <p>Cotton Country</p> <p>Tobacco Country</p> <p>The Southern Appalachians</p> <p>Florida and the Gulf South</p> <p>Islands of Farm Land</p> <p>Underground Treasures</p> <p>Highways to the West</p> <p>The Unknown Prairie</p> <p>The Great Lakes and Their Cities</p> <p>The Chensinz Corn Belt</p> <p>Forests in the North</p> <p>Iron Ore and the Great Lakes</p> <p>Famous Routes Used in New Ways</p> <p>From Fur Traders to Cattleman</p> <p>Farmers and their Problems</p> <p>Using the Land Today</p> <p>The Promise of Oregon</p> <p>Gold in the West</p> <p>Bringing East and West Together</p> <p>The Rockies and the Dry Lands</p> <p>The Pacific Northwest</p> <p>Puerto Rico</p> <p>British Columbia</p> <p>The Dry North</p> <p>Peru</p> <p>Bolivia</p>	<p>Old World Lands</p> <p>Farms in England</p> <p>The Sea and Britain</p> <p>Finland</p> <p>Denmark</p> <p>The Netherlands</p> <p>Germany</p> <p>Portugal</p> <p>Spain</p> <p>Italy</p> <p>Albania</p> <p>Regions of Agriculture</p> <p>Forest Workers and Fishermen</p> <p>Mines, Cities, Factories</p> <p>Jordan and Iraq</p> <p>The Philippines</p> <p>Burma and Thailand</p> <p>Vietnam, Laos, and Cambodia</p> <p>Farmers of South China</p> <p>Farmers in North China</p> <p>Manchuria, Old and New</p> <p>Western China - Deserts and Mountains</p> <p>Monoclia</p> <p>North and South Korea</p> <p>Australia</p> <p>Egypt</p> <p>The Republic of the Congo</p> <p>23. Change, Interdependence, And Freedom</p>
Environment and Society 3	<p>Welcome To Jack's House</p> <p>Our Wonderful, Wonderful Country</p>	<p>From Sea to Sea</p> <p>Farm Scenes and Farm Life</p> <p>How Ships and Planes Help the Netherlands</p> <p>Swiss City Workers</p> <p>Along the Coast of Southern Italy</p>	<p>Treasure from a Barrier</p> <p>Making Iron and Steel</p> <p>Cities, Steel, and Power</p> <p>Forests and Farms</p> <p>Crossing a Mountain Barrier</p> <p>River Highways and Cities</p> <p>Cotton Country</p> <p>The Southern Appalachians</p> <p>Islands of Farm Land</p> <p>Underground Treasures</p> <p>The Great Lakes and Their Cities</p> <p>The Unknown Prairie</p> <p>The Chensinz Corn Belt</p> <p>Forests in the North</p> <p>Factories that Use Steel</p> <p>Other Mines, Cities, and Factories</p> <p>Using the Land Today</p> <p>Rivers and Cities of the Plains</p> <p>Bringing East and West Together</p> <p>The Rockies and the Dry Lands</p> <p>The Pacific Northwest</p> <p>California</p> <p>15. The United States And The World</p> <p>Mineral Treasures</p> <p>The Prairie Provinces</p> <p>British Columbia</p> <p>The Great Forest</p> <p>The Dry North</p> <p>Eastern Lowlands</p> <p>Guatemala and El Salvador</p> <p>Honduras and British Honduras</p> <p>Nicaragua</p> <p>Cuba</p> <p>Jamaica, the Bahamas, and the Antilles</p> <p>Venezuela</p> <p>Peru</p> <p>Bolivia</p> <p>Northeastern Brazil</p> <p>Argentina</p>	<p>London</p> <p>How Britain Lives</p> <p>The Central Manufacturing District</p> <p>Wales</p> <p>Scotland</p> <p>Ireland</p> <p>The Sea and Britain</p> <p>Sweden</p> <p>Finland</p> <p>France</p> <p>Belgium</p> <p>The Netherlands</p> <p>Germany</p> <p>Austria</p> <p>Switzerland</p> <p>7. Southern Europe</p> <p>Portugal</p> <p>Spain</p> <p>Italy</p> <p>Greece</p> <p>Poland</p> <p>Czechoslovakia</p> <p>Hungary</p> <p>Rumania</p> <p>Yugoslavia</p> <p>Russia, Old and New</p> <p>Forest Workers and Fishermen</p> <p>Mines, Cities, Factories</p> <p>10. Southwest Asia</p> <p>Turkey</p> <p>Israel</p> <p>Jordan and Iraq</p> <p>Saudi Arabia</p> <p>Iran and Afghanistan</p> <p>11. India, Pakistan, Ceylon</p> <p>Pakistan, East and West</p> <p>India</p> <p>Ceylon</p> <p>The Philippines</p> <p>Vietnam, Laos, and Cambodia</p> <p>Singapore and Malaysia</p> <p>13. China</p> <p>Farmers of South China</p> <p>Cities of South China</p> <p>Farmers in North China</p> <p>Cities and Industries of North China</p> <p>Manchuria, Old and New</p> <p>North and South Korea</p> <p>15. Japan</p> <p>Using Natural Resources</p> <p>Factories and Cities</p> <p>Australia</p> <p>Antarctica</p> <p>Egypt</p> <p>19. The Atlas Lands</p> <p>Along the Gulf of Guinea</p> <p>The Republic of the Congo</p> <p>Looking at Them All</p> <p>Etiochia, Land of Isolation</p> <p>Republic of South Africa</p> <p>Zambia, Rhodesia, and Malawi</p> <p>Other Lands in Southern Africa</p> <p>Looking at Africa</p>
The Uses of Geography 1			<p>The Spaniards Came First</p> <p>Highway to the West</p> <p>Settling the West</p> <p>Bringing East and West Together</p> <p>Hawaii</p> <p>17. Neighbors In Latin America</p>	<p>Landmarks in Time</p> <p>Germany</p> <p>Spain</p> <p>Bulgaria</p>
The Uses of Geography 2				<p>23. Change, Interdependence, And Freedom</p>

Table 4. The percentages of each area of Amish textbooks

Geography Standard	Grade				Total
	2,3	4	5,6	7,8	
①The World in Spatial Terms 1	1.5	4.3	0.0	0.0	0.7
②The World in Spatial Terms 2	1.5	0.0	0.0	0.0	0.1
③The World in Spatial Terms 3	1.5	15.6	9.6	6.1	8.4
④Places and Regions 1	4.4	24.1	25.7	20.6	21.9
⑤Places and Regions 2	2.9	0.7	0.0	0.2	0.4
⑥Places and Regions 3	2.9	2.8	0.8	2.7	2.0
⑦Physical Systems 1	0.0	1.4	1.0	1.6	1.2
⑧Physical Systems 2	1.5	5.7	0.5	1.4	1.6
⑨Human Systems 1	2.9	0.7	6.0	9.3	6.5
⑩Human Systems 2	36.8	10.6	7.6	12.0	11.7
⑪Human Systems 3	16.2	10.6	19.4	17.6	17.3
⑫Human Systems 4	13.2	9.9	1.8	1.8	3.6
⑬Human Systems 5	1.5	1.4	5.5	3.8	4.0
⑭Environment and Society 1	1.5	0.0	1.8	1.4	1.3
⑮Environment and Society 2	8.8	8.5	9.1	6.1	7.7
⑯Environment and Society 3	2.9	3.5	9.8	14.3	10.4
⑰The Uses of Geography 1	0.0	0.0	1.5	0.9	1.0
⑱The Uses of Geography 2	0.0	0.0	0.0	0.2	0.1

the second-third and fourth grades. Especially the fourth grade learns this standard (4.3%) and these technical studies are not taught in higher grades.

②The World in Spatial Terms 2

This standard focuses on the use of mental maps to organize information about people, places, and environments. This is only studied in the second-third grades. This means Amish schools do not put emphasis on the skills of map making.

③The World in Spatial Terms 3

This standard focuses on the method of analyzing the spatial organization of people, places, and environment on Earth's surface. The fourth grade shows the highest percentage (15.6%) and fifth-sixth (9.6%), and seventh-eighth grade (6.1%) follow. For studying geography, map is important to understand the characteristics of the places. These studies are strengthened from the fourth grades.

④Places and Regions 1

This standard focuses on the physical and human characteristics of places. This deals various factors such as landform, weather and climate, pattern of migration, languages, religions, political systems, economic systems, population distribution, and quality of life. Therefore, this standard appears the most (21.9%). The percentage of this standard is the highest in the fifth-sixth grade (25.7%) and they study this standard in American country.

⑤Places and Regions 2

This standard means that people create regions to interpret Earth's complexity. This standard is not dealt in large. Even the fifth-sixth grade study American geography, they do not study this standard and other grades neither study this standard.

⑥Places and Regions 3

This standard deals how culture and experience influence people's perceptions of places and regions. For example, it deals the influence of pioneers on Native American, influence by exchanging other country's culture and wars. The contents are mainly studied in the seventh-eighth grade where students study world geography.

⑦Physical Systems 1

This standard deals the physical processes that shape the patterns of Earth's surface. The percentage becomes high when grade become high. However, the percentage only shows very small (0% to 1.6%). For Amish, this area is not important for their lifestyle as it explains physical systems scientifically.

⑧Physical Systems 2

This standard focuses on the characteristics and spatial distribution of ecosystems on Earth's surface. This standard is mostly dealt in the fourth grade (5.7%) where world geography is studied. Although American characteristics and distribution of ecosystem is emphasized, characteristics of other countries such as kangaroo and duckbill are introduced as rare animal.

⑨Human Systems 1

This standard deals the characteristics, distribution, and migration of human populations on Earth's surface. This area is not studied in the second-third to fourth grade. On the other hand, higher grades study this area (6.0~9.3%) because in their textbooks, they explain the characteristics of places and regions with human aspects. As numbers of content heading are relatively high, percentage also becomes high.

⑩Human Systems 2

This standard deals the characteristics, distribution, and complexity of Earth's cultural mosaics. As a textbook for the second-third contains many stories of cultural exchanges between Indian and American and lifestyle of early days, percentage becomes high (36.8%). Other textbooks for higher grades also show high percentages (7.6~12.0%). From this, Amish are interesting in learning different lifestyles.

⑪Human Systems 3

This standard focuses on the patterns and networks of economics interdependence on Earth's surface. This area shares 10.6% to 19.4% which is high among whole standards. This is because knowing the patterns and networks of economy is important for our lives. The household economy such as purchasing goods and services is mainly taught in the second-third and fourth grades. International economy such as trade and social economic system is taught in higher grades.

⑫Human Systems 4

This standard deals the processes, patterns, and functions of human settlement. Although there is not large differences of content headings in numbers, textbooks for the fifth-sixth and seventh-eighth grades show only 1.8%. It is interesting that how to built houses is explained in the textbook of second-third grade.

⑬Human Systems 5

This standard focuses on how cooperation and conflict among people influence the division and control of Earth's surface. In the second-third and fifth-sixth grades which deal American geography, expansion of land toward the West and formation of States are explained. On the other hand, the textbooks of fourth and seventh-eighth grades which deal world geography explain the colonization and division of lands by war. Numbers of content headings is high in the higher grades (3.8~5.5%).

⑭Environment and Society 1

This standard deals how human actions modify the physical environment, for example, building dams, the loss of wildlife habitat, the reforestation of denuded hill. This area is not dealt in large. Higher grades study this standard (1.4~1.8%), however they do not teach the importance of natural environment.

⑮Environment and Society 2

This standard focuses on how physical systems affect human systems such as different way of building houses and different lifestyles. This area is treated in the whole grades (6.1%~8.8%).

⑯Environment and Society 3

This standard focuses on the changes that occur in the meaning, usage, distribution, and importance of resources of each country and region. Numbers of content headings and percentages increase when grades become high. This is because resources are important for the society. Subject of region and country become large with the grades.

⑰The Uses of Geography 1

This standard deals how to apply geography to interpret the the past. Historical factors such as

the changes of land in historical length are important to study. This area is not studied in the whole grades.

⑬ The Uses of Geography 2

This standard focuses on how to apply geography to interpret the present and plan for the future. This area is only dealt in one content heading in the seventh-eighth grade.

(5) The characteristic of the content by the grade

① The second-third grade

The textbook for these grades is re-edited by Amish for Amish schools as mentioned. The textbook for these grades deals mainly "Human Systems" (36.8%) such as the life with Indians, how to build houses, and transportation. The content of "The World in Spatial Terms" is explained in stories. It is interesting that individual lifestyle is focused and students learn various lifestyles in this textbook.

② The fourth grade

In the textbook for the fourth grade, the standard of "Places and Regions 1", "The World in Spatial Terms 3", "Human Systems 2", and "Human Systems 3" are dealt in large (10.6~24.1%). The area of "Environment and Society 2" also shows relatively high percentage (8.5%). The contents are American capital, landform, each country and region, languages, and lifestyle. Numbers of pages differ chapters to chapters.

③ The fifth-sixth grade

The textbook for these grades deals "Places and region 1" and "Human Systems 3" with almost 20%. Other areas such as "Environment and Society 3", "The World in Spatial Terms", "Environment and Society 2", "Human Systems 2", and "Human Systems 1" show 6 to 10%. There are no areas of "The World in Spatial Terms 1" and "The World in Spatial Terms 2" in this grade. Compared to former two textbooks, there is more explanation for this grade. The contents are land uses for the present and the past time, culture and economic situation of America and neighbor countries, climate, distribution of resources and the use of land.

④ The seventh-eighth grade

The textbook for the seventh-eighth grade deals various countries. Economic situation, climate, distribution of resources, and Communism are mainly explained. In the chapter of Russia and China, critical sentences toward Communism can be seen. It is because this textbook is published by American company, however, it is interesting to know Amish also use the same textbook and learn the same way of thinking of American people.

(6) Summary

In this section, Amish geography textbooks are analyzed by using "The National Geography Standards". Consequently, the area of "Places and Regions 1" is dealt the most, "Human Systems 3", "Human Systems 2" and "Environment and Society 3" follow. Each grade deals different standard. For example, the second-third grade mainly study American geography through individual lifestyle, the fifth-sixth grade do not deal the areas of "The World in Spatial Terms and 2" and the area of "Environment and Society" shares the high percentage. On the other hand, as the seventh-eighth grade study world's economy, climate and the distribution of resources, the areas of "Places and Regions 1", "Human Systems 2, 3" and "Environment and Society 3" show large percentages.

Amish tend to study the change of lifestyle and American geography which are closely related to their lives and they do not put emphasis on learning usage of maps and analyzing physical systems scientifically. This is because the basic idea of education for them is not to analyze and teach by scientific point of view. Their main purpose to study geography is to know the characteristics of lands where they live.

4. Analysis of geography textbooks in American school^{15)~21)}

(1) The geography textbooks in American school

We have analyzed the contents of American geography textbooks, and compared them with those of Amish. The seven American textbooks for geography education used for the analysis are for students from the first to the eighth grades⁹⁾. Table 5 shows the title and the contents of the American textbooks. Most of them except a textbook for the seventh-eighth grade are also used for history because these textbooks are for social studies. The textbook for the seventh-eighth grade is the only textbook specific to geography. (Photo 2 shows American geography textbooks)

Table 6 shows the content headings of American textbook for the first to the seventh-eighth grades classified into eighteen standards according to "The National Geography Standards"¹⁰⁾.

Table 5. Title and the contents of American geography textbooks

Grade	Title	Pages	Contents	First Edition
1	My World	213	6UNITs Reference Section, Standardized Test Support, Skills, Citizenship, Many Voices, Charts& Graphs, Maps	2001
2	People Together	221	6UNITs Reference Section, Standardized Test Support, Skills, Citizenship, Many Voices, Charts& Graphs, Maps	2000
3	Communities	355	5UNITs 12Chapters Special Section, Reference Section, Standardized Test Support, Skills, Citizenship, Legacies Many Voices, Infographics, Link, Did You Know?, Charts, Graphs, &Diagrams, Time Lines, Maps	2000
4	Regions	421	6UNITs 12Chapters Special Section,, Reference Section, Standardized Test Support, Skills Lessons, Citizenship, Legacies Many Voices, Infographics, Links, Charts, Graphs, &Diagrams, Time Lines, Maps	2000
5	United States	669	9UNITs 21Chapters Special Section,, Reference Section, Standardized Test Support, Skills Lessons, Citizenship, Legacies Many Voices, Infographics, Links, Did You Know?, Charts, Graphs, &Diagrams, Time Lines, Maps	2000
6	World	635	6UNITs 20Chapters Reference, Standardized Test Support, Skills Lessons, Citizenship, Legacies Many Voices, Infographics, Links, Did You Know?, Charts, Graphs, &Diagrams, Time Lines, Maps	2000
7 • 8	Geography The World and Its People	780	9UNITs, 27Chapters, Gazerter, Glossary, Spanish Glossary, Index, Photo Credits, Images of the World, Eye on the Environment, Building Geography Skills, Making Connections, Tean Scean, What in the World?, Geo Lab, Cultural Heritage, Multimedia Activites, Maps, Graphs, Tables, and Diagrams	2000

(2) The characteristics of percentage rate

We can count content headings of each standard and calculate the percentage as shown in table 7. It is clear that three standards, "Places and Regions 1" (17.2%), "The World in Spatial Terms 3" (10.9%), and "Human Systems 3" (10.7%) show relatively high percentages. In every grade, the area of "The World in Spatial Terms 1" is found, however, none of the grades deal the area of "The Uses of Geography 2". When we see the characteristics of percentage of different grades, there are not big differences between the first to the sixth grade. The area of "The World in Spatial Terms" is highly dealt. In the seventh-eighth grade, 12% to 13% is shared in the area of "The World in Spatial Terms 3", "Places and Regions 1", "Human Systems 1", "Human Systems 2" and "Human Systems 3". The numbers of content headings differ from grades.



Photo 2. American geography textbooks

Table 6. Classification of content headings of American geography textbooks (1)

Geography Standard	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7,8
The World in Spatial Terms 1	<p>My World</p> <p>Using Globes and Maps</p> <p>Looking from Above</p> <p>Using Map Keys</p> <p>Using Directions</p>	<p>People Together</p> <p>Using Maps</p> <p>Fifty States, Our Country</p> <p>Using a Compass Rose</p> <p>Using Landform Maps</p>	<p>Continents</p> <p>Using Globes</p> <p>Using Maps</p> <p>Different Kinds of Maps</p> <p>Using Map Scales</p> <p>Using Intermediate Directions</p> <p>Understanding Hemispheres</p> <p>Reading Grid Maps</p> <p>Reading Transportation Maps</p>	<p>Regions</p> <p>Using Globes</p> <p>Using Maps</p> <p>Different Kinds of Maps</p> <p>Reading Elevation Maps</p> <p>Using Latitude and Longitude</p> <p>Using Map Scales</p> <p>Reading Road Maps</p>	<p>Using Globes</p> <p>Using Maps</p> <p>Different Kinds of Maps</p> <p>Understanding Latitude and Longitude</p> <p>Reading Historical Maps</p> <p>Reading Elevation and Relief Maps</p> <p>Reading Climographs</p> <p>Comparing Maps at Different Scales</p> <p>Comparing Maps</p> <p>Reading Time Zone Maps</p>	<p>World</p> <p>Using Globes</p> <p>Using Maps</p> <p>Different Kinds of Maps</p> <p>Working with Latitude and Longitude</p> <p>Using Maps at Different Scales</p> <p>Comparing Different Kinds of Maps</p> <p>Reading Elevation Maps and profiles</p> <p>Reading Historical Maps</p> <p>Reading Climographs</p> <p>Reading Distribution Maps</p> <p>Using Map Projection</p> <p>Using Cartograms</p> <p>Time Zone Maps</p>	<p>Geography, The World and Its People</p> <p>Geography and Maps Skills Handbook</p> <p>Using the Geography Themes</p> <p>Using a Map</p> <p>Using Directions</p> <p>Using Latitude and Longitude</p> <p>Using Scale</p> <p>Interpreting an Elevation Profile</p> <p>Interpreting a Diagram</p> <p>Reading a Circle Graph</p> <p>Reading a Line Graph</p> <p>Using Map Projection</p> <p>Comparing Two or More Graphs</p> <p>Using a Map and a Graph</p> <p>Reading a Contour Map</p> <p>Analyzing a Photograph</p> <p>Using the Internet</p> <p>Using an Electronic Spreadsheet</p> <p>Developing Multimedia Presentations</p> <p>Analyzing a LANDSAT Image</p>
The World in Spatial Terms 2	<p>How We Are Our Homes Are in Communities</p>	<p>Following Routes on a Map</p>					<p>Geography and Maps Skills Handbook</p> <p>Using the Geography Themes</p> <p>Unit 2 Atlas</p> <p>Map and Mapping</p>
The World in Spatial Terms 3		<p>Using Landform Maps</p>	<p>Our Country's Geography</p> <p>The Geography of San Francisco</p> <p>A Capital in Senegal</p> <p>Reading Transportation Maps</p>	<p>Reading Elevation Maps</p> <p>The Appalachian Mountains</p> <p>Switzerland's Mountains</p> <p>The Interior Plains</p> <p>The Plains of Poland</p> <p>Climate and Elevation</p>	<p>Comparing Maps at Different Scales</p>		<p>Landforms</p> <p>Unit 2 Atlas</p> <p>The Economy (Canada)</p> <p>Unit 3 Atlas</p> <p>The Land (Mexico)</p> <p>Central America</p> <p>Brazil</p> <p>Caribbean South America</p> <p>Colombia</p> <p>Unit 4 Atlas</p> <p>The United Kingdom</p> <p>France</p> <p>Germany</p> <p>The Benelux Countries</p> <p>Spain and Portugal</p> <p>Italy</p> <p>Greece</p> <p>The Baltic Republics</p> <p>Poland</p> <p>Hungary</p> <p>Unit 5 Atlas</p> <p>The Land</p> <p>The Economy</p> <p>The People</p> <p>Belarus and Moldova</p> <p>The Caucasus Republics</p> <p>The Central Asian Republics</p> <p>Unit 6 Atlas</p> <p>Turkey</p> <p>Israel</p> <p>Syria, Lebanon, and Jordan</p> <p>Iran, Iraq, and Afghanistan</p> <p>Egypt</p> <p>Other North African Countries</p> <p>Unit 7 Atlas</p> <p>Nigeria</p> <p>The Sahel Countries</p> <p>Coastal Countries</p> <p>Democratic Republic of the Congo</p> <p>Other Countries of Central Africa</p> <p>Kenya</p> <p>Tanzania</p> <p>United East Africa</p> <p>The Horn of Africa</p> <p>Republic of South Africa</p> <p>Atlantic Countries</p> <p>Indian Southern Africa</p> <p>Indian Ocean Countries</p> <p>Unit 8 Atlas</p> <p>India</p> <p>Middle South Asia</p> <p>The Himalayan Countries</p> <p>Island Countries</p> <p>The Land (China)</p> <p>The Economy</p> <p>The People</p> <p>Japan</p> <p>The Two Koreas</p> <p>Mainland Southeast Asia</p> <p>Island Southeast Asia</p> <p>Unit 9 Atlas</p> <p>Australia</p> <p>New Zealand</p> <p>Oceania</p> <p>Antarctica</p> <p>Reading a Relief Map</p> <p>Interpreting an Elevation Profile</p> <p>Reading a Political Map</p> <p>Reading a Climate Map</p> <p>Reading a Vegetation Map</p> <p>Reading a Population Map</p> <p>Reading a Transportation Map</p> <p>Reading a Time Zone Map</p> <p>Building a Database</p>
Places and Regions 1	<p>Neighborhoods Are in Communities</p> <p>Sharing Our Earth</p> <p>Our Land and Water</p> <p>How's the Weather</p>	<p>Looking at Earth</p> <p>Special Places in Our Country</p> <p>Dictionary of Geographic Words</p>	<p>Communities Across the United States</p> <p>Our Country's Geography</p> <p>The Geography of Mesa Verde</p> <p>The Geography of San Francisco</p> <p>A Tarnel in Europe</p> <p>Dictionary of Geographic Terms</p>	<p>Our Country's Geography</p> <p>Our Country's Climate</p> <p>Canada's Environment</p> <p>The Mighty Mississippi</p> <p>A River in Egypt</p> <p>Harvesting the Sea</p> <p>Switzerland's Mountains</p> <p>A City in Argentina</p> <p>The Interior Plains</p> <p>The Plains of Poland</p> <p>The Grand Canyon</p> <p>The Dry Southwest</p> <p>Oil Fields of Nigeria</p> <p>The Central Valley</p> <p>Climate and Elevation</p> <p>The Rain Forests of Brazil</p> <p>Japan's Economy</p> <p>Your State's Environment</p> <p>Your State's People and Heritage</p> <p>Dictionary of the Geographic Terms</p>	<p>The American Land</p> <p>Our Country's Climate</p> <p>Canada</p> <p>Mexico</p> <p>Central America and the Caribbean</p> <p>South America</p> <p>Dictionary of Geographic Terms</p>	<p>World Regions</p> <p>Regions and Culture</p> <p>Geography of Ancient Egypt</p> <p>Geography of the Fertile Crescent</p> <p>Geography of the Ancient India</p> <p>Geography of China</p> <p>Geography of Ancient Greece</p> <p>Geography of Ancient Rome</p> <p>Geography of Ancient -</p> <p>Geography of Middle America</p> <p>Geography of Europe</p> <p>Geography of Africa</p> <p>Geography of Asia</p> <p>Geography of the Americas</p> <p>Dictionary of Geographic Terms</p>	<p>Using the Geography Themes</p> <p>Climate and Vegetation</p> <p>Culture</p> <p>The Land (The United States)</p> <p>The People (The United States)</p> <p>The Land (Canada)</p> <p>The Economy (Canada)</p> <p>The People (Canada)</p> <p>Unit 3 Atlas</p> <p>The Land (Mexico)</p> <p>The People (Mexico)</p> <p>Central America</p> <p>The West Indies</p> <p>Brazil</p> <p>Caribbean South America</p> <p>Uruguay and Paraguay</p> <p>Colombia</p> <p>Peru and Ecuador</p> <p>Bolivia and Chile</p> <p>Argentina</p> <p>Unit 4 Atlas</p> <p>The Republic of Ireland</p> <p>Scandinavia</p> <p>France</p> <p>Germany</p> <p>The Benelux Countries</p> <p>The Alpine Countries</p> <p>Spain and Portugal</p> <p>Italy</p> <p>Greece</p> <p>The Baltic Republics</p> <p>Poland</p> <p>Hungary</p> <p>The Czech Republic and Slovakia</p> <p>The Balkan Countries</p> <p>Unit 5 Atlas</p> <p>The Land (Russia)</p> <p>The Economy (Russia)</p> <p>The People (Russia)</p> <p>Ukraine</p> <p>Belarus and Moldova</p> <p>The Caucasus Republics</p> <p>The Central Asian Republics</p> <p>Unit 6 Atlas</p> <p>Turkey</p> <p>Israel</p> <p>Syria, Lebanon, and Jordan</p> <p>The Arabian Peninsula</p> <p>Iran, Iraq, and Afghanistan</p> <p>Egypt</p> <p>Other North African Countries</p> <p>Unit 7 Atlas</p> <p>Nigeria</p> <p>The Sahel Countries</p> <p>Coastal Countries</p> <p>Democratic Republic of the Congo</p> <p>Other Countries of Central Africa</p> <p>Kenya</p> <p>Tanzania</p> <p>United East Africa</p> <p>The Horn of Africa</p> <p>Republic of South Africa</p> <p>Atlantic Countries</p> <p>Indian Southern Africa</p> <p>Indian Ocean Countries</p> <p>Unit 8 Atlas</p> <p>India</p> <p>Middle South Asia</p>

Table 6. Classification of content headings of American geography textbooks (2)

Geography Standard	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Places and Regions 1	My World	People Together	Communities	Regions	United States		Geography: The World and Its People The Himalayan Countries Island Countries The Land (China) China's Neighbors Japan The Two Koreas Midland Southeast Asia Island Southeast Asia Unit 9 Atlas Australia New Zealand Oceania Antarctica Memorizing: Dough It
Places and Regions 2	We Live in the United States Our Neighbors, Canada and Mexico	Fifty States, Our Country A World of Countries		Our Country's Regions Switzerland's Mountains The Grand Canyon The Central Valley	The American Land Our Country's Climate Canada Our Fifty States	World Regions Countries of the World	The Economy
Places and Regions 3				Oil Fields of Nigeria The Central Valley Japan's Economy		Geography of Arabia	Spain and Portugal Italy Poland Hungary Turkey Israel The Arabian Peninsula Egypt Nigeria The Sahel Countries Coastal Countries Democratic Republic of the Congo Other Countries of Central Africa Kenya Republic of South Africa Atlantic Countries Island Southern Africa Unit 8 Atlas India Muslim in South Asia The Himalayan Countries The People (China) China's Neighbors Japan The Two Koreas Midland Southeast Asia Island Southeast Asia
Physical Systems 1	Sharing Our Earth Our Land and Water How's the Weather? It's My Earth, Too	Looking at Earth	Our Country's Geography The Geography of Mass Verde	The Appalachian Mountains Autumn in the Northeast Far from the Ocean Climate and Elevation	Central America and the Caribbean	Geography of China Geography of Asia Geography of the Americas	Planet Earth Landforms Earth's Water Influences on Climate Scandinavia The Central Asian Republics Unit 6 Atlas Unit 7 Atlas Muslim South Asia The Land (China) Japan The Two Koreas Oceania Antarctica Danger: Ozone Loss Water: It's Not All Wet The Continental Divide Volcanoes: Powerful Giants Sunshine: Shadow Time Erosion: Shaping the Soil Glaciers: Earth's Scouring Pads
Physical Systems 2			A Fishing Community in Peru	Autumn in the Northeast The Dry Southwest Treasures of the Forests The Rain Forests of Brazil			Democratic Republic of the Congo Tanzania Indian Ocean Countries Unit 8 Atlas The Himalayan Countries Unit 9 Atlas Australia New Zealand Antarctica
Human Systems 1					Canada	Geography of Ancient Rome Geography of Arabia	Population Unit 2 Atlas The People (The United States) The People (Canada) Unit 3 Atlas The Economy (Mexico) Central America The West Indies Brazil Caribbean South America Uruguay and Paraguay Colombia Peru and Ecuador Bolivia and Chile Argentina Unit 4 Atlas The United Kingdom The Republic of Ireland Scandinavia France Germany The Alpine Countries Spain and Portugal Italy Greece The Baltic Republics Poland Hungary The Czech Republic and Slovakia The Balkan Countries Unit 5 Atlas The People (Russia) Ukraine Belarus and Moldova The Caucasus Republics The Central Asian Republics Unit 6 Turkey Israel Syria, Lebanon, and Jordan The Arabian Peninsula Iraq, Iran, and Afghanistan Egypt Other North African Countries Unit 7 Atlas Nearby The Sahel Countries Coastal Countries Democratic Republic of the Congo Other Countries of Central Africa Kenya Tanzania Island East Africa The Horn of Africa Republic of South Africa Atlantic Countries Island Southern Africa Indian Ocean Countries Unit 8 Atlas India Muslim South Asia The Himalayan Countries Island Countries The People (China) China's Neighbors Japan The Two Koreas Midland Southeast Asia Island Southeast Asia Unit 9 Atlas Australia New Zealand Oceania

Table 6. Classification of content headings of American geography textbooks (3)

Geography Standard	Grade 1 My World	Grade 2 People Together	Grade 3 Communities	Grade 4 Regions	Grade 5 United States	Grade 6 World Regions	Grade 7 & Geography: The World and Its People
Human Systems 2		A World of Countries		Our Country's People Switzerlan'ds Mountains Oil Fields of Nigeria Your State's Environment	Americans Today Mexico Central America and the Caribbean South America		Culture The People (The United States) The People (Canada) The People (Mexico) The West Indies Brazil Uruguay and Paraguay Scandinavia France Germany The Balkan Countries The Alpine Countries Spain and Portugal Greece Poland Hungary The Czech Republic and Slovakia The Baltic Countries Unit 5 Atlas The People (Russia) Ukraine Belarus and Moldova The Central Asian Republics Unit 6 Atlas Turkey Israel Syria, Lebanon, and Jordan The Arabian Peninsula Iraq, Iran, and Afghanistan Egypt Other North African Countries Unit 7 Atlas Nigeria The Sahel Countries Coastal Countries Democratic Republic of the Congo Other Countries of Central Africa Kenya Tanzania Inland East Africa The Horn of Africa Republic of South Africa Atlantic Countries Inland Southern Africa Indian Ocean Countries Unit 8 Atlas India Muslim South Asia The Himalayan Countries Island Countries Mainland Southeast Asia The People (China) Japan The Two Koreas Mainland Southeast Asia Island Southeast Asia Unit 9 Atlas Australia New Zealand Oceania The United States and Canada Latin America Europe Russia and the Independent Republics Southwest Asia and North Africa Africa South of the Sahara Asia Australia and Oceania
Human Systems 3			On the Farm On the Assembly Line Partners in Trade	A Buried Treasure Harvesting the Sea Switzerlan'ds Mountains The Interior Plains The Changing Middle West Oil Fields of Nigeria Japan's Economy Your State's Environment	Mexico	Geography of Ancient India Geography of Ancient Greece Geography of Europe Geography of Africa	The Economy (The United States) The Economy (Canada) Unit 2 Atlas The Economy (Mexico) Central America The West Indies Brazil Caribbean South America Uruguay and Paraguay Colombia Peru and Ecuador Bolivia and Chile Argentina Unit 4 Atlas The United Kingdom The Republics of Ireland Scandinavia France Germany The Alpine Countries Spain and Portugal Italy Greece The Baltic Republics Poland Hungary The Czech Republic and Slovakia The Baltic Countries Unit 5 Atlas The Economy (Russia) Ukraine Belarus and Moldova The Caucasus Republics The Central Asian Republics Unit 6 Atlas Turkey Israel Syria, Lebanon, and Jordan The Arabian Peninsula Iraq, Iran, and Afghanistan Egypt Other North African Countries Unit 7 Atlas Nigeria Coastal Countries Democratic Republic of the Congo Other Countries of Central Africa Kenya Tanzania Inland East Africa The Horn of Africa Republic of South Africa Atlantic Countries Inland Southern Africa Indian Ocean Countries Unit 8 Atlas India Muslim South Asia The Himalayan Countries Island Countries The Economy (China) China's Neighbors Japan The Two Koreas Mainland Southeast Asia Island Southeast Asia Unit 9 Atlas Australia New Zealand Oceania
Human Systems 4	Cities with a Story from Houses and Homes by Ann Morris	Where We Lived Cities with Story from This Is My House by Arthur Dorros					The People (Mexico) Central America The West Indies Uruguay and Paraguay The Republic of Ireland Scandinavia France Germany The Czech Republic and Slovakia The People (Russia) Belarus and Moldova The Caucasus Republics The Central Asian Republics Coastal Countries Republic of South Africa India Muslim South Asia Japan The Two Koreas Mainland Southeast Asia Island Southeast Asia Oceania

(3) The characteristics of the content by eighteen standards of geography

①The World in Spatial Terms 1

Most of grades deal this standard. More than 20% is shown in the first, second, third, fifth, and sixth grade. From this tendency, this standard is regarded as basic standard for learning geography. There is a corner called "Reviewing Geography Skills" in the fourth, fifth, and sixth textbooks to learn skills for geography.

②The World in Spatial Terms 2

This standard is learned in the first, second and seventh-eighth grades. Knowing where we live is very important for the first and second students. On the other hand, more broad area is focused in the seventh-eighth grade such as knowing location of world continents and oceans.

③The World in Spatial Terms 3

This standard is dealt in all grades except the first and sixth grade. In the sixth grade, as most of contents are related to the measurement of acquiring information from maps, none of content headings are counted to this standard.

④Places and Regions 1

This standard can be seen in all grades. Most of the contents are about landform and climate. These facts are very important for learning geography. As the sixth grade usually learns geography after learning history where they live, contents of geography tend to deal the characteristics of its land. The percentage of this area shows rather high as 30%.

⑤Places and Regions 2

This standard is dealt in all grades except the third grade. Numbers of pages are almost the same, however, percentage shows different because of different numbers of content headings. The method of geography of dividing American Continents by five regions or two regions according to its climate are studied. This standard is mainly focused in the second and fifth grade.

⑥Places and Regions 3

Although this standard is studied in the fourth, sixth and seventh-eighth grades, the percentage is rather small (2.0%~4.6%). The contents are related to the facts of the past time, so this area has close relationship with history.

⑦Physical Systems 1

All grades deal this standard. The first grade shares the most (19.0%). The contents are about how lands are shaped, composition of the earth, climate influenced by landform, the reason for earthquake and water circulation. From these contents, it is clear that this standard focused not only teaching facts but also containing scientific factors which make students to think the reasons.

⑧Physical Systems 2

This standard is dealt in the third, fourth and seventh-eighth grades (1.6%~5.1%). The fourth grade deals the most (5.1%) and the contents are about various kinds of forests in America, the changes in species of animals and plants in desert and Amazon. Animals and plants in various areas of the world are dealt in the seventh-eighth textbooks.

⑨Human Systems 1

This area is treated in the fifth, sixth and seven-eighth grades. From the first to the fourth grades, the contents of population do not appeared. This is because it is important to learn characteristics of "Places and Regions" in the lower grades. The percentages become high with the grades because more regions are studied in the higher grades.

⑩Human Systems 2

All grades except the first and the third learn this standard. The fifth and seventh-eighth grades share 11% to 12%. The contents are about lifestyles, culture, religions, and languages of various regions. As the seventh-eighth grade studies various places and regions, the percentages of contents headings become high.

⑪Human Systems 3

All grades except the third grade deal this area. Lower grades do not learn economic situation of other regions. In the third grade, they learn the differences between public and private property and profits from factories to the communities from Detroit automobile industry area. In the fourth grade, they learn how to live in the communities where influenced by its climate, how to engage in agriculture, fishery and industry. The fifth, sixth and seventh-eighth grades learn the industry and economic situation within their communities. The percentages are rather high (8.0%~12.3%) except the fifth grade (2.9%).

⑫ Human Systems 4

This standard is dealt in the first, second and seventh-eighth grades. The first grade students learn various types of houses in the world, and the second grade students learn various materials of houses in the world and the seventh-eighth grade students learn various materials and appearances of houses in the world.

⑬ Human Systems 5

This standard is dealt in the third, fifth and seventh-eighth grades. The meaning of community is taught in the third grade. The fifth and seventh-eighth grade students learn the history of colonization in Mexico and Africa by Europeans.

⑭ Environment and Society 1

This standard is dealt in the first, third and seventh-eighth grades. The importance of environment for the earth is emphasized in the first and third grades. On the other hand, various environmental problems are introduced in the seventh-eighth grade.

⑮ Environment and Society 2

The third, fourth, fifth, sixth and seventh-eighth grades deal this area. Contents are almost similar in all grades where various lifestyles are introduced. Percentages are high in the third, fourth and sixth grades (10.8%~15.2%).

⑯ Environment and Society 3

All grades except the sixth grade teach this area with 5.9%~13.5%. Various resources and their utilization in different places and regions are introduced. Resources are thought to be very important factors for the development of human being.

⑰ The Uses of Geography 1

Only the seventh-eighth grade deals this area (1.2%). The contents are about the influences of the history on the land.

⑱ The Uses of Geography 2

None of grades deal this standard.

(4) The characteristics of the content by the grade

① The first grade

Percentages for the standards of "Places and Regions 1", "The World in Spatial Terms 1" and "Physical Systems 1" are high (19.0%~23.8%). The contents are about goods on the road from home to school, address, how the United States named, composition of the earth, various houses, landform, direction and natural resources. This grade tends to deal the facts which are close to children's lives.

② The second grade

The standards of "The World in Spatial Terms 1", "Places and Regions 1", "Places and Regions 2" and "Human Systems 4" are mainly dealt. The contents are about capital, neighbor countries of America, landform, resources, various materials for houses, and usage of maps. This grade learns the relation to outside countries.

③ The third grade

The standards of "The World in Spatial Terms 1", "Places and Regions 1", "Environment and Society 3", "The World in Spatial Terms 3" and "Environment and Society 2" are mainly taught. The contents are about communities, landform, direction, unit of maps and desert. They mainly learn

American geography by dividing regions into several areas. Also some transportation such as a tunnel between France and England are introduced.

④ The fourth grade

The standards of "Places and Regions 1", "Environment and Society 2" and "Human Systems 3" are mainly dealt. The examples of contents are about how to use a globe, landform, environment, characteristics and the usage of lands, farm lands and factories. It mainly deals American geography and also related countries such as Canada, Japan, Nigeria, Poland, Egypt and Brazil.

⑤ The fifth grade

The standards of "The World in Spatial Terms 1", "Places and Regions 1", "Places and Regions 2", "Human Systems 2" are mainly focused. The contents are about how to use a globe, American history, dividing regions by its climate, resources, languages and religion. American geography and neighbor countries like Canada, Mexico, Central America and South America are introduced.

⑥ The sixth grade

The standards of "Places and Regions 1", "The World in Spatial Terms 1" and "Environment and Society 2" are mainly dealt. The contents are about how to use a globe, natural environment, landform, agriculture, industry, trades, and languages. This grade studies world geography such as India, Egypt, Middle East, Greek, China, Europe, and Africa. The study of history comes after the study of geography, therefore the contents of geography is related to its history in this grade.

⑦ The seventh-eighth grade

The areas of "Places and Regions 1", "The World in Spatial Terms 3", "Human Systems 1", "Human Systems 3" and "Human Systems 2" are mainly focused. The contents are about landform, economy, peoples, and the use of maps and a globe. The history of various countries is introduced as well.

(5) Summary

In this section, American geography textbooks are analyzed. Consequently, the standards of "Places and Regions 1", "The World in Spatial Terms 3", "Human Systems 3", "Human Systems 2", and "Human Systems 1" share the most. However, except the standard of "Places and Regions 1", there are not big differences in percentages. All grades deal the standard of "The World in Spatial Terms 1" which means this standard is regarded as a basic skill in geography. Geography in the first to the sixth grades is taught as one of the subjects in social study. However, the seventh-eighth grade specializes in geography in which three categories such as "The land", "The economy", and "The people" are contained. Because of this, the percentages of the standards of "Places and Regions 1", "Human Systems 1", "Human Systems 2" and "Human Systems 3" are rather high. Geography in America and related countries is studied in the first to the sixth grades and world geography is mainly treated in the seventh-eighth grade.

American textbooks tend to deal many facts and knowledge of each place and region, and there are many practical activities such as experiments and observations in order to build up logical way of thinking toward natural phenomena.

5. The comparison of geography textbooks in Amish and American schools

(1) The comparison of the characteristics of percentage rate

From table 4 and 7, Amish textbooks deal the standards of "Places and Regions 1", "Human Systems 3", and "Human Systems 2" the most. On the other hand, American textbooks deal the standards of "Places and Regions 1", "The World in Spatial Terms 3" and "Human Systems 3" the most. This difference means that Amish textbooks tend to emphasis on lifestyles of people and American textbooks tend to focus on building up an ability to obtain information from maps and skills of using maps. As Amish limits the relation to outside, learning suitable lifestyles for their places and regions is the most important thing for them rather than using maps and obtaining information from maps.

Lower graders in Amish schools study the area of "The World in Spatial Terms". The percentage

of "Environment and Society" becomes high in higher grades. American textbooks in all grades deal the area of "The World in Spatial Terms" with certain percentages. The numbers of contents headings become high with higher grades in Amish textbooks, however, numbers of contents headings in American textbooks differ within different grades. This is because American textbooks deal other areas of social study as well.

(2) The comparison of the characteristics of the content by eighteen standards

①The World in Spatial Terms 1

Amish textbooks only deal this area in the second-third and fourth grades. However American textbooks deal it in all grades. From this, it is clear that Amish do not emphasis on studying skills for using maps and American regard this standard as a basic study for learning geography.

②The World in Spatial Terms 2

Both Amish and American textbooks deal this standard in lower grades with small percentages. Using mental maps is important to know their location, so this standard is thought to be important for geography.

③The World in Spatial Terms 3

Amish study this area mainly in the second-third and fourth grades and American study mainly in the first, second and third grades. Other standards are mainly focused in higher than these grades.

④Places and Regions 1

There are differences between Amish and American textbooks. Amish study this area in higher than the fourth grades and American textbooks constantly deal this standard in all grades. As Amish in the third grade study the changes of lifestyle in places and regions, the percentage is small for that grade.

⑤Places and Regions 2

This standard shares only small percentage in all grades both in Amish and American textbooks.

⑥Places and Regions 3

Amish deal this area almost in all grades with certain percentage. On the other hand, American textbooks deal this area in the fourth, sixth and seventh-eighth grades and percentages differ from grades to grades. This means that Amish focus on learning geography from its culture and experiences.

⑦Physical Systems 1

American constantly learns this standard in all grades and percentages are rather high. This is because Amish tend not to put emphasis on learning scientific matters on physical systems. American studies scientific contents such as composition of the earth from the first grade.

⑧Physical Systems 2

Amish deal this standard in all grades and American textbooks deal this in the third, fourth, and seventh-eighth grades but the percentage is small in both textbooks.

⑨Human Systems 1

Amish constantly deal this area in all grades but American textbooks only deal this standard in the fifth, sixth and seventh-eighth grades. However both Amish and American textbooks share high percentages in seventh-eighth grade.

⑩Human Systems 2

Amish deal this standard in all grades with rather high percentages. On the other hand, American textbooks deal this area in small percentages and it is not dealt in the first and third grades. Learning culture in geography is not emphasized in American geography except in the seventh-eighth grade.

⑪Human Systems 3

The percentages are high in Amish textbooks. The content of economic situation is more dealt in Amish textbooks than American one.

⑫ Human Systems 4

Every grades deal this standard in Amish textbooks and American textbooks deal this area in lower grades and the seventh-eighth grade. Amish tend to explain lifestyle and houses of different places and regions without pictures but American textbooks tend to introduce them with many pictures.

⑬ Human Systems 5

Every grades deal this area in Amish textbooks and American textbooks deal this in the third, fifth and seventh-eighth grades. Both percentages are rather small and this standard is focused on American geography in both Amish and American textbooks.

⑭ Environment and Society 1

The percentages of this area are high in American textbooks which mean American has strong consciousness on the environmental problems caused by human being.

⑮ Environment and Society 2

American lower grades do not deal this standard because they only learn the characteristics of lands. On the other hand, Amish tend to learn this standard in all grades.

⑯ Environment and Society 3

All grades in Amish and American textbooks except the sixth grade in America deal this standard. The sixth grade in American school does not deal this standard because they mainly learn ancient history.

⑰ The Uses of Geography 1

Both textbooks deal this standard with the contents of the influences on present geography by the past history. American textbooks only deal this standard in America and other related countries, but Amish textbooks deal this area in Europe as well.

⑱ The Uses of Geography 2

Only seventh-eighth grade in Amish schools deal this area. None of American schools deal this standard. In Amish textbooks, the meanings of learning history and geography are introduced, and students think what does development mean and how people live in their places and regions.

(3) The comparison of the characteristics of the content by the grade

As Amish start the study of geography from the second-third grades and American start from the first grade, we compare their geography textbooks from the third grade.

① The third grade

The percentages show that Amish deal the areas of "Human Systems 2", "Human Systems 3", "Human Systems 4" the most. On the other hand, American textbooks deal the area of "The World in Spatial Terms 1", "Places and Regions 1", "The World in Spatial Terms 3" the most. Amish tend to deal the contents of lifestyle of certain regions and geographical factors such as direction is explained with it. American textbooks tend to explain basic factors of geography such as direction, natural resources, hemisphere and geography of other regions in America.

② The fourth grade

The percentages show that Amish deal the areas of "Places and Regions 1", "The World in Spatial Terms 3", "Human Systems 2", and "Human Systems 3" the most. On the other hand, American textbooks deal the area of "Places and Regions 1", "Environment and Society 2", "Human Systems 3" the most. Amish textbooks tend to deal world geography in this grade and American textbooks mainly deal American continent and related countries with trade and transportation.

③ The fifth grade

We compare the textbooks for American fifth grade and Amish fifth-sixth grade as Amish textbook for this grade is combined textbook for the fifth and sixth grades. The percentages show that Amish deal the areas of "Places and Regions 1", "Human Systems 3" the most. On the contrary, American textbooks deal the areas of "The World in Spatial Terms 1", "Places and Regions 1", "Places

and Regions 2" and "Human Systems 2" the most. There are not big differences between Amish and American textbooks as both textbooks deal present American geography, however, it is noticeable that "present" means different from Amish and American textbooks.

④ The sixth grade

Again, we compare the textbooks for American sixth grade and Amish fifth-sixth grade. The percentages show that Amish deal the areas of "Places and Regions 1", "Human Systems 3" the most. On the other hand, American textbooks deal the areas of "Places and Regions 1", "The World in Spatial Terms 1" and "Environment and Society 2" the most. Amish deal the present and the past of America, Canada, Latin America, Mexico, Central America and South America. American textbook deals world geography and ancient geography with its history.

⑤ The seventh-eighth grade

The percentages show that Amish deal the areas of "Places and Regions 1", "Human Systems 3", "Environment and Society 3", "Human Systems 2" the most, and American textbook deals the areas of "Places and Regions 1", "The World in Spatial Terms 3", "Human Systems 1", "Human Systems 3" and "Human Systems 2" the most. Both textbooks deal all standards constantly. Amish textbook introduces world countries and their economic situation and usages of their lands. There is a critical opinion toward communism, Russia and China. On the other hand, American textbook deals almost all countries and introduce the characteristics of lands, economics situation and lifestyles of many places. More numbers of countries are introduced in American textbook than Amish one.

6. Conclusion

The purpose of this research is to analyze the relationship between Amish lifestyle and information. This paper analyzed the geography textbooks used in Amish schools as one of the sources of information for the Amish, and compared them with those of American. The method used for the analysis is to classify the contents of Amish and American geography textbooks according to the "National Geography Standards".

As a result, Amish textbooks deal the areas of "Places and Regions 1", "Human Systems 3", and "Human Systems 2" the most. On the contrary, American textbooks deal "Places and Regions 1", "The World in Spatial Terms 3", "Human Systems 3", "Human Systems 2" and "Human Systems 1" the most. American textbooks tend to deal most of all standards and also they deal many world countries. On the other hand, Amish textbooks for the third and fourth grades are written in story and more contents are about lifestyles of people. Therefore Amish study the way of life through geography rather than learning skills such as map making and obtain information from maps.

Amish do not learn present geography because most of their textbooks are written in 1960's. However if we understand that Amish regard geography as a method of living in different regions, it is not very important for them to learn present geographic changes by world politics.

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