

Advisory Opinion

**Toward the Enrichment of “Geography” and the
Construction of Geography Education Consistent
from Elementary School to University;
Toward the realization of a sustainable society**



27 September 2023

Science Council of Japan

**Subcommittee on Geography Education of
the Committee on Area Studies and
the Committee on Earth and Planetary Sciences**

This advisory opinion is the result of the deliberations of the Subcommittee on Geography Education of the Committee on Area Studies and the Committee on Earth and Planetary Sciences of the Science Council of Japan.

List of Members

Chair of Committee	IDA Yoshiyasu	(Associate Member)	Professor, Institute of Human Sciences, University of Tsukuba
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	IGUCHI Azusa	(Associate Member)	Associate Professor, Faculty of Collaborative Regional Innovation, Ehime University

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ISHIKAWA Yoshitaka	(Associate Member)	Professor Emeritus, Kyoto University
OKAHASHI Hidenori	(Associate Member)	Professor Emeritus, Hiroshima University
OGUCHI Takashi	(Associate Member)	Professor, Center for Spatial Information Science, The University of Tokyo
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KONDO Akio	(Associate Member)	Professor, Faculty of Economics, Hosei University
KONDOH Akihiko	(Associate Member)	Professor Emeritus, Chiba University
SHINODA Masato	(Associate Member)	Professor, Graduate School of Environmental Studies, Nagoya University
SUGIMOTO Yoshio	(Associate Member)	Professor Emeritus, National Museum of Ethnology
SUZUKI Yasuhiro	(Associate Member)	Professor, Disaster Mitigation Research Center, Nagoya University
TAKEUCHI Hirokazu	(Associate Member)	Professor, Faculty of Education, Kaichi International University
TANIGUCHI Makoto	(Associate Member)	Deputy Director and Professor, Research Institute for Humanity and Nature, National Institutes for the Humanities
NAKAZAWA Takashi	(Associate Member)	Professor, School of Business Administration, Meiji University
NAKAYA Tomoki	(Associate Member)	Professor, Graduate School of Environmental Studies, Tohoku University

HIMIYAMA Yukio	(Associate Member)	Professor Emeritus, Hokkaido University of Education
MASUDA Satoru	(Associate Member)	Professor, Graduate School of Economics and Management, Tohoku University
MIZUUCHI Toshio	(Associate Member)	Affiliate Professor, Graduate School of Literature and Human Sciences, Osaka Metropolitan University
MIYAMACHI Yoshihiro	(Associate Member)	Professor, Faculty of Economics, Oita University
MORIMOTO Izumi	(Associate Member)	Professor, Faculty of International Studies, Meiji Gakuin University
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YAMAZAKI Takashi	(Associate Member)	Professor, Graduate School of Literature and Human Sciences, Osaka Metropolitan University
YAMASHITA Jun	(Associate Member)	Professor, Faculty of Social and Cultural Studies, Kyushu University
YAMAMOTO Kayoko	(Associate Member)	Professor, Graduate School of Informatics and Engineering, The University of Electro- Communications
YOKOYAMA Satoshi	(Associate Member)	Professor, Graduate School of Environmental Studies, Nagoya University
YOSHIDA Michiyo	(Associate Member)	Professor, Faculty of Tourism, Wakayama University
WATANABE Kohei	(Associate Member)	Professor, Faculty of Liberal Arts, Teikyo University

SUGAI Toshihiko	(Designated Associate Member)	Professor, Graduate School of Frontier Sciences, The University of Tokyo
YUI Yoshimichi	(Designated Associate Member)	Professor, Graduate School of Humanities and Social Sciences, Hiroshima University

Working Group on School Geography Education

Chair	TAKEUCHI Hirokazu	(Associate Member)	Professor, Faculty of Education, Kaichi International University
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	IDA Yoshiyasu	(Associate Member)	Professor, Institute of Human Sciences, University of Tsukuba
	SUGIMOTO Yoshio	(Associate Member)	Professor Emeritus, National Museum of Ethnology
	MURAYAMA Tomoko	(Associate Member)	Professor, College of Education, Ibaraki University
	YUI Yoshimichi	(Designated Associate Member)	Professor, Graduate School of Humanities and Social Sciences, Hiroshima University
	ASAKAWA Toshio		Professor, Faculty of Education Department of Education, Tohoku Fukushi University
	IKE Shunsuke		Professor, Faculty of Education and Integrated Arts and Sciences, Waseda University
	IZUMI Takahisa		Teacher, Senshu University Matsudo High School
	UCHIKAWA Takeshi		Teacher, Seikei Elementary School

KONNO Ryosuke SHIMURA Takashi	Teacher, Senior High School at Sakado, University of Tsukuba Professor, Graduate School of Teacher Education, Joetsu University of Education
SUZUKI Makoto	Associate Professor, Faculty of Education, Yokohama National University
SUHARA Yoji	Professor, Faculty of Letters, Ryukoku University
TAKAGI Suguru	Teacher, Kobe University Secondary School
TAKIZAWA Yumiko	Chief Director, International Cartographic Informaiton Center
NAKAMURA Mitsutaka NAKAYA Keiko	Teacher, Senior High School at Otsuka, University of Tsukuba Teacher, Elementary School Attached to the Faculty of Education, Chiba University
NAKAYAMA Masanori	Teacher, Saitama Prefecture Koshigaya City Dewa Elementary School
MATSUMOTO Hotaka YAMAMOTO Ryuta	Teacher, Ibaraki Prefectural Takezono Senior High School Associate Professor, Education Center for Regional Development, Shizuoka University
YUIZONO Ken	Teacher, Elementary School Attached to University of Tsukuba
YOSHIMIZU Hiroya	Trustee, Vice President, Professor, Hyogo University of Teacher Education

YOSHIDA
Kazuyoshi

Former Professor, Faculty of
Education, Soka University

**Working Group on Physical Geography/Environmental Disaster
Prevention Education**

Chair	SUGAI Toshihiko	(Designated Associate Member)	Professor, Graduate School of Frontier Sciences, The University of Tokyo
Vice-Chair	YAMANO Hiroya		Director, National Institute for Environmental Studies
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	ABE Ayako	(Associate Member)	Professor, Atmosphere and Ocean Research Institute, The University of Tokyo
	OKUMURA Koji	(Associate Member)	Professor Emeritus, Hiroshima University
	KUBO Sumiko	(Associate Member)	Professor, Faculty of Education and Integrated Arts and Sciences, Waseda University
	KONDOH Akihiko	(Associate Member)	Professor Emeritus, Chiba University
	SHINODA Masato	(Associate Member)	Professor, Graduate School of Environmental Studies, Nagoya University
	SUZUKI Yasuhiro	(Associate Member)	Professor, Disaster Mitigation Research Center, Nagoya University
	MASUDA Satoshi	(Associate Member)	Professor, Graduate School of Economics and Management, Tohoku University

AOKI Tatsuto	Associate Professor, Faculty of Regional Development Studies, Kanazawa University
UNE Hiroshi	Retired, Geospatial Information Authority of Japan
KIMURA Keiji	Professor, Faculty of Letters, Nara University
KUSAKA Hiroyuki	Professor, Center for Computational Sciences, University of Tsukuba
KOIWA Naoto	Professor, Faculty of Education, Hiroshima University
GOTO Hideaki	Associate Professor, Graduate School of Humanities and Social Sciences, Hiroshima University
SAITO Hitoshi	Associate Professor, Graduate School of Environmental Studies, Nagoya University
SUZUKI Takehiko	Professor, Graduate School of Urban Environmental Sciences, Tokyo Metropolitan University
NIWA Yuichi	Associate Professor, Faculty of Economics, Keio University
HASEGAWA Naoko	Associate Professor, Faculty of Core Research Human Science Division, Ochanomizu University
HATTANJI Tsuyoshi	Associate Professor, Faculty of Life and Environmental Sciences, University of Tsukuba
HAYAKAWA Yuichi S.	Associate Professor, Faculty of Environmental Earth Science, Hokkaido University

HORI Kazuaki	Professor, Graduate School of Science, Tohoku University
MATSUYAMA Hiroshi	Professor, Graduate School of Urban Environmental Sciences, Tokyo Metropolitan University
YAMAGATA Kotaro	Professor, Graduate School of Education, Joetsu University of Education
YAMAGUCHI Masaru	Chief Announcer, Yokohama Station, Japan Broadcasting Corporation (NHK) and Visiting Professor, Yokohama National University
YAMANAKA Tsutomu	Professor, Faculty of Life and Environmental Sciences, University of Tsukuba

Working Group on Map/GIS Education

Chair	HASHIMOTO Yuichi	(Associate Member)	Professor, Faculty of Humanities and Human Sciences, Hokkaido University
Vice-Chair	OGUCHI Takashi	(Associate Member)	Professor, Center for Spatial Information Science, The University of Tokyo
Secretary	NAKAYA Tomoki	(Associate Member)	Professor, Graduate School of Environmental Studies, Tohoku University
Secretary	YAMASHITA Jun	(Associate Member)	Professor, Faculty of Social and Cultural Studies, Kyushu University
	YANO Keiji	(Section I Council Member)	Professor, College of Letters, Ritsumeikan University
	YAMAMOTO Kayoko	(Associate Member)	Professor, Graduate School of Informatics and Engineering,

	The University of Electro-Communications
ISHIBASHI Ikuru	Teacher, Toin Gakuen Senior High School
ITOH Satoru	Professor Emeritus, Kanazawa University
OTA Hiroshi	Lecturer (part time), Faculty of Literature, Senshu University
SATO Takenori	Geospatial Information Authority of Japan, Ministry of Land, Infrastructure, Transport and Tourism
KAWAI Toyoaki	Teacher, Shinagawa Joshi Gakuin
KOEN Shozo	Teacher (part time), Adachi Ward Iriya Minami Junior High School
KOBAYASHI Taketo	Teacher, Chiba Prefectural Chiba High School
TANAKA Takashi	Teacher, Gunma Prefectural Fujioka Chuo High School
TAMURA Kenya	Chairman, NPO Ino Shachu
NAKAMURA Yasuko	Associate Professor, Faculty of Education, Tokyo Gakugei University
HIGASHI Keiko	Chief Researcher, Fujisawa City Education and Culture Center
MORI Taizou	Professor, Faculty of Literature, Notre Dame Seishin University
WAKABAYASHI Yoshiki	Professor, Graduate School of Urban Environmental Sciences, Tokyo Metropolitan University

Working Group on University Geography Education

Chair	YUI Yoshimichi	(Designated Associate Member)	Professor, Graduate School of Humanities and Social Sciences, Hiroshima University
Vice-Chair	YOKOYAMA Satoshi	(Associate Member)	Professor, Graduate School of Environmental Studies, Nagoya University
Secretary	KONDO Akio	(Associate Member)	Professor, Faculty of Economics, Hosei University
Secretary	MORIMOTO Izumi	(Associate Member)	Professor, Faculty of International Studies, Meiji Gakuin University
	YANO Keiji	(Section I Council Member)	Professor, College of Letters, Ritsumeikan University
	ISHIKAWA Yoshitaka	(Associate Member)	Professor Emeritus, Kyoto University
	KUBO Sumiko	(Associate Member)	Professor, Faculty of Education and Integrated Arts and Sciences, Waseda University
	SUZUKI Yasuhiro	(Associate Member)	Professor, Disaster Mitigation Research Center, Nagoya University
	MURAYAMA Tomoko	(Associate Member)	Professor, College of Education, Ibaraki University
	YOSHIDA Michiyo	(Associate Member)	Professor, Faculty of Tourism, Wakayama University
	WATANABE Kohei	(Associate Member)	Professor, Faculty of Liberal Arts, Teikyo University
	YOSHIMIZU Hiroya		Trustee, Vice President, Professor, Hyogo University of Teacher Education

Working Group on Regional Geography and International Understanding Education

Chair	NAKAZAWA Takashi	(Associate Member)	Professor, School of Business Administration, Meiji University
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Vice-Chair	IKEGUCHI Akiko	(Associate Member)	Associate Professor, College of Education, Yokohama National University
Secretary	OKAHASHI Hidenori	(Associate Member)	Professor Emeritus, Hiroshima University
	MATSUBARA Hiroshi	(Section I Council Member)	Director, Professor, Research Institute for Regional Economics, Fukui Prefectural University
	IGUCHI Azusa	(Associate Member)	Associate Professor, Faculty of Collaborative Regional Innovation, Ehime University
	SUGIMOTO Yoshio	(Associate Member)	Professor Emeritus, National Museum of Ethnology
	TANIGUCHI Makoto	(Associate Member)	Deputy Director and Professor, Research Institute for Humanity and Nature, National Institutes for the Humanities
	HIMIYAMA Yukio	(Associate Member)	Professor Emeritus, Hokkaido University of Education
	MIZUUCHI Toshio	(Associate Member)	Affiliate Professor, Graduate School of Literature and Human Sciences, Osaka Metropolitan University
	MIYAMACHI Yoshihiro	(Associate Member)	Professor, Faculty of Economics, Oita University
	MORIMOTO Izumi	(Associate Member)	Professor, Faculty of International Studies, Meiji Gakuin University
	YAMAKAWA Mitsuo	(Associate Member)	Professor Emeritus, Fukushima University
	YAMAZAKI Takashi	(Associate Member)	Professor, Graduate School of Literature and Human Sciences, Osaka Metropolitan University

YOKOYAMA Satoshi	(Associate Member)	Professor, Graduate School of Environmental Studies, Nagoya University
YUI Yoshimichi	(Designated Associate Member)	Professor, Graduate School of Humanities and Social Sciences, Hiroshima University

The officials listed below were responsible for administrative matters related to the creation of this document.

MASUKO Noriyoshi	Director for Scientific Affairs I (until April 2023)
NEGORO Kyoko	Director for Scientific Affairs I (from May 2023)
YAMADA Hiroshi	Deputy Director for Scientific Affairs I (until March 2023)
WAKAO Kimiaki	Deputy Director for Scientific Affairs I (from April 2023)
YAMAGISHI Daisuke	Chief, Section I: Humanities and Social Sciences

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Executive Summary

1. Background to the Development of this Opinion

In April 2022, a new curriculum based on the current National Curriculum Courses Standards (revised in 2018) began in high schools, and classes in “Geography and History” began with the newly established “Geography” as a compulsory subject. All students, from elementary school through high school, will study geography equally, and it is expected that geography education will make a greater contribution to society by fostering spatial awareness from people’s local communities to the land, the world, and the earth, and by fostering future leaders who will live better lives and be better shapers of society.

In order to promote such education, while reforms have been made as indicated in the proposal issued in August 2020 by the Subcommittee on Geography Education of the Committee on Area Studies and the Committee on Earth and Planetary Sciences of the Science Council of Japan, “Toward the Enhancement of New Geography Education to be Changed by ‘Geography’ - Fostering Geographical Qualities that Contribute to the Creation of a Sustainable Society”, there still remain an unaddressed issue of the continuity of geography education from elementary school to high school and university.

It is important to find a direction for solving this issue and to further enhance geography education. In order to promote the further development of geography education and its contribution to society, including the findings of not only geography but also and other humanities including cultural anthropology and history, natural sciences, and informatics, for a sustainable society, we issue the following statement. The following is a summary of the views expressed in the Opinion.

2. Current Situation and Issues

The school curriculum and training system for teachers in introducing of “Geography” at each high school are insufficient, and the importance and continuity of geography education from elementary school to university are not fully recognized. The issues are following: the relationship between the academic background and the contents of school learning has not been clarified. In addition,

the development and evaluation of the required qualities and abilities, that are the aims of “Geography” including the use of maps/GIS (geographic information systems), international understanding, and environment and disaster prevention, which are necessary in a DX (Digital Transformation) society, have also not been indicated.

There is an immediate need to examine the university curricula for the training of geography teachers and the state of the university entrance examinations for "Geography" which has become a compulsory subject, and continuity of geography education at universities.

3. Details of the Opinion

(1) Enrichment of “Geography” and establishment of continuous geography learning from elementary school to high school

The training should include: detailed training for teachers on the content of geography, according to their expertise and years of teaching experience; training on evaluation, including the new perspective-based evaluation; and training on basic knowledge and concepts of the content of learning, fieldwork, etc. It is necessary to provide a variety of contents to support the devising and improvement of classroom practices based on the revised National Curriculum Courses Standards. It is expected that the national government, geography-related academic associations, universities, research institutions, etc. will collaborate to develop a system to provide diverse teacher training materials and programs, and to accumulate and enhance training programs by utilizing a cross-sectional network of geography-related academic associations. With the introduction of “Geography” as a compulsory subject at high schools, it is necessary to examine the continuity of geography studies at elementary, junior and senior high schools, and to provide teacher training for this purpose.

(2) Map/GIS education content development with “Geography”

In the development of contents for map/GIS education, there is a need for a system to accumulate, maintain, and update important geospatial information and useful contents, and to ensure that the latest information is available at all times. In map/GIS education, it is important to make the regional image through fieldwork and other means. In addition to using the websites as a source of statistical information, it is expected to collaborate and interact with the local communities. It is desirable for students to use the skills they have acquired such

as "localization of teaching materials" using the results of map/GIS education and having students think about disaster prevention and the environment in their immediate surroundings, and to use this learning guidance to improve their own lives and society.

(3) Distribution of the importance of "international understanding and international cooperation"

In order to gain a correct understanding of the philosophy of "Geography", it is necessary to raise public awareness of importance of "international understanding and international cooperation in "Geography". For reducing the gap between the philosophy of "Geography" and social reality, it is required to take one step further, such as providing information to the press through press releases.

It is necessary to seek for a consensus through wide-ranging discussions on to what degree complex realities should be structured and grasped, under the philosophy of moving from content (knowledge) to competency (ability) and under the conditions required for the compulsory subject as easy to teach and learn.

(4) Enhance physical geography education to support education for environmental disaster prevention and further strengthen cooperation with universities, etc.

School classroom support needs to be strengthened to make unique difficulties of education for environmental disaster prevention easier. In the learning for environmental disaster prevention, focusing on offering various learning opportunities in high schools, curriculum structure should be considered that allows students to flexibly take subjects that can be linked to geography and adjacent subjects such as history and geology. In addition, it should be encouraged to further collaborate with universities and research institutions. It is desirable to accelerate the dissemination of ICT learning for environmental disaster prevention using maps by Geospatial Information Authority and other tools, as well as use of the collection of teaching materials, and to provide a generous support system to achieve learning that enables students to apply their knowledge.

(5) Teacher training and enhancement of geography education in common education at universities, and reform of university entrance examinations

In order to reflect the content of "Geography" effectively, it is necessary to

improve the contents of university training course for elementary and high school teacher training programs and the contents of teacher training for “Geography and History” of high school. As “Geography” started as compulsory subject along with “History” in high school, it is necessary to treat geography and history equally in university entrance examinations, because school students who have taken geography subjects will not be disadvantaged in entrance examinations. It is required that students who select geography as university entrance examination could be evaluated on the various qualities and abilities acquired through their geography learning of high school. It is also required for the universities that have difficulty making their own entrance examinations to use the Common Test for University Admission or other methods to ensure opportunities for students who take geography.

While aiming at consistency with the learning contents of “Geography”, in the common subjects in universities, it is necessary to enhance the contents of geography in universities, taking into consideration the connection with the high school and university, such as provision of subject based on “Geography” aiming at fostering competency by utilizing the achievements that have been made so far.