Geospatial Information Authority of Japan’s (GSI’s) support for geography education

Takaki Okatani\textsuperscript{a,*}, Hiroaki Tanaka\textsuperscript{b}, Yuki Kurisu\textsuperscript{b}, Hidetoshi Nakajima\textsuperscript{b}, Keisuke Katsuta\textsuperscript{b}

\textsuperscript{a} College of Land, Infrastructure, Transport and Tourism; okatani-t96ms@mlit.go.jp
\textsuperscript{b} Geospatial Information Authority of Japan; tanaka-h96i3@mlit.go.jp, kurisu-y96kx@mlit.go.jp, nakajima-h96pm@mlit.go.jp, katsuta-k96dd@mlit.go.jp

\* Corresponding author

**Keywords:** Geography Education, National Courses of Study, Geospatial Information Authority of Japan (GSI)

**Abstract:**
In Japan, the National Courses of Study was revised in 2016 and 2017. One of the most extensive discussions is on enhancing geography education in primary and secondary levels in this era of globalization. Further, it is argued how the Geospatial Information Authority of Japan (GSI), the national organization within the Japanese government for the production and coordination of basic geospatial information, should play a more important role in this process to support the promotion of geography education. In addition to these actions, GSI had started discussion with specialists for geography education and high-school teachers about supports for geography education expected to GSI. This presentation discusses the role of GSI in the promotion of geography education.

**1. Introduction**
In Japan, the National Courses of Study was revised in 2016 and 2017. Regarding geography education, major changes are as follows:

- Geography will come to compulsory subject in high school (transition from optional)
- Utilization of maps and geographic information system (GIS) became more important

The Geospatial Information Authority of Japan (GSI), which is the national organization within the Japanese government tasked with producing and coordinating basic geospatial information, had begun to be concerning itself with education in recent years. GSI established a team to tackle with the issues of geography education since 2015, and the team released a report in 2016. In the report, the team showed the following problems of geography education in the context of geospatial information and proposed actions to GSI for the promotion of geography education (Une, 2017).

A: Problems of Geography Education in the Context of Geospatial Information

1) Decrease in the fundamental geographic knowledge
2) Need for geospatial information literacy
3) The curriculum of geography for high school – transition from an optional to a compulsory subject
4) Support of teachers who are not trained to impart geography education professionally
5) The information provided by GSI is not widely accessible to teachers
6) Weakening of the ties between human life and land
7) Education for disaster reduction
8) Recreational activities associated with geography

B: Proposals for GSI’s Actions for the Promotion of Geography Education
1) Supporting classrooms
2) Direct approach to students and pupils
3) Reinforcement of support for disaster reduction education
4) Promotion of recreational geographic activities

2. GSI’s actions for geography education support

GSI started putting some of the proposals into practice. In June 2016, the authority opened a corner called “Toolbox for Geography Education” on its web page. It includes many types of information, such as “How to Create a Blank Map from GSI Maps”. The briefing session for textbook publishing companies began in 2016, and has been held every year since then. “Summer school” organized by GSI and the Japanese Association of Geographers was held in 2016 and 2017. Since March 2017, many schools have been visited by GSI staff under the “Let’s go to school” project.

In addition to these actions, GSI had started discussion with specialists for geography education and high-school teachers about supports for geography education expected to GSI. In committee’s interim report, following problems were revealed;

1) GSI’s products are unfamiliar to teachers and students
2) Teachers don’t know how to use GSI’s products for their classrooms

GSI’s products are expected to glow children’s following abilities, such as;

1) To grasp peripheral circumstance and abstract it
2) To recognize how peripheral landform was made
3) To acquire information to give solution to solve social problems using PC

Based on these discussions, further promotion of supporting for geography education would be needed for GSI, such as;

1) To promote lectures for students and pupils, teachers
2) To improve GSI’s HP (“Toolbox for Geography Education”) structure to make customers get information easier
3) To improve GSI’s geospatial product to match educational needs

As our country is often attacked by natural disasters recently, GSI’s support for education is especially needed for disaster prevention.

3. Conclusions

GSI began to concern itself with education in recent years. GSI has implemented various actions to support teachers and students in the promotion of geography education. The author looks forward to discussing on the role of GSI in the promotion of geography education.

Reference