

Primary Geography Education in Japan: Curriculum as Social Studies, Practices and Teachers' Expertise

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Abstract

This paper examines the status and relevant challenges in Japan's primary geography education system, from the perspectives of curriculum and levels of teachers' expertise. Japanese elementary schools adopted the subject Social Studies in the National Curriculum Standards. These emphasize geographical content and the curriculum structure utilizing a regional geography approach. This research study assessed the geography content included in Social Studies, as well as the levels of teachers' expertise. The study revealed that: 1) qualitative difference in teaching activities depended on whether or not teachers majored in Social Studies at teacher training college; 2) teachers who did major in Social Studies tended proactively to develop their own customized teaching materials, and focused on emphasizing a wide range of scholastic skill development in their lessons; 3) ensuring that teachers had sufficient time to develop in meaningful educational opportunities for students outside the classroom was a major issue; and 4) additionally, the ability of teachers to develop these customized teaching materials is related to whether or not they majored in Social Studies, especially geographical matters directly. The study reveals a need to establish continued professional development programs (CPDs), enhancement of geographical content in teacher training courses, and geography as compulsory subject in the senior high school curriculum, in order to increase the geographical expertise of primary teachers in Japan.

Keywords: Social Studies curriculum, elementary school, teacher education, local materials development, Japan

Introduction

The book, *Geography Education in Japan* (Ida et al. 2015), was published by geography education researchers in Japan. Written in English, this book is a comprehensive discussion of the current status and challenges of geography education in the country, and is the first publishing project to present information about Japanese geography education to the world. Additionally, Toida et al. (2012) reviewed recent geography education trends in Japan. These studies discussed primary geography

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education, drawing on available evidence. However, geography in secondary education is the main focus, though again practical and detailed evidence is limited.

The purpose of this paper is to examine issues related to the state of Japan's geography education at the primary school level through empirical analysis. The paper will specifically assess geography in primary education from the perspectives of curriculum content and the levels of teacher expertise, following an outline of the educational system and the elementary school curriculum of Japan. Drawing on original research findings (Shimura et al. 2014), there is then an analysis of the findings of a survey focused on teaching practices in elementary school Social Studies. Finally, this article discusses the influence of teacher education, in-service training systems and senior high school curriculum standards on the current state of primary Social Studies education in Japan.

The primary curriculum in the Japanese education system

An overview of Japan's education system

Japan's current education system, which established immediately after World War II, closely modelled on the American education system. Compulsory education consists of a total of 9 years. Six years are dedicated to primary, or elementary, education (from 6 to 12 years old), and 3 years are dedicated to lower secondary education (from 12 to 15 years old). Following the completion of these levels, students then have the option to advance to the upper secondary level, which consists of 3 years (from 15 to 18 years old). It should be noted that while this level is not compulsory, enrolment rates are over 97%. These educational levels represent the Japanese school equivalents to elementary, junior high, and senior high school.

The National Curriculum Standards have been a significant component of Japan's school education system, and were developed as a part of modernization efforts in the late nineteenth century, when curriculum was homogenized and adopted nationwide. Following World War II, further changes were made, and the subjects of Geography and History were combined into a newly integrated Social Studies curriculum. As a result, at the elementary school level, geography is currently taught as a part of Social Studies curriculum.

The role of Social Studies in primary curriculum

As a part of the post-war era's new education system, Social Studies was established as a core subject and was considered extremely important to the creation of a democratic Japanese society. For example, 16.5% of total class hours at the elementary school level were allocated to teach Social Studies. At the time, Social Studies included a strong emphasis on geography, and the subject became closely associated with early childhood education (Tabe 2004). Since that time, however, various influences have altered the emphasis placed on Social Studies within the Japanese education reform. In the 1960s, a movement towards increasing science education led to a shift in educational priorities. By 1989, a new subject called 'Life Environmental Studies' was included in first and second grade curriculum; the course was a fusion of Social Studies and Science. By 2000, a new field named 'Integrated Studies' was included in the third to sixth grade curriculum. Throughout the 2000s, influential changes to education policy placed an

emphasis only on Language and Arithmetic. Currently, the Social Studies curriculum has been reduced to just 6.4% of total class hours, and is now positioned as a main subject, rather than a core subject. Figure 1 demonstrates the current placement of Social Studies in relation to other subjects in Japan’s primary school curriculum.

Age	Grade	Contents in curriculum			
11-12	6	Japan's place in the world	Politics of Japan and the world	History of Japan	Integrated studies (5%)
10-11	5	Land of Japan, and Japanese agriculture and industries			
9-10	4	Our prefecture	Public utilities and services	Historical changes in our local area	
8-9	3	Our local area			
7-8	2	Life Environmental Studies (4%)			
6-7	1	(Our neighborhood)			
Subjects/fields		Geographical strand	Civic strand	Historical strand	related subjects/fields
		Social Studies			
A percentage of the total class hours		6%			9%

Note: Life Environmental Studies is a combined subject of Social Studies and Science.

Figure 1.

Social Studies and its related subject/field curriculum (2008 edition) in Japanese primary education

Organization principles of Social Studies curriculum, geographical content, and scholastic abilities

An Orientation to Regional Geography Education in Japan

In Japanese school education, there is little evidence of the conceptual revolution that converted regional geography learning to thematic or systematic geography learning, such as occurred in the United Kingdom in 1960s-1970s (Shimura 2015). The Orientation to regional geography learning, when viewed globally, seems to be a tendency in some countries, especially in East Asian countries, not only in Japan (Shimura 2014). This trend reflects the traditional and popular view that emphasizes factual knowledge. In Japanese history education, it has been very remarkable to adopt entirely the diachronic curriculum that consists of huge factual knowledge. In addition, this has brought Japanese people to think that Geography and History learning is memorization of ‘capes and bays’ facts and events, and that regional geography is the only Geography content. As a result of this trend, the primary and lower secondary geographical curriculum tends to be organized on basis of regional geography content.

In stark contrast, the upper secondary level curriculum is typically organized based on systematic geography. This emphasis is similar to the geography education content taught at the university level currently, and reflects the 1970's impact of geography's conceptual revolution in Japan.

Geographical Contents in Primary Curriculum

As demonstrated in Figure 1, the primary level Social Studies curriculum is composed of three strands: geographical, civic, and historical. Figure 1 shows that a large portion of Social Studies content is geographical, relative to the other strands – particularly in grades three to five. Additionally, as the geographical and civic strands are closely related – and as the social, functional, integrated curriculum organizational principle has been adopted in configuring the complete primary content – it can be difficult clearly to distinguish contents as belonging to one strand or the other.

A sequence exists within the geographical strand, beginning with 'our neighbourhood' (as part of Life Environmental Studies in grades 1 to 2), and going on to include: 'our local area' (grade 3), 'our prefecture' (grade 4), 'our country' (grade 5), and Japan's overall place in the world (grade 6). This sequence represents a regional geography structure that is based on a principle of concentric horizontal expansion. It is rigorously applied to organizing the geography curriculum content.

Two specific issues result from the organization of curriculum using the principles described above. First, content related to physical geography is under-represented when compared with content related to social and human geography. Second, despite the globalized nature of society today, substantial learning about the world beyond Japan does not take place at the elementary school; its students must wait until junior high school before such topics are included (Yoshida 2015). This issue is not limited to the primary levels, and continues through the secondary levels, affecting the entire Social Studies curriculum. The latter is also an issue that should be considered in conjunction with the scope of regional geography content taught in the lower secondary levels.

Additionally, claims have been made that a separation of the Social Studies content from Life Environmental Studies content should be considered, as children in grades 1-2 are developmentally at a critical period when the fundamental development of their geospatial cognitive capacity should be a priority (Teramoto 2015).

Geographical Scholastic Abilities and Issues

In 2007, the National Institute for Educational Policy Research (NIER) conducted a nationwide survey on the scholastic achievement of students in Social Studies courses. This is the most recent national survey focused on teaching, learning, and scholastic achievement in Social Studies at the elementary school level. This survey report (NIER 2008) clarifies the following issues with respect to the study of geographical matters.

- (1) *Regarding basic knowledge of fundamental concepts:* Many students demonstrated insufficient knowledge of the names and locations of the prefectures of Japan and the major countries in the world. The percentage of correct answers from students who had utilized maps as a part of their lessons was significantly higher than those who did not use maps.

(2) *Regarding problem solving*: Students' abilities to discover and understand problems from a variety of materials were not sufficient. The percentage of correct answers from students who had used inquiry methods in their lessons tended to be high.

The above-mentioned issue (1) is a matter related to geographical learning content and learning/teaching strategies with a focus on fourth-fifth grade. Issue (2) is also a matter that requires that students inquire into their local area problems and resolve them using various materials including maps. Therefore, the survey suggests that primary teachers are not effectively teaching and using geographical content and materials in Social Studies lessons.

Based on these results, NIER recommended that lessons be developed which utilize a variety of materials, including maps and atlases, to enhance geographical learning opportunities and to foster awareness of the issues associated with using various materials, to help students process and express their newly acquired knowledge. In other words, it asked questions about the geographical expertise of primary teachers. And, it indicated that there is a need to know the actual conditions of lessons and of the geographical expertise of the teacher. In the following section, original survey data is used to examine these issues.

Purpose of the Survey

In Japan, there has been limited systematic research conducted into Social Studies teaching practices at the primary levels, especially relating to the study of geographical contents and the expertise of teachers. In this context, Akimoto et al (2010) and Sakai et al (2011) carried out large-scale questionnaire survey. They discovered that teachers' expertise in Social Studies and geography was insufficient, and suggested that teachers' education opportunities and in-service training systems should be improved. This study is particularly valuable because it is analytic and empirical. However, this research was conducted exclusively within the Tokyo metropolitan area, and an understanding of overall Japanese trends was limited.

Therefore, in order more accurately to understand the realities in non-metropolitan areas of Japan, Joetsu University of Education Social Studies laboratory conducted a similar survey in 2013 (Shimura et al. 2014). The following is a summary of the study and its findings.

Methodology

Procedures and Instruments

The survey was conducted by post, from July to August 2013. Respondents included teachers from 79 municipal elementary schools in the region of the university. This region, Joetsu district, is representative of a typical non-metropolitan area in Japan, and has a population of approximately 280,000.

In reference to previous studies in Japan, to obtain accurate and useful data in quantity and quality, the questionnaire survey included an open description part that was considered to be appropriate for the purpose of the study. Structured questionnaires,

printed on paper, were sent to schools, and it was requested that three teachers per a school respond.

The questionnaire consisted of 10 pages (A4 size paper). It included 28 questions covering the attributes of the respondent, the situation of Social Studies lesson practices, and the perceptions of Social Studies lessons and curriculum. Respondents were asked to write their own thoughts, not simply to reflect those of the school. There were 152 responses, averaging 1.9 teachers per school. The recovery rate was 64%, significantly higher than the 44% recovery rate of a similar study conducted in Tokyo using this method (Sakai et al. 2011).

Respondents

The ratio of male-to-female respondents was 51% and 49%, respectively. Although 60% of all elementary school teachers in Japan are women, male participation in this survey was significant. This is likely due to the fact that Social Studies tends to be a subject which male teachers prefer, and the survey asked for a response from the subject chief of Social Studies in each school. With respect to age structure, 40% of respondents were in their 40s, 23% were in their 50s, and 12% were in their 20s. Regarding length of teaching experience, half of respondents had been teaching for over 21 years, and more than 70% had been teaching for more than 11 years. For the purposes of this study, teachers with more than 10 years of experience, and who were over 40 years old, were considered to be expert primary teachers. Overall, many respondents fitted into this expert category, since this reflects the general context of few younger teachers in non-metropolitan areas, contrary to metropolitan areas.

Table 1.

Major course of respondents in university

Subjects majored in teacher training college			Focus of courses not taught in teacher training college		N=150 primary teachers
Social Studies major	Majors in other subjects	Majors in general studies	Courses related to social sciences	Courses related pedagogy	
23%	43%	16%	7%	11%	

Note: 90% of the teacher training college graduates are majoring in primary teacher training course.

Source: Shimura *et al.* 2014

Subjects Attributes of Respondents

Elementary school teachers are responsible for teaching all subjects in Japan. Therefore, the teaching license for primary level is not divided into separate subjects, and educators only require a single ‘primary education’ certification to teach. This license is typically acquired from primary and lower secondary teacher training colleges of educational universities. In these colleges, students usually major in one elementary school subject (e.g. Arithmetic, Language, Science or Social Studies, etc.). However,

some students choose to major in general courses that are not limited to a particular subject. In this survey, 23% of respondents majored in Social Studies (consisting of geography, history, and civics). When including social sciences majors who did not focus specifically on Social Studies education, a combined total of 30% of participating teachers qualified as having majored in a related field. Therefore, a large number of respondents majored in subjects other than Social Studies (Table 1).

Discussion: Practice situation

Teachers' Perception of Social Studies

In the questionnaire, teachers were asked to rank the anxiety levels they experience towards each of the nine subjects taught in elementary school, referencing a 4-point scale. At the upper end of the scale, 4 points represent high levels of anxiety, while at the lower end, 1 point represents not feeling any anxiety towards the subject matter. The mean point of all subjects surveyed was 2.3. Subjects that scored the highest reported levels of anxiety were Music (3.1), and Science (2.6). Conversely, the subject that scored at the lowest level was Arithmetic (1.8). On average, Social Studies was ranked at a moderate level of 2.3 points, the mean point.

Additionally, we asked about teacher anxiety levels towards all 13 units in the Social Studies curriculum, using the same 4-point scale. Although the differences were not significant between units, relatively high scores were reported for 'our local area' and 'historical changes in our local area' in third/forth grade, and 'manufacturing industries and life' and 'communication industries and life' in fifth grade. The former two units require customized local teaching materials, and the latter two units usually incorporate car factories and local television stations, which locations tend to be limited to metropolitan areas, and can be difficult to access in non-metropolitan regions.

Teaching/Learning Activities at Lessons

Table 2 provided answers to the question, 'To what extent have you used the following teaching and learning activities?' Respondents were asked to use a 5-point scale, and base their answers on actual teaching and learning situations. Analysis of the responses was as follows.

- (1) Learning activities that involve simple investigations and hypothesis testing were common, while few activities tend to incorporate meaningful debate and discussion.
- (2) Many teachers took advantage of fieldwork learning activities based outside the school setting (e.g. visiting public facilities such as water purification plants). However, many of these activities were passive observation tours. Opportunities for students actively to engage in educational experiences (such as interviews in the community) were limited.
- (3) Learning activities that include materials such as graphs, diagrams, and maps were the most common. However, reading-based activities were also widely used. Activities where students were required to develop or create their own interactive learning materials were rare.

(4) Most of the teaching materials used (e.g. prints and worksheets) were commercially produced. Few teachers developed their own customized teaching materials.

Lesson Preparation

The survey asked, ‘How often do you use the following activities to prepare lessons?’ The questionnaire measured 11 different activities, and used the same 5-point scale referenced in Table 2. The activity most frequently used in lesson preparation was ‘read the accompanying teacher’s manual provided by the textbook company’ (3.8). The second highest ranked activity was ‘search the surrounding school area for available teaching materials’ (3.0). All the remaining activities averaged 2.6 points. The study revealed an extensive dependence on the teacher’s manuals.

In contrast, ‘comparison with different textbooks not currently used in own school’ was the least utilized lesson preparation activity (1.8). The second least utilized activity was ‘read journals/magazines about Social Studies education’ (1.9). In Japan, compulsory education textbooks are distributed free of charge following an approval system. In this system, approved textbooks are selected by the Board of Education in each municipality district (Yuda 2015). Because of this system, schoolteachers do not have the opportunity to evaluate competing textbooks, and tend to rely only on the teacher’s manuals that accompany these approved textbooks.

Table 2.

The degree of each teaching/learning activity at Social Studies lessons

Teaching and learning styles			Always	Often	Sometimes	Not often	Seldom	Total	Average points
Weighted point scale			5	4	3	2	1		
Learning strategy	1	Investigate learning	4%	23%	47%	20%	7%	100%	3.0
	2	Hypothesis testing	3%	23%	40%	30%	4%	100%	2.9
	3	Debate and discussion	2%	12%	21%	40%	25%	100%	2.3
Learning outside of schools	4	Visits to public facilities	13%	28%	36%	18%	4%	100%	3.3
	5	Experiential learning, such as neighborhood interviews	9%	19%	41%	22%	9%	100%	3.0
Use of materials	6	Reading and interpretation of materials such as graphs, diagrams, and maps	23%	42%	30%	4%	0%	100%	3.8
	7	Creating materials such as graphs, diagrams, and maps	9%	26%	32%	26%	7%	100%	3.0
Development of materials	8	Relying on commercial prepared teaching materials, such as prints and worksheets	12%	31%	42%	12%	3%	100%	3.4
	9	Using self-developed teaching materials, such as prints and worksheets	5%	22%	36%	25%	12%	100%	2.8

Source: Shimura et al. 2014

Problems Related to of the Social Studies Lessons Planning

Teachers were asked in the survey, ‘To what extent have you experienced the following 16 problems in relation to Social Studies lessons?’ The question was measured on a 5-point scale, with 5-points indicating that the teachers strongly related to the problem, and 1-point indicating that the teachers never experienced the problem. The average ranking of all problems included in this question was 3.1.

The most common problem reported was ‘insufficient time to conduct enough fieldwork’ (4.1), followed closely by ‘not enough time to research and prepare teaching materials’ (4.0), and ‘difficulty finding the time necessary to customize local teaching materials’ (3.9). From these responses, we can see that a lack of time is a fundamental issue. Specifically, the survey revealed a consistent lack of meaningful opportunities to engage in learning activities outside the school setting, as well as issues related to the development of teaching materials. In addition, it should be noted that ‘insufficient of student’s social experiences’ ranked as a high 3.8.

Discussion: Teachers’ levels of expertise

Based on the overall findings outlined above, we conducted a cross tabulation analysis with teachers’ expertise, and obtained the following results.

Degree of Anxiety toward Social Studies Lessons

The levels of anxiety towards Social Studies lessons appear to be moderate. However, the degrees of anxiety reported in this study tended to depend on whether or not respondents majored in Social Studies. Of those respondents that did major in Social Studies, 37% reported feeling anxious. Of those respondents that majored in another subject or in general studies, 57% reported experiencing anxiety towards the Social Studies curriculum.

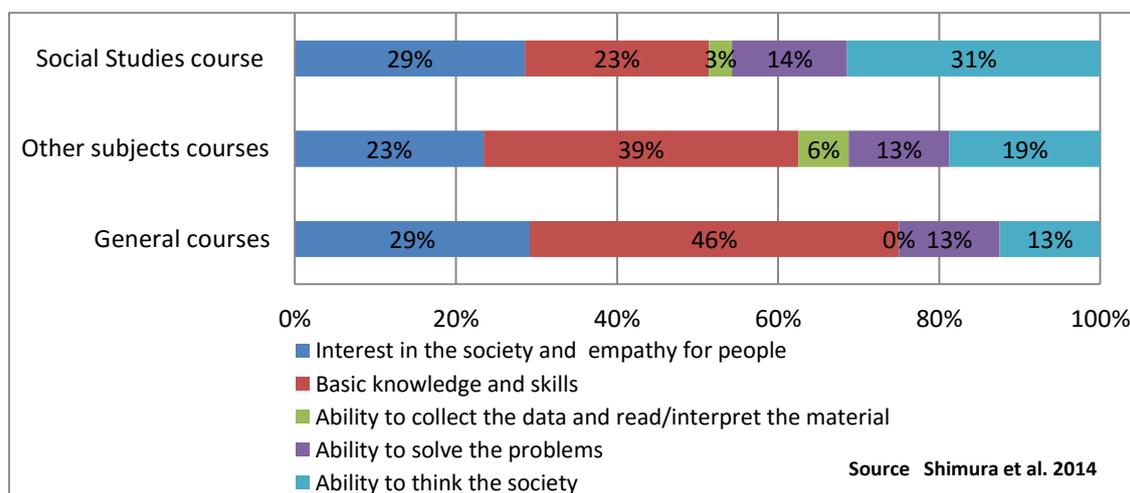


Figure 2.

The Important scholastic achievement in Social Studies lessons and major course of respondents in university

Concepts of Scholastic Achievement in Social Studies and Choice of Major

In the questionnaire, respondents ranked the most important and the second most important scholastic priorities in relation to Social Studies. Figure 2 shows their responses. There appears to be little difference between subject majors regarding an emphasis on ‘Interest in the society and empathy for people’ and ‘Ability to solve the problems’. In contrast, there is a large discrepancy when it comes to an emphasis on ‘Ability to think the society’. While Social Studies course majors rank this skill as the most important, non- majors do not rank this skill as highly.

Social Studies majors tend to place an emphasis on developing a wide range of scholastic abilities when organizing their lessons, and incorporate social thinking skills that address ‘what society has become, and why’, and ‘how society should be’. In contrast, non-majors tend to emphasize acquiring factual knowledge and basic skills when developing their Social Studies lessons.

Degree of Dependence on Teacher’s Manuals, the Ability to Develop Local Materials, And Major Courses

The previous analysis revealed a significant dependence on teacher’s manuals for lesson preparation. The levels of this dependence were then analysed according to the majors of each respondent, and the results are shown in Figure 3. Teachers who majored in ‘other subjects’ ranked the highest for choosing the option ‘always’. Teachers who majored in general studies ranked the highest for the option ‘often’. In comparison, Social Studies majors ranked relatively high in the ‘sometimes’ and ‘less’ options. Overall, Social Studies majors reported a tendency towards a lower reliance on teacher’s manuals than non-social studies majors.

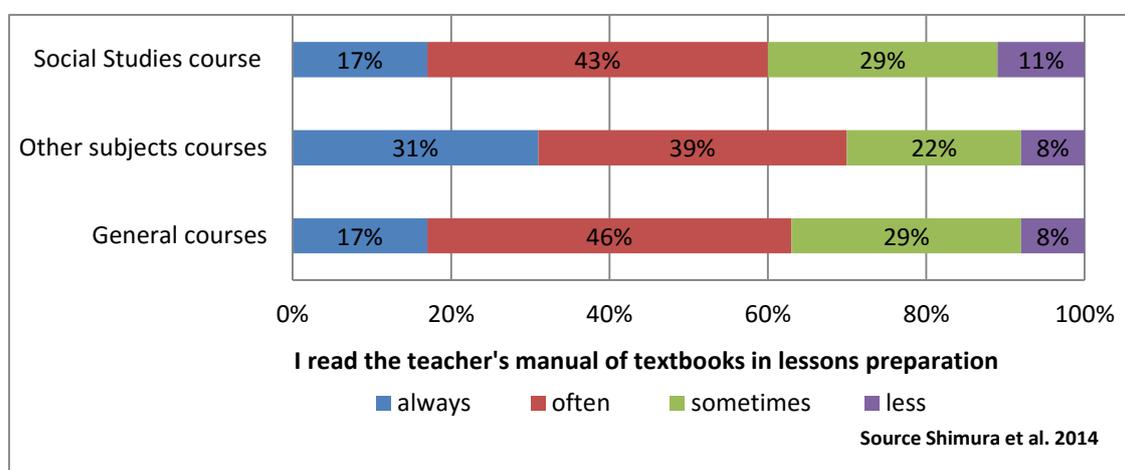


Figure 3.
Lessons preparation and major course of respondents in university

Additionally, despite efforts made by many teachers to utilize local resources when preparing lessons, the study indicated that a lack of time adequately to prepare customized local learning materials was a significant issue. Figure 4 shows the response rates to the statement, ‘I feel that not knowing how to develop local teaching materials is a problem’. A total of 71% of Social Studies majors answered ‘relatively not so’ or

‘never’ to this statement, compared to only 39% of respondents who majored in other subjects and 33% of majors in general studies. On the contrary, answers of feel ‘strongly’ or ‘so’ reach more than 30%, which is more than double those of the Social Studies majors. The results indicate that teachers who did not major in Social Studies appear more likely to lack the capacity to develop local materials. This indicates, in other words, that these teachers’ lack a capacity for developing geographical teaching materials, that is, of a local curriculum making capability.

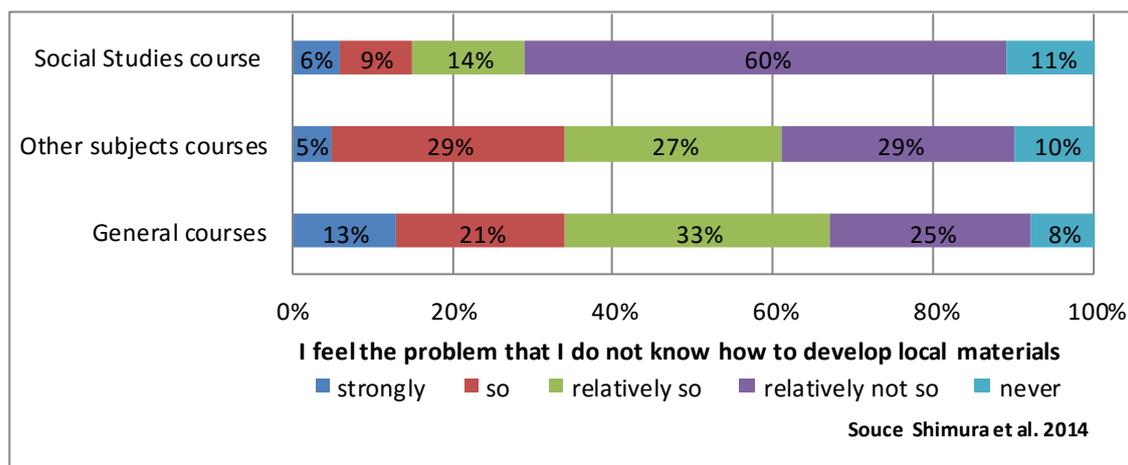


Figure 4.

Perception of own local materials development ability and major course of respondents in university

Findings

The main findings from the foregoing discussion reveal:

- (1) Many of the survey respondents were veteran teachers over the age of 40, and approximately 30% of respondents were Social Studies majors.
- (2) When compared with teaching practices in other subjects, Social Studies teaching practices did not typically rank as qualitatively better or worse.
- (3) However, the uses of teaching practices differed based on whether or not respondents had majored in Social Studies.
- (4) Social Studies majors were more likely proactively to develop their own teaching materials and emphasize the development of a wide range of scholastic abilities in their lessons. Alternatively, respondents who had not majored in Social Studies tended to be more dependent on off-the-shelf materials and teacher’s manuals. In contrast, non-Social Studies majors tended to emphasize acquiring factual knowledge and basic skills in their lesson planning.

The following problems were also identified:

- (1) Regardless of their major, teachers struggle both to develop customized local teaching materials, and to create meaningful learning experiences outside the classroom. A lack of sufficient time for these activities is a significant problem.

(2) The study also indicated that teachers who did not major in Social Studies felt they lacked the geographical capacity to develop their own teaching materials in the subject.

These findings are practical issues that include some which have been identified in previous research in metropolitan areas, where there are a larger number of young/non-expert teachers. In contrast, our survey was conducted in a non-metropolitan area where many of the teachers are veteran teachers. The problems pointed out in the findings noted above are not issues which are solved naturally by teachers gaining experience. It is clear that a vision is required to tackle these issues through initial and in-service teacher training. To address these issues in Social Studies, and particularly in geography education, improvements need to be made to initial teacher training and in ongoing in-service programs.

Issues in Ongoing Teacher Education

Underlying Issues with Primary Teacher Education

As mentioned above, primary teacher's licenses are typically awarded at the primary teacher training colleges of educational universities. The credits required to obtain this license are divided into two categories: credits related to subject pedagogy, and credits related to subject content. Credits related to pedagogy in all nine elementary school subjects, including pedagogy of Social Studies, are required to qualify for a primary teacher's license. However, these credits are two units per one subject pedagogy; this is equivalent to fifteen lecture hours. In Social Studies pedagogy, the 15 hours are divided between the geography, history and civic strands, so that one Social Studies field has no more than 5 hours at the most. Essentially, the lecturers in Social Studies pedagogy are Social Studies specialist educators and researchers. Among those educators and researchers, those that specialize in geography education are few; the large majority are history or civics majors. This does not mean that there are no lectures that do not contain a geographical pedagogy, but this can be the case.

Further, according only to the principles of the teacher's license act rules, it is possible to qualify for a teacher's license without having to obtain credits based on content mastery of any of these nine subjects. In many cases, in reality, it is common for trainee teachers to gain two credits about named 'Contents of Social Studies'. However, since these are also divided into three strands – of geographical, historical and civic content – the content is not so much. Additionally, as in the case of the pedagogy lectures, the proportion of geographers in Social Studies department staff is very few.

This means that the number of trainee teachers selecting the Social Studies courses have an insufficient background in its content. In the case of geography education, this content shortage creates a very serious current issue for meeting National Curriculum Standard. This issue is compounded by an overall lack of geography education at senior high school level (Ida & Takizawa, 2015). Currently, geography is not a compulsory subject in the high school curriculum, and only half of university students have studied geography at senior high school. In primary school teacher training college admissions, the percentage of students who studied geography in senior high school is less than 30%. Compared to History as a compulsory subject, this selectivity rate of Geography is extremely low. As a result, many primary teachers have not adequately mastered

geographical knowledge and skills at senior high school level. This lack of subject matter expertise at the senior high school and university levels significantly contributes to the issues identified in this study.

In-Service Training and Geography

There are various teacher in-service training systems in Japan. Among them, a continuing professional development program (CPD) at the graduate school level is the primary method of advanced teacher education. In the case of the Japanese national university system, three educational universities, including Joetsu University of Education where this research was conducted, were established in the late 1970s as new initiative universities to support in-service teacher training at master's degree level. To obtain a master's degree in education, teachers are sent by the board of education to graduate schools where they study educational theory and practice. Upon returning to their schools, graduates then work to apply practically the results of their master's level research. Since many universities and teacher training colleges have established graduate schools, the number of elementary school teachers who hold a master's degree is currently increasing. Practical research activities conducted by graduates are increasing in popularity.

For example, the Association for Social Studies at Joetsu University of Education held a symposium, during their 2013 academic conference, to discuss relevant topics studied in graduate school. In the symposium, participants were asked what was most useful for their subsequent Social Studies education practice from their masters programs. The most common opinion among teachers was that the experience of developing teaching activities outside the classroom and the improvement of their geographical capacity to develop their own customized local teaching materials had been extremely useful. This is similar to the survey findings noted above. These opinions indicated that there is a significant need to improve initial teacher education and ongoing education with especially reference to geographical matters in Social Studies.

To resolve these issues, universities and academic societies which value geography education have begun to develop and promote aggressively a variety of teacher training programs (Ida & Shimura, 2015, Izumi & Iwamoto, 2015).

Future challenges

This paper has discussed the practical situation and teachers' levels of Social Studies expertise, especially related to geography education in the Joetsu district in Japan. The resulting findings and issues are not only similar to the results in a Japanese metropolitan area such as Tokyo, but some are also common to debates in the United Kingdom (Catling et al. 2007).

However, the new findings from this research survey have found, first, that expertise of local material/curriculum development is especially insufficient among teachers expertise in Social Studies, and second, that the lack of such expertise is found even in veteran teachers and is not limited to less experienced teachers.

These problems are significant for the current goals of Social Studies education in Japan. One of the ultimate goals of Social Studies is social participation capacity building. In the case of primary education, this is promoted mainly through participation

at the local community scale. Geographical teaching and learning dealing with local matters is essential and effective to meet this goal (Takeuchi 2015).

If considered from these perspectives, the concern about the expertise of elementary school teachers revealed in this paper is their low ability to develop their own comprehensive local teaching materials. This is a serious issue. Especially, a lack of geographical ability is a critical matter, because it encourages and enables local materials/curriculum development. Therefore, there is a need to establish and enrich curriculum theory in the institutions for initial teacher training and which provide CPD to create such skills and capability in primary teachers. For CPD, the development is being promoted, as noted above. In the future, enhanced education on subject content in teacher training courses in colleges and in the curriculum in senior high schools is the focus that is required.

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