Theory and Research for Developing Learning Systems, 2: 49-65, 2016 Research Initiative for Developing Learning Systems (RIDLS)

# Development of a Professional Development Program to Promote the Reconfiguration and Exploration of Life Environment Studies as a View of the Subject: Analysis and Discussion of the "Essence" of Life Environment Studies

#### Takumi Watanabe

This paper proposes a training program for teachers in charge of life environment studies (LES), including a discussion of the relevant particulars.

The development policy for the training program is as follows. The objective of training, in addition to fostering an understanding of the existence of alternative opinions and practices and encouraging reflection on the part of teachers themselves, is to promote the reconfiguration and exploration of how LES is viewed as a curricular subject. For this purpose, the substance of the training program has been set bearing in mind the following three points. The first deals with the opinions and practices of the teachers themselves as well as the plans and other materials developed by them. The second deals with research findings (e.g., academic articles) in the field of LES pedagogy. The third deals with excellent unit case studies and practice-oriented videos. Moreover, I will prepare multiple unit case studies with different unit configurations based on the common LES philosophy of "cultivating the foundations of self-reliance." Training will be conducted with a focus on analysis and discussion of materials including the unit case studies and lesson videos.

Based on the above, I have developed an actual professional development (PD) program for LES. The program is ultimately a model, and its time allocation and contents will require changes depending on the needs and schedules of the participants. To enhance possibilities for critiquing the training program, it has been prepared in the format of a syllabus for use in the developmental study of social studies teaching.

The progression of the training is as follows. In the Introduction, after imparting the training objectives, participants study "Why Teach LES?" and "Relationships and Differences between LES and Related Subject Areas (Early Childhood Education, Integrated Learning, Science, and Social Studies)." In Stage 1, participants will gain an understanding of the existence of other options in the curriculum through the following process: cases study analyses of curriculums (year, unit, and lesson planning for LES), followed by plan development and by presentation and discussion. In Stage 2, participants will gain an understanding of the existence of other options in teaching through the following process: analysis of lesson videos, followed by teaching implementation (mock lessons) and by the presentation and discussion of recorded teaching implementations. The Wrap-Up will summarize the overall training program. In addition, participants will also be asked to conduct an evaluation of the training program itself.

This program, through a series of training exercises, is intended to facilitate the analysis and discussion of the essence of LES. We believe that this sort of curricular and pedagogical training is also required in the field of LES education.

Key Words: Life Environment Studies, Views of the Subject, Units, Professional Development, Curriculum and Instruction

#### I. Introduction

This article proposes a training program for teachers in charge of life environment studies (LES), including a discussion of the relevant particulars.

As a subject, LES contains a wide range of learning content related to society (people), nature, and the self. By linking these together in an organic way, LES aims to inculcate children with "the foundations of self-reliance." In terms of the character of learning pertaining to the life environment that surrounds the child, teachers tasked with LES are required to independently develop their own teaching materials and lessons to a higher degree than in other subjects. Accordingly, Nakano points out that "LES practice involves the motivation and competence of teachers and schools to an immense degree, and it truly is a subject that tests the expertise of the teaching profession" (Nakano, 1992, p.3). It could be said that the success or failure of LES depends on the curricular leadership abilities of individual teachers.

Research has been conducted in relation to professional development (PD) in the context of LES.

One example is a study conducted by Nagata (2007). By analyzing the character of two lessons and lesson study groups related to them, Nagata indirectly points the way to one possibility for PD. Arguing that "the 'teaching power' needed for LES, much more than that for 'absolute' components, entails 'relative' components in which variation and change are required depending on the unit, the subject, and the circumstances of the target children' (Nagata, 2007, p.12), Nagata points to the importance of pacing learning from the facts of each lesson. As they explore the "essence of LES" (Nagata, 2007, p.19), each teacher or teaching team can be said to be enhancing their curricular leadership abilities. Toda (1995-96) also shows a similar orientation toward enhancing lesson analysis.<sup>1</sup>

In addition, Koda & Sato (2007) have developed and implemented an approach to "Evaluation and Training Utilizing a Group Moderation Method." This approach seeks to enhance individual teachers' capacity for evaluation and leadership through the scoring and

discussion of evaluation materials (i.e., pictures and text on observation cards by children).

Furthermore, Omachi & Nakano (2010), having developed a PD program that aims "to improve LES teaching," have attempted an implementation that aspires to continuous improvement. The contents of the training are intended "to improve the distinctiveness of the subject, key points for the preparation of yearly teaching plans, basic ideas behind LES unit configuration, ideas for teaching and lesson planning, methods of evaluation in LES, and the quality of awareness" (Omachi & Nakano, 2010, p.2). The program may be said to be one that comprehensively covers the curricular leadership required for teachers tasked with LES instruction. The program intends to enhance curricular leadership on the basis of the essence of the subject as it has been prescribed in the curriculum guidelines. This was developed through a study by the Aichi Branch of the Japan Life Environment Studies and Integrated Learning Education Society and could be said to be a prime example of a PD program by professional LES practitioners and researchers.

The above pioneering developmental studies may be noted as corresponding to the needs of schools. However, from what I have found, we have not yet seen a training program that seeks to rethink the *essence* of LES by asking fundamental questions such as "Why teach LES?" and "What is LES in the first place?" Ultimately, we only have a part of such a program, as represented by the indirect proposal of Nagata and Toda mentioned above.

As is widely known, LES was first instituted as a curricular subject in 1989. As a result, the lack of both practical experience (as practitioners) and educational experience (as learners) proved to be challenging for teachers (Toda, 1995, No.49, pp.78-79). Training was undertaken as a means of overcoming these challenges. Nowadays, however, the number of teachers who went through LES themselves as schoolchildren is increasing. Even though the length of the course of lessons for LES is short compared with that for other subjects (Year 1 and Year 2 of elementary school), we can consider that some

view of LES as a subject has been formed as part of teachers' own learning experience. In daily practice and inschool training with colleagues, opportunities to rethink such views are limited. However, it may be that it is precisely by enhancing the subjective awareness of these views that teachers will be able to better realize the independent development their own teaching materials and lessons.

In this paper, I develop a training program that seeks to promote the reconfiguration and exploration of such views of LES as a subject.

# II. Training Program Development Policy1. Setting Training Objectives

Typical examples of PD programs incorporating questions relating to the essence of their respective subjects (e.g., "Why teach X?" and "What is X in the first place?") can be found in American-style social studies.

Elsewhere, I have already elucidated the structural principles of such training programs through an examination of PD in the context of American social studies (Watanabe, 2016). In this paper, by applying these results, I develop a PD program that seeks to promote the reconfiguration and exploration of how LES is viewed as a subject. In doing so, I make particular reference to research findings about "Powerful and Authentic Social Studies: A Professional Development Program for Teachers" (hereinafter, PASS) supplied by the National Council for the Social Studies (Watanabe, 2015).

Of course, LES and social studies are separate subjects. However, given that they both share the goal of forming social awareness (i.e., an intellectual awareness of society), in terms of the configuration of a training program, we should be able to obtain some pointers.

## 2. Development of Teaching Materials and Training Contents

Promoting the reconfiguration and exploration of how teachers view LES requires that individual teachers be encouraged to perceive the essence of LES while reflecting on their own personal experience of the subject. It is from this perspective that the contents of the training program will be set.

The first deals with the opinions and practices of the teachers themselves as well as the plans and other materials developed by them. These aspects can also be found in PASS.

The second deals with research findings in the field of LES pedagogy. Specifically, it uses excerpts from academic papers and books as teaching materials. However, these are not intended to point to correct answers but are treated as one among many possible expert opinions. Teachers are also ensured the opportunity to critique each paper based on their respective practical experiences and circumstances in the field.

Number 3 deals with excellent unit case studies and practice-oriented videos.

Conceivably, multiple unit case studies could be prepared with different unit configurations on the basis of the common LES philosophy of "cultivating the foundations of self-reliance." This is a concept also evident in PASS. In the case of social studies classes, there are lesson types that have been approved by an official association.<sup>3</sup> This is why it is possible to select typical case studies by relying on existing lesson types. However, in the case of LES lessons, the three types presented by Kuwabara (2002) —namely, Environmental Acclimation, Environmental Adaptation, and Environmental Mastery—remain the only case studies that can be attempted.

While based on Kuwabara's typology, in this training program, I set new lesson types and draw teaching materials from typical case studies that correspond to each type. These types are not presented to those participating in the training but are merely intended as a basis for the selection of teaching materials. A detailed investigation of the typology itself will be conducted in future studies.

I used the following procedure to create the typology. I gathered examples of practice concerning the "Town Exploration" unit in Year 2 and grouped these together inductively to four types based on their similarities in terms

of content and methodology. I avoided ranking the types, intentionally situating them as relative to each other. Herein, for convenience, I describe these types as Discovery-, Adaptation-, Research-, and Proposal-based.

The Discovery-based type aims to heighten attachment to sociality, community, and nature through the re-discovery of the life environment. The typical case study used here is Kotsuji Michiko's "Suteki da na watashi ga sumu machi [So Pretty! The Town Where I Live]," included in Kage & Shimizu (2009). This can be checked in texts published as commentary on the Curriculum Guidelines or texts by the History Educationalist Conference of Japan.<sup>4</sup>

The Adaptation-based type aims to deepen the understanding and skills required in the context of the life environment and to heighten public engagement. The typical case study used here is Miyata Shuji's "Watashi no machi [My Town]," collected in Nakano (1990).

The Research-based type aims to rethink the life environment in objective terms. The typical case study used here is Yoshihara Kentaro's "Machi tanken ni iko! [Let's Explore Our Town!]," included in Asakura (2002).

The Proposal-based type aims to propose improvements to the life environment. The typical case study used here is the essay "Randomaku wo mitsukeyo [Let's Find Some Landmarks!]" in Seki (2011).

Note that in my own survey, unit case studies based on the Discovery-based type were the most frequent, followed by those for the Research-based type. In this training program, each type will involve the use of a typical case study.

With regard to practice cases (lesson videos), I used excellent lessons that deal with the same scenes in the same unit. In this training program, I used the example of the Toy-making unit in Year 2. Units on Town Exploration and Cultivation/Husbandry are often taught in lessons that take place outside classrooms and schools, making it difficult to apprehend the aspect of teachers' guidance (support). In contrast, instructions for this unit are frequently given in the classroom, making it easy to apprehend the aspect of

teachers' guidance. In this training program, I use "scenarios of working to improve created toys" as teaching materials. As examples, I take up instances of lesson practice conducted by Ishii Nobutaka<sup>5</sup> and Fujiwara Ayako<sup>6</sup> In these, the instruction scenarios of "providing opportunities for reflection and representation," "devising sites of interaction and mutual communication," "providing repeated activities for trial and error," and "making full use of children's diversity" (MEXT, 2008, pp.64-66) are all incorporated into a 1 h session, arguably making them ideal as training materials. Both practitioners specialize in LES, and their lessons are examples of the deployment of high-quality instruction.

#### 3. Methodological Principles for Training

This training program, with reference to the aforementioned PASS program, relies on the analysis of unit case studies and lesson videos as its main methodological principle (I should note that the unit case studies and lesson videos in question include those introduced as part of the training program itself and those produced by the participants themselves). The process of case study analysis is as shown in Figure 1.

In PASS, as shown to the left of Figure 1, the essence of social studies and teaching standards (rubrics) that commensurate with such a basis are set in advance, and the analysis and scoring of case studies for each of curriculum (i.e., year-, unit-, and lesson-based planning for the subject)," Evaluation, and Instruction proceed according to that standard. The process has an a priori quality. However, such an a priori analysis and the act of scoring another's instruction are perceived negatively in the context of LES education in Japan and are difficult to carry out in practice. Even if faithful in theory, the development of a program that would be impossible to implement in the context of Japanese teachers' culture and the Japanese educational system (especially the Curriculum Guidelines) goes against the spirit of this paper.

Therefore, in this LES PD program, I have performed modifications as on the right side of Figure 1.

After discussion of the essence of LES, each teacher analyzes and discusses the various case studies and lesson videos in relation to curriculum (i.e., curriculum-, unit-, and lesson-based planning for LES) and Instruction, respectively, while making reference to this essence. In other words, rather than scoring cases studies based on a priori standards (a prescribed analytical perspective towards teaching practice), the objective is to build a new perspective for observing classes as a basis for engaging in the discussion and analysis of case studies.

In addition, case study analyses relating to Evaluation have been left out. While evaluation (of children's understanding) is given more emphasis in LES than in social studies, it is not something that can be achieved without an understanding of children's appearance and context. Accordingly, I would like to leave this aspect to in-school training. In this training program, by focusing on curriculum and instruction, I distinguish their roles in contrast to in-school training

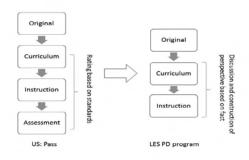


Figure 1: Methodological Principles for Professional Development in Life Environment Studies

#### **III.** Development of the Training Program

This section explains the LES PD program developed here in specific terms. Its intended audience encompasses professionals with 10 years or less of experience, including novice teachers. In terms of the total number of hours, it assumed 15 h. The program is ultimately a model, and its time allocation and contents

will require changes depending on the needs and schedules of the participants. The selective implementation of a portion of the program is also possible. It can also be used in teacher training programs at universities.

The training objective, in addition to fostering an understanding of the existence of alternative opinions and practices and encouraging reflection on the part of teachers themselves, is to promote the reconfiguration and exploration of how LES is viewed as a curricular subject.

The overall plan of the training is as shown on Table 1 on the next page. For more detail, please consult Table 2 (Training Plan). In this paper, to enhance possibilities for critique of the training program, it has been prepared in the format of a syllabus<sup>7</sup> for use in the developmental study of social studies teaching. Table 1 shows the Stage from left to right: Themes (Facilitator's Main Questions and Instructions) and Thoughts to Elicit from Participants. On this basis, I will now explain the Training Plan (Table 2).

To begin with, the Introduction is the stage at which participants are familiarized with the objectives of the training program. At the beginning, through the sharing of teachers practical experiences, the interest of the participants is purposefully guided in the direction of the essence of LES. "Why do you think we teach life environment (studies)?" and "Couldn't helping out, husbandry, cultivation, and local community matters be learned at home as well?" Teachers have a variety of interests and concerns. In-school training, with its collegial focus, should involve the pursuit of various learning objectives based on the interests of each school. However, in this training program, the objective is to make participants aware of the essence of LES and to promote the reconfiguration and exploration of how LES is viewed as a curricular subject. By disclosing the orientation of the training program to its participants, I hope to negotiate any discrepancies between the way the problem is conceived by teachers and facilitators so as to enhance the effectiveness of training. This aspect is also evident in PASS. In the deployment of the program, participants will be prompted to examine "Why Teach LES?" and the

"Relationships and Differences between LES and Related Subject Areas (Early Childhood Education, Integrated Learning, Science, and Social Studies)."

Table 1: Overall Plan of the LES PD Program

Stage	Themes (Facilitator's Main Questions and Instructions)	Thoughts to Elicit
Introduction (1 h)	Orientation—Training Objectives (1 h)  "Why do you think we teach life environment (studies) in school?"  "Couldn't helping out, husbandry, cultivation, and local community matters be learned in the home as well?"  Why must we teach LES?	Rethinking the essence of LES
Stage 1: Curriculum (7 h)	Year-based Planning Case Study Analysis (1 h)  Why do such differences occur in year-based planning for LES, even though we are all planning for the same subject?	A bird's eye view of year-based planning (educational curriculum)
	Unit Case Study Analysis (2 h)  Why do such differences occur in unit-based planning for Year 2 Town Exploration, even though we are all planning for the same unit?	Discover unit (lesson)     configuration patterns
	Unit Planning Development (2 h)  O Let us create unit/lesson plans for the Year 2 Town Exploration unit (or improve lesson plans created in the past, depending on time).	Employ and modify unit (lesson) configuration patterns
	Unit Planning Presentation and Discussion (2 h)  Why did he (she) create the unit/lesson plan in that particular way?	Examine possibilities for alternative or improved unit (lesson) configurations
Stage 2: Instruction (6 h)	Instruction Case Study Analysis (2 h)  Let us try to discover instructional techniques from lesson videos of the Year 2 Toymaking unit. (Videos used will be two excellent examples of teaching practice, both by veteran teachers specializing in the study of LES.)	Discover instructional techniques
	Teaching Implementation (2 h)  ○ Making use of instructional techniques and principles, let us select a 1-h-long segment from the Year 2 Town Exploration Unit prepared earlier and stage a mock lesson or exercise (recorded). (If compatible with year-based planning at the home school, it would be fine to place it into actual practice.)	Employ and modify instructional techniques
	Presentation and Discussion of Recorded Teaching Implementations (2 h)  • Why did he (she) teach the lesson plan in that particular way?	Examine possibilities for alternative or improved instruction
Wrap-Up (1 h)	Training Evaluation (1 h)  Let us prepare to convey the outcomes of this training program to colleagues at our home institutions. What kinds of outcomes seem to be worth conveying?	Learning evaluation, critical examination of the training program

**Table 2: Stages of the Training Plan** 

ges of the fra	inning i ian	
Teaching and Activities	Teaching materials	Learning Content
	•	
T: Question P: Present		Confirm attributes of participants.
T: Question		Reflect on your own practice.
		E list of the TEG
P: Discuss		Explicitly state your own thoughts on LES.
T: Question	(1)	• Think about the philosophy of LES.
P: Interact	(2)	Depending on the situation, also refer to the
		Curriculum Guidelines and expert opinions.  Re-familiarize yourself with the standpoint of learning from the "life environment."
T: Question		While reflecting on your own practice, think
P: Interact		about the relationship between LES and other
P: Present		related subjects.
T: Question		Become familiar with expert opinions (article)
P: Read		excerpts, etc.). Scrutinize your own
materials		experience of practice.
P: Interact		
I		
or Connections and	Developments w	ith Integrated Learning* (4)
at Studies and the Sc	tiences" (5)	
	I (5)	
t Studies and Social		
t Studies and Social T: Query		Direct interest to the essence of LES and to how
		Direct interest to the essence of LES and to how LES is viewed as a curricular subject.
T: Query		
T: Query T: Query	Studies" (6)	LES is viewed as a curricular subject.
T: Query		LES is viewed as a curricular subject.  • Understand the overall educational
T: Query T: Query T: Question	Studies" (6)	LES is viewed as a curricular subject.      Understand the overall educational curriculum and the outline and intentions of
T: Query T: Query T: Question	Studies" (6)	Understand the overall educational curriculum and the outline and intentions of the two-year LES curriculum in participants'
T: Query T: Query T: Question	Studies" (6)	LES is viewed as a curricular subject.      Understand the overall educational curriculum and the outline and intentions of
T: Query T: Query T: Question	Studies" (6)	Understand the overall educational curriculum and the outline and intentions of the two-year LES curriculum in participants'
T: Query T: Query T: Question P: Present	Studies" (6)	Understand the overall educational curriculum and the outline and intentions of the two-year LES curriculum in participants' own schools.
T: Query T: Query T: Question P: Present T: Question	Studies" (6)	Understand the overall educational curriculum and the outline and intentions of the two-year LES curriculum in participants' own schools.  Notice differences with other schools. Notice
T: Query T: Query T: Question P: Present	Studies" (6)	Understand the overall educational curriculum and the outline and intentions of the two-year LES curriculum in participants' own schools.
T: Query T: Query T: Question P: Present T: Question	Studies" (6)	Understand the overall educational curriculum and the outline and intentions of the two-year LES curriculum in participants' own schools.  Notice differences with other schools. Notice understanding based on objective and content
	Teaching and Activities  T: Question P: Present T: Question P: Interact T: Question P: Discuss T: Question P: Interact T: Question P: Interact T: Question P: Interact P: Present T: Question P: Interact P: Present T: Question P: Read materials P: Interact	T: Question P: Present T: Question P: Interact T: Question P: Discuss T: Question P: Interact (2)  T: Question P: Interact T: Question P: Interact P: Present T: Question P: Interact P: Present T: Question P: Interact P: Present T: Question P: Read materials P: Interact en Early Childhood Education and Education or Connections and Developments were

#### Takumi Watanabe

		each school and in accordance with school environments.
Part 2: Unit Case Study Analysis		
• Glance over these unit case studies A-D for the Year 2 unit on	T: Question	Be reminded that Unit Planning can be done
"Town Exploration." Each is an excellent unit published in	P: Read	differently even for the same unit.
university-level textbooks, etc.	materials	

A: "So Pretty! The Town Where I Live" (8) Discovery-based (heighten sociality and attachment through the re-discovery of the life environment) Unit Objectives.

- Develop an interest in the town where you live as well as the nature, public resources, and other elements; be able to questions and learn about the community
  by encountering and interacting with local people.
- Be able to communicate what you discovered and noticed during your explorations using your own methods of expression.
- Learn the merits of the community and the joys of becoming involved with the people and places of your community, and develop a sense of attachment to vour town.

B: "My Town" (9) Adaptation-based (deepen the understanding and skills and public engagement required in the context of the life environment) Unit Objectives.

 Observe and investigate the buildings and people of the town and natural environment. Look carefully at the spaces where you live, develop an interest in people's appearances and local events, and learn to think about the proper way to use common facilities that everyone uses.

C: "Let's Explore Our Town!" (10) Research-based (rethink the life environment in objective terms) Unit Objectives.

- Develop an interest in the various aspects of your town and the people in it; become readily able to attempt to learn about them and also learn to be able to
  engage in an appropriate manner.
- Be able to think about what you should do to investigate something you have doubts about and then be able to communicate what you have found out about it to your peers in an easily comprehensible manner.
- Realize that there are a great many people and things in this town and that various discoveries can be made by deepening your involvement with them.

D: "Let's Find Some Landmarks!" (11) Proposal-based (propose improvements to the life environment) Unit Objectives.

- Be able to clarify differences and continuities by gathering all sorts of information about events and subjecting this to comparison and classification.
- . Be able to devise methods of writing and drawing charts to summarize collected information in an easy to visualize and easy to understand manner.
- Be able to see the symbolism in the events that occur around you.

Of Units A-D, which lesson do you think is the one you would	T: Question		Reflect on your own view of LES as a subject.
most want to teach yourself?	P: Interact		Reflect on your own view of LES as a subject.
Let us write a list of all of the kinds of continuities and	T: Question		Inductively identify continuities and
differences in Units A-D.	P: Interact		differences.
What are the respective strengths that Units A-D seek to	T: Question		Notice what sorts of things arise due to
1 0			· ·
cultivate in children?	P: Present		differences in the object-focus of LES (the
			approach and degree of encouraging
			understanding of the life environment). Also,
			direct the attention as well to the underlying
			context (i.e., the environment).
What kinds of contents and methodologies are set in Units A-D	T: Question	(12)	Notice that contents and methodologies
in order to help them achieve their objectives?	P: Present		differ according to objectives. On such
			occasions, inductively derive contents and
			methods from unit examples. Where this is
			difficult, participants may also refer to the 11
			perspectives and 15 subjects specifically set
			out for content configuration in the
			Curriculum Guidelines.

# Development of a Professional Development Program to Promote the Reconfiguration and Exploration of Life Environment Studies as a View of the Subject

[Deductive Analysis Using the Curriculum Guidelines] 11 specific perspectives: Safe and Healthy Living, Interacting with the Consumption, Information and Exchange, Interacting with Local Nati	•		
[Deductive Analysis Using the Curriculum Guidelines] 15 subjects: School Facilities, School Employees, Friends, School Re Property, Public Facilities, Local Events and Observances, Local Natur			
What sorts of learning (teaching) materials and learning activities are respectively set for Units A-D?      Why do such differences occur in unit-based planning for Year 2 Town Exploration, even though we are all planning for the same unit?      Part 3: Unit Planning Development	T: Question P: Interact T: Question P: Present		Notice that the quality of learning materials and learning activities differs according to objectives, contents, and methodology.     Understand the differences between the units in terms of goal theory.
If you were going to create a Town Exploration Unit, which pattern from among Units A-D would you choose?  Let us create unit/lesson plans for the Year 2 Town Exploration unit (or improve lesson plans created in the past, depending on time). Let us think about applying them in the case of our own schools.	T: Question P: Choose T: Instruct	(13)	Select one pattern.      Participants may make use of unit planning formats that use their own towns or communities. However, they must add the objectives, content, and methodology of the unit.
Let us create a unit plan and, within that, a lesson plan for an arbitrary part of the unit. First, decide the unit name and then try setting a unit objective. Next, we shall examine the contents and methodology.	T: Instruct P: Develop		Be conscious of examining the lesson from the perspective of the unit objectives.
By examining learning (teaching) materials and learning activities, let us develop the unit and lesson plans.	T: Instruct P: Develop		Where time allows, develop these in groups.  Or else develop them to bring to the next session.
Part 4: Unit Planning Presentation and Discussion  What kind of unit plan will you create and present?  Why did he (she) create the unit/lesson plan in that particular way?	T: Question T: Question P: Present		<ul> <li>Explain your own unit plan.</li> <li>Describe your own and another's unit plan from the perspectives of unit planning objectives, content, and methodology.</li> </ul>
<ul> <li>Let us try critiquing each other's presentations from the standpoint selected earlier (Units A-D). Let us point out things that we can learn beyond these standpoints.</li> <li>After the presentation and resulting discussion, let us improve the unit/lesson plan.</li> </ul>	T: Question P: Present T: Instruct P: Improve		Reflect on your own unit planning using that of others as a mirror. Or else, look for common ground.     Engage with the perspective of others to improve your own unit plan.
Why did you make those particular improvements?	T: Question P: Present		Consciously describe the reasoning behind your improvements to the unit plan.
Part 1: Instruction  Part 1: Instruction case study analysis  ○ Let us try to identify instructional techniques from lesson videos based on the Year 2 Toy-making unit. (Videos used will be two excellent examples of teaching practice, both by veteran teachers specializing in the study of LES).	T: Instruct		By analyzing specific lesson videos, discover and master instructional techniques.
Let us watch Lesson Video A from the Year 2 Toy-making unit and attempt to point out instructional techniques. Please record the specific scene and time where these occur.	T: Instruct P: Watch P: Record	(14)	Lesson Video A is an excellent example of teaching, and a variety of instructional techniques will be discovered by watching it. These will also contain elements prescribed in the Curriculum Guidelines.

#### Takumi Watanabe

[Video] "Scenes of working to improve created toys." (Ishii)			
What instructional techniques did you find? In which scenes?	T: Question P: Present		Indicate specific instructional scenes. In addition, think about why the teacher in the video used the instructional techniques that he did.
Let us think together about instructional techniques and principles. I would like for us to find at least six.	T: Question P: Present		Participants will build these up together. However, it is expected that the Curriculum Guideline themes of "providing opportunities for reflection and representation," "devising sites of interaction and mutual communication," "providing repeated activities for trial and error," and "making full use of children's diversity" will be included. These elements are included in Lesson Video A.
Let us watch Lesson Video B from the standpoint of instructional techniques and principles.	T: Instruct P: Present	(15)	Lesson Video B is also an excellent example of teaching. Through the video, we will gain an understanding of instructional techniques in specific instructional settings.
[Video] "Scenes of working to improve created toys." (Fujiwara)			
In which scenarios were these instructional techniques and principles apparent. Why did you think they were good?	T: Instruct P: Present		Discuss better ways of giving instruction.
Part 2: Teaching Implementation  Making use of instructional techniques and principles, let us select a 1-h-long segment from the Year 2 Town Exploration Unit prepared earlier and stage a mock lesson or exercise (recorded). (If compatible with year-based planning at the home school, it would be fine to put it into actual practice.)	T: Instruct		Implement a lesson based on the instructional techniques discovered in cooperation with the facilitator and other participants.
In addition to improving the lesson plan produced last time, let us try writing down specific key points related to instruction.	T: Instruct P: Improve		Based on instructional techniques and principles, carry out specific lesson preparations on your own (or in groups).
Let us try delivering a (record) mock lesson/exercise from the Year 2 Town Exploration unit.	T: Instruct P: Practice		Prepare a mock lesson for next time, and bring the video of the lesson to class for discussion. Moreover, summarize the lesson beforehand (about 1 A4 sheet of paper).
Part 3: Presentation and Discussion of Recorded Teaching			
Implementations     Let us present on the kind of teaching that was conducted.	T: Instruct P: Interact		Describe your own instruction video.
Why did he (she) teach the lesson plan in that particular way?	T: Question P: Present		Reflect on your own teaching using that of others as a mirror.
Focusing on instructional techniques and principles, let us critique each other's implementations (with a view to improving them)	T: Instruct P: Interact		Examine each other's teaching from the perspective of objectives and instructional techniques and principles.
In addition, let us discover new instructional techniques. Whose practices and which scenarios inspired your thoughts?	T: Instruct P: Present		Based on participants' implementations, work together to develop new instructional techniques.
Let us think about instructional principles and techniques.	T: Instruct P: Present		In addition to participants using these techniques in their own future teaching, it is expected that they will carry them back to their home institutions where they will share the outcomes of their training.

### Development of a Professional Development Program to Promote the Reconfiguration and Exploration of Life Environment Studies as a View of the Subject

Wrap-Up			
Training Evaluation			
• Let us prepare to convey the outcomes of this training program	T: Instruct	(16)	In addition to an overall review of the training
to colleagues at our home institutions. What kinds of outcomes	P: Note		program, participants will reflect on what
seem to be worth conveying?	impressions they have learned. In additi	they have learned. In addition, the preparation	
	and interact		of at Training Report will take place. This
	P: Interact		should be in the formats of individual
	P: Produce a		schools.
	Report		
• Please offer your views on how to improve the training program	T: Instruct		Evaluate the training program itself.
in future.	P: Describe		

(Note that T and P denote the Teacher educator [facilitator] and Participants, respectively)

#### [Teaching Materials Course List]

#### [Introduction]

- (1) MEXT (ed.) (2008) Shogakko gakushu shido yoryo kaisetsu seikatsu-hen [Commentaries on Elementary School Curriculum Guidelines: Life Environment Studies], Nihon Bunkyo Shuppan, pp.9-13. (in Japanese)
- (2) Nakano, S. (1990a) Seikatsu-ka shiinsetsu no igi to kadai [The Significance and Challenges for the Newly Established Subject of Life Environment Studies]. In National Association for the Study of Educational Methods (ed.) Chiiku tokuiku no koso to seikatsu-ka no shido [Concepts of Intellectual and Moral Education and Life Environment Studies Instruction] (pp.38-49), Meiji Tosho Shuppan. (in Japanese)
- (3) Kimura, Y. (2012) Seikatsu-ka no riron to jissen: 'Ikiru chikara' wo hagukumu kyoiku no arikata [Theory and Practice of Life Environment Studies: Possibilities for Education that Cultivates "Vital Strength"], Nihon Bunkyo Shuppan. pp.74-89. (in Japanese)
- (4) Hidai, T. (2000) Kyoka to shite no seikatsu-ka no minaoshi to togo e no setsuzoku hatten no kanosei [A Review of Life Environment Studies and Possibilities for Connections and Developments with Integrated Learning], Seikatsu-ka [Life Environment Studies], (7), pp.4-9. (in Japanese)
- (5) Noda, A. (2011) Seikatsu-ka to rika no setsuzoku to kubetsu wo kangaeru: Kizuki no shitsu wo takame, kagakutekina mikata/kangaekata no kiso wo yashinau [Continuities and Distinctions Between Life Environment Studies and the Sciences: Improving Quality of Awareness and Cultivating the Basis for Scientific Thought]. Science Education Monthly, (702), pp.5-8. (in Japanese)
- (6) Miyamoto, M. (1996) Seikatsu-ka to shakai-ka no setsuzoku hatten: Sono riron to jissai [Continuities and Developments in Life Environment Studies and Social Studies]. In M. Miyamoto (ed.), Seikatsu-ka to shakai-ka no setsuzoku hatten: Sono riron to jissai [Continuities and Developments in Life Environment Studies and Social Studies] Toyokan Shuppansha, pp.57-89. (in Japanese)

#### [Stage 1]

- (7) For example, the following can be used as teaching materials: Otemachi Elementary School in Joetsu (1991) Sa seikatsu-ka wo hajimemashou: Seikatsu-ka no gakushu no seiritsu to hyoka [All right! Let's Begin Life Environment Studies! Learning Formation and Assessment in Life Environment Studies], Nihon Kyoiku Shinbunsha Shuppan-kyoku.(in Japanese); Nakano, S. (ed.) (1991) Seikatsu-ka no sokatsu [Life Environment Studies Compendium], Dohosha Shuppan. (in Japanese)
- (8) Kotsuji, M. (2009) Suteki da na watashi ga sumu machi [So Pretty! The Town Where I Live]. In M. Kage & K. Shimizu, (eds.) Heisei 20-nenban shogakko shin gakushu shido yoryo pointo to jugyo-zukuri: Seikatsu [Key Points and Lesson Planning for the 2008 Elementary School Curriculum: Life Environment Studies] (pp.132-139), Toyokan Shuppansha. (in Japanese)
- (9) Miyata, S. (1990) Watashi no machi [My Town]. In S. Nakano (ed.), 2-Nen seikatsu-ka jugyo-zukuri no hinto [Lesson Planning Hints for Life Environment Studies Year 2] (pp.50-59), Meiji Tosho Shuppan. (in Japanese)
- (10) Yoshihara, K. (2002) Machi tanken ni iko! [Let's Explore Our Town!]. In A. Asakura (ed.), Seikatsu-ka kyoikugaku [Life Environment Studies Pedagogy] (pp.84-89), Kyodo Shuppan. (in Japanese)
- (11) Seki, H. (2011) Randomaku wo mitsukeyo [Let's Find Some Landmarks!]. In H. Seki (ed.), Seikatsu-ka jugyo dezain no riron to hoho [Life Environment Studies Lesson Design: Theory and Methods] (pp.143-172), Fukuro Shuppan. (in Japanese)

#### [Stage 2]

- (12) MEXT (ed.) (2008) Shogakko gakushu shido yoryo kaisetsu seikatsu-hen [Commentaries on Elementary School Curriculum Guidelines: Life Environment Studies], Nihon Bunkyo Shuppan, pp.19-21. (in Japanese)
- (13) Hiroshima Board of Education (2015) Hiroshimaken kyoiku shiryo [Hiroshima Prefectural Educational Materials], Hiroshima Board of Education, p.115. (in Japanese)
- (14) Ishii, N. Ugoku omocha wo tsukutte issho ni asobo [Let's All Enjoy Building a Toy That Moves!]. Academic Year. 18th K-9 Consistent Education Study Group (Hiroshima University Mihara Elementary School). Filmed December 5, 2015.
- (15) Fujiwara, A. "Asobi daisuki atsumare!": Tsukutte asobo omocha rando [Playtime Roundup! Build and Play Toyland]. Academic Year. Mihara Municipal Minami Elementary School Education Study Group. Filmed November 27, 2015.

#### [Wrap-Up]

(16) Guskey, T. R. (1999) Evaluating professional development, Corwin Press.

With regard to the question of "Why Teach LES?," interviews with veteran teachers in participants' home institutions and neighboring schools will be set as a preparatory assignment. These will then be examined as a teaching tool. I would like to prompt participants' awareness

of the philosophy of LES as learning about the life environment. In addition, depending on circumstances, participants will also refer to the Curriculum Guidelines and articles by expert professionals. As an example of such an article, we may cite Nakano's (1990) chapter on "The

Significance and Challenges for the Newly Established Subject of Life Environment Studies."

With regard to "Relationships and Differences between LES and Related Subject Areas (Early Childhood Education, Integrated Learning, Science, and Social Studies)," after sharing their opinions on the topic amongst themselves, participants will read (excerpts from) articles by professional experts and examine these in light of their own experience. Specifically, participants will read Kimura's chapter (in Kimura 2012) on "Life Environment Studies and the Difference between Early Childhood Education and Elementary School Education" with regard to early childhood education and Hidai's (2000) article on "A Review of Life Environment Studies and Possibilities for Connections and Developments with Integrated Learning" with regard to Integrated Learning. They will read Noda's (2011) "Continuities and Distinctions Between Life Environment Studies and the Sciences" with regard to science and Miyamoto's (1996) "Continuities and Developments in Life Environment Studies and Social Studies" with regard to social studies.

Next, in Stage 1, through a process of analyzing curriculum case studies (year-, unit-, and lesson-based planning for LES) and then developing, presenting, and discussing their own plans, participants will come to perceive the existence of alternative options for curriculum development.

In Part 1, participants will conduct Year Planning Case Study Analyses. Participants will bring yearly plans for LES at their home institutions and seek to perceive their similarities and differences. They will come to perceive how the organization of contents varies in accordance with the objectives each school considers for LES as well the particular environments of each school. For younger teachers, this could offer the chance to understand the overall educational curriculum as well as the outline and intentions of the two-year LES curriculum in their own schools. Note that where there are many participants from schools in the same area, it is possible that this stage would end up focusing on broadly similar cases of year-based

planning. Thus, distinctive case studies will also be provided, such as that of Otemachi Elementary School in Joetsu, Niigata Prefecture (1991)<sup>8</sup>

In Part 2, participants will undertake Unit Case Study Analyses. The training program discusses case studies (A-D) related to the Town Exploration Unit in Year 2. These, as mentioned earlier, offer varying examples of unit planning that differ in objective, content, and methodology. The focus here is on the possible reasons for such differences despite the fact that all the case studies relate to the same Year 2 Town Exploration unit. After having planned and described the excellent units and courses published in sources such as university-level textbooks, participants will be asked to select a unit that they would intuitively like to attempt themselves. In addition, participants will be assigned the task of inductively analyzing continuities and differences in the respective objectives, content, methodologies, teaching tools (learning materials), and learning activities for the unit case studies A-D. Noted that with respect to content analysis, the 11 perspectives (Interacting with the Local Community, Community Spirit, Civic Awareness and Manners, Production and Consumption, etc.) and 15 subjects (the Household, People Living and Working in the Community. Public Property, etc.) specifically set out in the Curriculum Guidelines content configuration could also be used as points of view (MEXT, 2008, pp.19-23).

In Part 3, participants will undertake Unit Planning Development. With reference to unit case studies A-D, participants will be assigned to produce unit plans for the Year 2 Town Exploration Unit and lesson plans for an arbitrary portion of the unit using their own home institutions as examples. Where time is an issue, a possible alternative would be for students to make improvements to past teaching plans.

In Part 4, participants will undertake Unit Planning Development and Discussion. Participants will present the Unit Plans they produced, which will then be turned over for discussion. Questions will focus on why individual participants created unit and lesson plans in the way they did. Based on these discussions, each participant will be expected to improve their unit plan.

Then, in Stage 2, participants will gain an understanding of the existence of other options in teaching through the following process: analysis of lesson videos, followed by teaching implementation (mock lessons) and by the presentation and discussion of recorded teaching implementations.

In Part 1, participants will undertake Instruction Case Study Analyses. Participants will watch two lesson videos related to the Year 2 Toy-making Unit aiming to discover new instructional techniques. The videos that will be used will be excellent teaching scenarios performed by experienced teachers who specialize in the study of LES. With the first viewing, participants and facilitators will work together to identify instructional techniques and principles (aiming for six at the least). With the second viewing, participants will analyze the teaching scenario by applying the instructional techniques and principles identified in the first viewing. Through this process, they will discuss possibilities for even better teaching practice.

Part 2 will involve "Instruction Implementation." Using instructional techniques and principles, participants will select a 1-h-long segment from the Year 2 Town Exploration unit produced in Stage 1 to stage a mock lesson, which will be recorded as a video. In addition, where this is compatible with year-based planning at participants' home institutions, it could conceivably also be put into actual practice.

In Part 3, participants will undertake the Presentation and Discussion of (Recorded) Practice Teaching Scenario. Participants will be asked to present their recorded teaching scenario for discussion. Based on this, participants will collaboratively discover new instructional techniques. In addition to participants making use of these techniques in their own future teaching, it is expected that they will carry them back to their home institutions where they will share the outcomes of their training.

Finally, the Wrap-up will summarize the training program. In addition to an overall review, participants will reflect on what they have learned. Moreover, participants

will be asked to provide an evaluation of the training program itself. Following the training evaluation perspective advanced by Guskey (1999), a survey related to the perceived usefulness of the contents of the training program for the participants will be performed.

In the training program described above, training is conducted by distinguishing curriculum from instruction. In the context of LES education, there is a growing interest in the importance of children's understanding (evaluation) as the basis for the development of teaching tools (and learning materials). And while these are of course important, in this training program, my intention has been to deliberately shape the capacity to perceive LES teaching from the perspective of objectives, contents, and methodology. In addition, through repeated case study analysis, the program supports the reconfiguration and exploration of teachers' views of LES. Note that it would be possible to focus solely on the Introduction (the essence of LES) and Stage 1 (Curriculum). Alternatively, one could also implement only Stage 2 (Instruction). I have attempted to create a mutable and flexible training program that can meet practitioners' needs and schedules.

#### IV. Conclusion: The Significance of this Program

This paper, having presented the basic principles of an LES-related PD program, has undertaken the development of a practical training plan. Herein, I have proposed a training model to support the reconfiguration and exploration of teachers' views of LES as a curricular subject.

LES entails the need to understand the life environment of the child and, to a greater degree than in other subjects, to respect children's subjectivity. It is for this reason that LES maps and LES calendars have been produced and studies of the subject have been conducted in individual schools.

In these circumstances, what kind of training can researchers interested in curriculum and instruction provide to teachers in the field? This question shapes the basic orientation of this paper.

#### Takumi Watanabe

In recent years, amidst calls to enhance cross-subject cooperation and active learning, interest has been chiefly oriented toward cross-subject training. In tandem with this trend, as the other side of the coin, I would like to focus once more on the essential nature (the specificity) of individual disciplines. It is precisely through teachers' arriving at particular views of individual subjects that cross-subject cooperation is encouraged, and it may be that active learning is something that takes place in subject-specific ways. In other words, this points to the necessity of curricular and pedagogical training.

PD for LES has the potential to begin and end with providing teachers with experiences such as fieldwork and extracurricular observation. Certainly this kind of training will also require further enhancement. At the same time, there also seems to be a need for the kind of training that aims to promote the reconfiguration and exploration of teachers' views of LES as a curricular subject.

This training program is ultimately only a model. It is my hope that the model will be modified through implementation, either in whole or in part, in the sites where PD and teacher training take place.

#### Notes

- Toda emphasizes the importance of performing lesson analysis (often seen in social studies education) with reference to the principles and claims of curriculum guidelines and private educational organizations. This can also be taken as a recommendation for training.
- Note that Kodama (2015) reports an initiative to promote the examination of the meaning of LES by comparison with lower-year social studies lessons in the past. This is being conducted as a part of the "Elementary LES" program at the Hyogo University of Teacher Education.
- As an example, there are the materials used in social studies pedagogy. See Shakai Ninshiki Kyoiku Gakkai [Japanese Association for Social Studies Education] (2014).
- 4. For example, Kimura (2008) and Rekishi Kyoikusha

- Kyogikai (1993) may be cited as representative texts.
- Ishii Nobutaka. Ugoku omocha wo tsukutte issho ni asobo [Let's All Enjoy Building a Toy That Moves!].
   2015 Academic Year. 18th K-9 Consistent Education Study Group (Hiroshima University Mihara Elementary School). Filmed December 5, 2015.
- Fujiwara Ayako. "Asobi daisuki atsumare!": Tsukutte asobo omocha rando [Playtime Roundup! Build and Play Toyland]. 2015 Academic Year. Mihara Municipal Minami Elementary School Education Study Group. Filmed November 27, 2015.
- 7. For a more detailed discussion of syllabi, see Moriwake (1978).
- 8. Cases of year-based planning from multiple schools are also collected in the compilation supervised by Nakano (1991), which can also be used as training material.

#### References

Asakura, A. (ed.) (2002) Seikatsu-ka kyoikugaku [Life Environment Studies Pedagogy], Kyodo Shuppan. (in Japanese)

Asakura, A. (2008) Kodomo no kidzuki wo kakudai shinka saseru seikatsu-ka no jugyo genri [Principles of Teaching for Life Environment Studies to Expand and Deepen Children's Awareness], Kazama Shobo. (in Japanese)

Guskey, T. R. (1999) *Evaluating professional development*, Corwin Press.

Harada, N, Sumoto, Y., & Tomoda Y. (eds.) (2011) *Kidzuki* no shitsu wo takameru seikatsu-ka shido-ho [Instruction Methods in Life Environment Studies for Enhancing the Quality of Awareness], Toyokan Shuppansha. (in Japanese)

Hidai, T. (2000) Kyoka to shite no seikatsu-ka no minaoshi to togo e no setsuzoku hatten no kanosei [A Review of Life Environment Studies and Possibilities for Connections and Developments with Integrated Learning]. *Seikatsu-ka* [*Life Environment Studies*], (7), pp.4-9. (in Japanese)

Hiroshima Board of Education (2015) Hiroshimaken kyoiku

- shiryo [Hiroshima Prefectural Educational Materials], Hiroshima Board of Education. (in Japanese)
- Imatani, N. (ed.) (1994) Kodomo ga ikiru seikatsu-ka no jugyo sekkei [Lesson Design for Life Environment Studies for Children's Lives], Mineruva Shobo. (in Japanese)
- Kage, M. & Shimizu, K. (eds.) (2009) Heisei 20-nenban shogakko shin gakushu shido yoryo pointo to jugyo-dzukuri: Seikatsu [Key Points and Lesson Planning for the 2008 Elementary School Curriculum: Life Environment Studies], Toyokan Shuppansha. (in Japanese)
- Kimura, Y. (ed.) (2008) Shogakko shin gakushu shido yoryo no tenkai: Seikatsu-ka-hen [Deployment of the New Curriculum Guidelines for Elementary Schools: Life Environment Studies], Meiji Tosho Shuppan. (in Japanese)
- Kimura, Y. (2012) Seikatsu-ka no riron to jissen: 'Ikiru chikara' wo hagukumu kyoiku no arikata [Theory and Practice of Life Environment Studies: Possibilities for Education that Cultivates 'Vital Strength'], Nihon Bunkyo Shuppan. (in Japanese)
- Kobara, T. & Asakura, A. (eds.) (2010) Seikatsu-ka kyoiku: 21 Seiki no tame no kyoiku sozo [Life Environment Studies Education: Creating Education for the 21st Century], Gakujutsu Tosho Shuppansha. (in Japanese)
- Koda, K. & Sato, S. (2007) Gurupu modereshon-ho ni yoru hyoka kenshu no jissen-tekina igi: Seikatsu-ka ni okeru ruburikku settei wo toshite [The Practical Significance of Evaluation and Training Utilizing a Group Moderation Method: Establishing Rubrics for Life Environment Studies]. Seikatsu & sogo [*The Japanese Journal of Education for Life Environment Studies and Integrated Learning*], (14), pp.86-93. (in Japanese)
- Kodama, Y. (2015) The student's consideration research on roll of Life Environment Studies: Comparison with practice of lower classes social studies. *Hyogo University of Teacher Education Journal*, 47, pp.35-47. (in Japanese)

- Kuwabara, T. (2002) A Basic Logic of the Studies for Living Environment and a Strategy of Teaching It in the New Curriculum: On the Basis of an Analysis of a Course of Study. *Bulletin of School of Education*, *Okayama University*, 121, pp.197-206. (in Japanese)
- MEXT(ed.) (2008) Shogakko gakushu shido yoryo kaisetsu seikatsu-hen [Commentaries on Elementary School Curriculum Guidelines: Life Environment Studies], Nihon Bunkyo Shuppan. (in Japanese)
- Miyamoto, M. (ed.) (1996) Seikatsu-ka to shakai-ka no setsuzoku hatten: Sono riron to jissai [Continuities and Developments in Life Environment Studies and Social Studies], Toyokan Shuppansha. (in Japanese)
- Monjugawa, M. (1996) Kyoshi no kenshu no arikata [Teacher Training Possibilities]. In S. Nakano, A. Tanikawa & T. Muto (eds), *Seikatsu-ka jiten* [*Life Environment Studies Dictionary*] (pp.394-395), Tokyo Shoseki. (in Japanese)
- Moriwake, T. (1978) Shakai-ka jugyo kosei no riron to hoho [Theory and Methods of Social Studies Lesson Structure], Meiji Tosho Shuppan. (in Japanese)
- Murakawa, M., Nakayama, Y. & Wada, N. (2009) Seikatsuka aratanaru suteji e: Heisei 20-nen kokuji shin gakushu shido yoryo kaisetsu [Toward a New Stage for Life Environment Studies: A Commentary on the New Curriculum Guidelines Announced in 2008], Nihon Bunkyo Shuppan. (in Japanese)
- Nagata, T. (2007) Seikatsu-ka ni okeru 'jugyo-ryoku' kojo e no dotei: Kyoka no honshitsu wo toi tsudzukeru jimichide kenjitsuna torikumi [The Path to Improving 'Teaching Power' in Life Environment Studies: Steady, Solid Initiatives for Continuing to Explore the Essence of the Subject]. Seikatsu & sogo [The Japanese Journal of Education for Life Environment Studies and Integrated Learning], (14), pp.12-19. (in Japanese)
- Nakano, S. (1990a) Seikatsu-ka shinsetsu no igi to kadai [The Significance and Challenges for the Newly Established Subject of Life Environment Studies]. In National Association for the Study of Educational

- methods (ed.), Chiiku tokuiku no koso to seikatsu-ka no shido [Concepts of Intellectual and Moral Education and Life Environment Studies Instruction] (pp.38-49), Meiji Tosho Shuppan. (in Japanese)
- Nakano, S. (ed.) (1990b) 2-Nen seikatsu-ka jugyo-zukuri no hinto [Lesson Planning Hints for Life Environment Studies Year 2], Meiji Tosho Shuppan. (in Japanese)
- Nakano, S. (ed.) (1991) *Seikatsu-ka no sokatsu* [*Life Environment Studies Compendium*], Dohosha Shuppan. (in Japanese)
- Nakano, S. (1992) Shintei: Seikatsu-ka kyoiku no riron to hoho [Theory and Methods of Life Environment Studies: Newly Revised Edition], Toyokan Shuppansha. (in Japanese)
- Noda, A. (2011) Seikatsu-ka to rika no setsuzoku to kubetsu wo kangaeru: Kizuki no shitsu wo takame, kagakutekina mikata/kangaekata no kiso wo yashinau [Continuities and Distinctions Between Life Environment Studies and the Sciences: Improving Quality of Awareness and Cultivating the Basis for Scientific Thought]. *Science Education Monthly*, (702), pp.5-8. (in Japanese)
- Omachi, S. & Nakano, S. (2010) A Training Program for Improving Lesson in Living Environment Studies. Bulletin of Comprehensive Center for Education Practice, (13), pp.1-7. (in Japanese)
- Otemachi Elementary School in Joetsu, Niigata Prefecture. (1991) Sa seikatsu-ka wo hajimemashou: Seikatsu-ka no gakushu no seiritsu to hyoka [All right! Let's Begin Life Environment Studies!: Learning Formation and Assessment in Life Environment Studies], Nihon Kyoiku Shinbunsha Shuppan-kyoku. (in Japanese)
- Rekishi Kyoikusha Kyogikai [History Educationalist Conference of Japan] (ed.) (1993) *Tanoshiku wakaru seikatsu-ka 2-nen no jugyo* [Enjoy Learning! Life Environment Studies Class (Year 2)], Ayumi Shuppan. (in Japanese)
- Seki, H. (2011) Seikatsu-ka jugyo dezain no riron to hoho [Life Environment Studies Lesson Design: Theory and Methods], Fukuro Shuppan. (in Japanese)

- Shakai Ninshiki Kyoiku Gakkai [Japanese Association for Social Studies Education] (ed.) (2014) *Shin shakaikakyoiku-gaku handobukku [New Social Studies Education Handbook*], Meiji Tosho Shuppan. (in Japanese)
- Shimano, M. & Terao, S. (eds.) (2003) Seikatsu-ka no jugyo hoho: Atarashi hyoka wo ikasu koso to tenkai [Teaching Methods for Life Environment Studies], Gyosei. (in Japanese)
- Tamura, M. (ed.) (2012) Irasuto de miru zen tangen zenjikan no jugyo no subete: Shogakko seikatsu 2-nen [The Complete Illustrated Guide to Lesson Planning for All Units and All Periods: Elementary School Life Environment Studies, Year 2], Toyokan Shuppansha. (in Japanese)
- Toda, Y. (1995-96) Rensai: Watashi ga seikatsu-ka jugyo bunseki ni kodawaru riyu [Column: Why I'm So Insistent about Analyzing Life Environment Studies Teaching]. Seikatsu-ka jugyo wo tanoshiku [Making Life Environment Studies Teaching Enjoyable], (49) (61), Meiji Tosho Shuppan. (in Japanese)
- Watanabe, T. (2015) The Structure and Characteristics of PASS by the National Council for the Social Studies: Professional Development Program Based on Learning Social Issues. *Journal of Education Research on Social Studies*, (83), pp.25-36. (in Japanese with English abstract)
- Watanabe, T. (2016) Amerika shakai-ka ni okeru kyoin kenshu no shisou to houhou [Research on Thought and Approach of Professional Development for Social Studies Teachers in America: Focused on Social Studies Teacher's Quality and Capability Development], Hiroshima University. (Doctor thesis) (in Japanese)

### Development of a Professional Development Program to Promote the Reconfiguration and Exploration of Life Environment Studies as a View of the Subject

#### Author

Watanabe Takumi is a Ph.D. candidate, Graduate School of Education at Hiroshima University, Higashi-Hiroshima, Japan.

This article translated into Japanese is published in the journal *Gakushu Shisutemu Kenkyu*, Vol.3.