The design of the learning environment

(1) The structure of the learning model

This paper presents a social studies learning model aiming at developing students’ competency about the methodology of inquiry. The learning model is formed by the relationship between learning materials such as collections of textbooks and documents, the methodology adopted, and the lesson evaluations. This paper aims to construct a learning model to enhance education by analysing these tripartite relations. In other words, I attempt to work toward the creation of a learning environment, in which a student can learn eagerly, with a focus on developing teaching materials with a focus on analysing the media of these materials.

In Japan, there has already been a lot of research on the development of learning materials for education in specific class subjects. Kusahara distributes social studies learning materials in three types\(^1\). The first is teaching materials intended to improve understanding of class content. This could, for example, be represented by a traditional textbook. The second is teaching materials focusing on analytical skills. In social studies, these materials demonstrate ways of interrogating social conditions and characteristics, speculating on alternatives, and closely examining the validity of ideas and information presented in teaching materials. This category would include, for example, higher-level textbooks outlining learning points and encouraging students to synthesise key information from their readings. The third category is “posture-moulding” teaching materials. An example of this type would be a textbook letting a child interprets a primary document by making the document presented as simple as possible. This might include texts consisting of a picture or a

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The structure of learning environments in elementary social studies education aimed at methodology of inquiry
—Educational practice for citizenship through analysis of media used—
primary document to supplement textbook teaching materials. For example, be constitution to be seen in the U.K. and U.S. social studies textbook mainly.

These learning materials prescribe how to lead classes and support children’s learning with their content and design. However, the real learning takes place as a result of a complex integration of content and design. Phyllis C. Blumenfeld discusses the importance of a learning environment design that promotes cognitive engagement. Cognitive engagement as a concept indicates the use of learning stratagems including intention, emotion, systematisation, meta-recognition, and effort. The learning environment design takes these stratagems into account to improve the learning outcomes for the student.

For example, Wittmann, a mathematics-education researcher, presents a learning environment design (seen in figure 1). He sets social environment as the basis of educational theory and practice. The social environment in a family affects the personal mental domain of the child, as school and society later do as well. Wittmann points out that learning materials and daily implementation of pedagogical theory have a big influence on the learning environment of the child. The design of the learning environment should rely on the above-mentioned tripartite relationship. I am a situation arresting from the tripartite relations that the social environment included a class in not the thing, which learning theory and an educational practice go ahead of again. Many conditions, such as students’ consciousness, social common sense, and cultural factors, can serve as the basis for deriving learning objectives. In other words, this research aims to be a step toward the development of a learning theory educational practice, and teaching materials that incorporate the tripartite relations discussed above.

![](image)

The research method used in this paper has three points, as follows. The first is to clarify the design of the learning environment. The second develops a teaching plan based on the theory set forth. The third present the results of
a class using the developed approach. To the fourth, revise the teaching plan for the cause by the interview to the teacher of the school spot, the interview investigation to a U.K. citizenship education researcher. On the basis of this four-step process, a performance analysis is conducted and suggestions regarding learning environment design in social studies education are developed.

(2) A learning environment design for social studies education

I classify pedagogical research methods in social studies related to learning environment design mainly into three types. The first is theoretical research. Examples include class theory, teaching method theory, and essence theory. A theoretical study of social studies education should adopt and analyse a pedagogical theory of social studies, examine the nature and goals of the discipline, and build on those findings. The second type is analytical research on, for example, curriculum, textbooks, teaching materials, and teaching tools. For example, this could include comparative analysis of textbooks from many countries and their theoretical assumptions. This category also includes research analysing the structure and content of classes. The third type of research relates to the development of lesson plans, textbook development, and development of teaching materials.

In social studies pedagogy, contrary to the claim of Wittmann, great importance should be attached to each of these three domains and to their balance. Though there is a large amount of social studies pedagogical research existent, not all of it has a strong theoretical grounding and practical approach. In this research, the design of the social studies learning environment is based in development research.

2. Learning environment design in lesson planning

(1) The structure of the lesson

In recent years, “citizenship education,” meaning education that prepares a child to live in the real world, has started to attract attention in schools. The three principles of judgement, information literacy, and activeness “citizenship” for the purposes of this study; the major focus in schools is on the development of methodology of inquiry through these three factors. Analysed a advantage and the disadvantage of the social phenomenon and the grounds, and made this class as the teaching materials which aimed at methodology of inquiry upbringing in the citizenship by aiming at it being possible for individual oneself society-like judgment. The lesson-plan structure is shown in Figure 2.
In this lesson, the three points above are presented non-hierarchically and interactively. In other words do the judgement not a thing used based on knowledge understanding when there is it for knowledge understanding and interdependence relations. Theoretical knowledge must be supplemented by activity for the successful transmission of knowledge. The students should not accept knowledge uncritically, but should test it in real life. Our concept should be not unchanging things but dynamic relationships. This lesson focuses on delivering a structure that supports the three points given above.

The learning materials adopted are cartoon books, which should attract the interest of the students—specifically, “the in front of this place Kameari, Katsushika-ku park police” by Osamu Akimoto. This cartoon, which has been published since 1976, is known for taking up many social phenomena. For the present study, 243 items dealing with social issues were identified. Three ways to handle these problems emerge from the process. As for the first, thing to particularly finish taking up a problem, the second analyse the cause of the problem into thing taking up a problem critically, the third. The goal is to build a lesson in which a student can solve social problems by critical thinking and the uptake of these three strategies.

(2) Lesson plan
The advantages and disadvantages of this approach were assessed, and it became clear that the class saw it as a way to think about usage and keep important points alive. The lessons gleaned from the learning materials also seeped into students’ lives. The first of three learning materials employed involve identifying advantages and disadvantages of a manufactured product and a handmade product, and giving reasons. The second uses cartoons to assess a manufactured product in the same way. The third uses case studies to help students think about the way to use various things properly. These tasks are intended to promote the development of student judgement.

The details of this lesson plan is as follows.
### 【First lesson】

<table>
<thead>
<tr>
<th>Structure of each part</th>
<th>Students activities</th>
<th>Teacher’s instruction</th>
<th>Teaching materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the motivation for lesson 5 minutes</td>
<td>Students will watch the material presented by the teacher. Then answer the concepts that are common to those materials.</td>
<td>Teacher presents some disposal things and asks for students as following question. “What is the concept that are common to them?” What is the concept of the meaning of “Disposal”?</td>
<td>Disposal noodle, disposal rice etc</td>
</tr>
<tr>
<td>Discussion the advantages and disadvantages about the disposal noodle: To get the methodology to judge the values 15minutes</td>
<td>Student receive the disposal noodles. And they discuss the advantage and disadvantage of it. After that, they present it for everyone.</td>
<td>Distribute the disposal noodle and worksheet to each group. And ask the following question. “What is the advantage and disadvantage of disposal noodle? Please discuss the above question with reasons.”</td>
<td>Three kinds of disposal noodles Worksheet</td>
</tr>
<tr>
<td>Discussion the advantages and disadvantages about the handmade noodle: To get the methodology to judge the values 15minutes</td>
<td>Student sees the panel printed the handmade noodle. And they discuss the advantage and disadvantage of it. After that, they present it for everyone.</td>
<td>Teacher ask the following question. “What is the advantage and disadvantage of handmade noodle? Please discuss the above question with reasons.”</td>
<td>Panel printed the handmade noodle Worksheet</td>
</tr>
<tr>
<td>Conclusion and the ready for next lesson 10minutes</td>
<td>Review the lesson about the following matters. * advantage and disadvantage of disposal things</td>
<td>Review the advantage and disadvantage of disposal things.</td>
<td>Worksheet Cartoon</td>
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</table>
## Second lesson

<table>
<thead>
<tr>
<th>Structure of each part</th>
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<th>Teaching materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the motivation for lesson 3 minutes</td>
<td>Review the lesson about the following matters with worksheet students written. ・advantage and disadvantage of disposal things</td>
<td>Review the advantage and disadvantage of disposal things.</td>
<td>Worksheet</td>
</tr>
<tr>
<td>Expressed intention 3 minutes</td>
<td>Students do need to express whether or not making disposable products.</td>
<td>Teacher ask the following question. “Do you think disposable products is necessary in the world? Please fill in the worksheet including the reasons.”</td>
<td>Cartoon Worksheet</td>
</tr>
<tr>
<td>Applying the methodology acquired: method of discussion 30minutes</td>
<td>Teacher presented by a panel of three disposable products that are listed in the cartoon to discuss the advantage and disadvantage of each product by team. Presentations from each team to decide who will be presented. After the announcement of the team, to present additional comments if there are other opinions.</td>
<td>Distribute the worksheet and teacher ask the following questions. “Now, Let’s discuss the following three matters appeared in the cartoon. First is disposal bicycle. Second is disposal air conditioner. Third is disposal House!” “What do you think about the advantage and disadvantage about these matters? Please fill in the worksheet including the reasons.” Student notice that disposable products are not universal.</td>
<td>Worksheet Cartoon Panel materials printed disposal bicycle, disposal air conditioner and disposal house.</td>
</tr>
<tr>
<td>Conclusion 9 minutes</td>
<td>Considering the best usage of disposal things according each case.</td>
<td>Teacher shows the example about noodles and asks the following questions. “If you have a time, which is better to eat disposal noodle or handmade noodle?” “And if you do not have a time, which is better to eat disposal noodle or handmade noodle?” “Disposable products have combined both the advantages and disadvantages. What can be useful depending on usage and take advantage of the good scenes though. So, before using a disposable item, once you need to consider situations that can take advantage of the good.” To decide such things in your daily life, please have a criterion based on the perspective of disadvantage and advantage.</td>
<td>Worksheet Panel materials printed all of things that teacher used.</td>
</tr>
</tbody>
</table>
In other words, the first lesson involves the teacher showing a manufactured product to the students, who describe it in words. The students could then take a manufactured product like disposal noodles and write its good and bad qualities on a worksheet. In the third, a handmade product like handmade ramen could be assessed using a picture, and the opinions recorded the same way as above, with a worksheet. Good and bad points could be read in class afterward.

The second lesson involves outlining of the contents of a cartoon in the blackboard and assessing, in groups, the good and bad points of manufactured products appearing in the cartoon, like bicycles, houses, and air conditioners. Points can be written down and shared or discussed afterward. Students can even discuss whether one student’s good point might seem to another student to be a bad point. (This would apply for example to matters of taste.) Finally, repeat with other products and scenes.

In this lesson plan, the teacher should generally aim at eliciting active analysis. Perform a value judgment for the aerial disposal product on this occasion I am flat once, and to do the society environment where sense of values and an idea namely the individual who has already stood of the individual was employed. The value of this approach is that it teaches students not to assume that others have certain knowledge or understanding and those they must assume and express a point of view.

3. Conclusion and limitations of the learning model

The purpose of this paper was to present a model of learning environment design in social studies learning using specific media. The two following points are the benefits of this paper. The first is that it shows the structure of learning environment design in social studies education. The learning materials prescribe a large amount of content in a short amount of time. Children with a better relationship with the education method will see greater improvement. Thus, this research showed a stratagem to improve learning by providing interesting points in a non-cyclical fashion.

The second point of value is that the study uses concrete lessons. It was suggested that social studies lesson plans use concrete learning materials as well as a strong theory of learning environment design. In addition, the study included the inspection of a “real” result, rather than a so-called eidolon.

However, three problems appeared while using the approach in this class. The first is the issue of the maintenance of the child’s concentration, or in other words, of the setting at which education content and method are
effective. The class expressed the advantages and disadvantages of various manufactured products, as discussed; however the presentation of materials by the teacher in this way may be less effective than an approach that encourages more interaction with the materials on the part of the students, or with their environment (for example, putting a picture on every desk and have students movie around their desks).

The second issue is the working out of content. Recognition of the subject was often vague. On the other hand, it was understood that advantages and disadvantages are relative, and that it is important to understand for whom a thing is bad or good.

The third issue relates to the children’s independence. The class named not at knowledge acquisition, but at skilled analysis, which is interactive and requires autonomy. Therefore, there will be a necessity to think about an evaluation method to measure analysis power and value judgement.

Thus, there remain concerns with the research, as seen above. However, there is still a suggestion here for a learning environment design that takes theory and practice into account for designing strong lesson plans.

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1 Kazuhiro Kusahara,
6 Takashi Sasaki, Musashino Gakuin University has done pioneering research to develop learning materials using the cartoons. Media Studies is responsible for the research center of cultural studies, such as movies and cartoons with a focus on community and the Tokyo University of Shunya Yoshimi. And Koichi Shiraishi analyzing the media studies in U.K. as follows. Koichi Shiraishi, ‘Media’ in Key Stage Four Citizenship Studies in England’, Ohkagakuen University, Vol.13, 2011, pp.59-76.
7 This research was supported by Grant of Osaka-Ohtani University Student Research Project. This project member is as follows. Masaharu Kunimori, Takumi Shindo, Teppei Ueno, Yuji Mizobuchi. I would like to express the gratitude for them.