

Analysis and Interpretation of lessons through the Collaboration between University and School

— Historical approach to the Lesson Study in Japan and a Case Study for the integrated perspectives —

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Abstract: The “Joint Research of Lesson studies between five universities and schools” in Japan had contributed to develop the concept of “Lessons” and movement of Lesson Study in Japan. There were major five universities which led Lesson Studies from 1962 to 1985. And those five universities developed each unique methodology of analysis and interpretation of lessons through the collaborative researches with each partnered schools. In this study the concept of “Lessons” is clarified, which have been developed through post-war movement of Lesson Studies in Japan as Joint Research between universities and schools, focusing on the methodologies of analysis and interpretation of the lessons. And we suggest a new methodology using a case study of Lesson study which aims at integrating the six perspectives, “Teaching Material-Oriented Approach”, “Child-Centered Approach”, “Group Formation based Approach”, “Objective-Based Approach”, “Method-Focused Approach”, “An Approach Based on the Way of Life”, for the lesson planning.

Key words: Lesson Study in Japan, Lesson Analysis,
integrated perspectives for lesson planning

1. Aim and Method of this Study

The purpose of this study is to clarify the concept of “Lessons”, which have been developed through post-war movement of Lesson Studies in Japan, focusing on the methodologies of analysis and interpretation of the lessons. When we analyze or interpret the lessons, we must select the methods and objects depending on our concept of “lessons”. For instance, if we try to analyze what is learned by children from the perspective of the constitution of subject contents, our methods must reflect our concept which attaches importance to “study of subject matter”. Adversely, if we emphasize the aspect of the “Lessons” as interactive group processes between teacher and children, we must try to see their concrete accumulation of conversation – actions and reactions – and their relationship in our Lesson Analysis.

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The “Joint Research of Lesson studies between five universities and schools” had contributed to develop the concept of “Lessons” in Japan. There were major five universities which led Lesson Studies from 1962 to 1985. And those five universities developed each unique methodology of analysis and interpretation of lessons through the collaborative researches with each partnered schools. Hokkaido University with Tokoro Elementary School: “Jugyou-syo Houshiki” (class report book method), the University of Tokyo with Shima Elementary School: Lesson Study as science, Nagoya University with Ando Elementary School: “R. R. (Relativistic Relation Research) Method” and “Kodomo no Mitori” (interpreting children’s learning), Kobe University with Sugano Elementary School: “Kaihou Kyouiku” (liberation education) and “Douwa Kyouiku” (social integration education), Hiroshima University with Mori Elementary School and Kamogawa Junior High School: “Group Process” in the Lesson. The researchers of those universities had presented their research results and practical reports, then their actions accelerating the movement of the Lesson Study. Actually those movements gave the impact on the development of the concept of “Lessons” after that.

Research result is to point out that methodologies of analysis and interpretation of lessons by reviewing the characteristics of the “Joint Research of Lesson studies between five universities and schools” present “cognitive-process and collective-process”, “combination of science and life”, “relation between the one Child and the classroom as community” in lessons as the concept of “Lessons”. And we suggest a new methodology using a case study of Lesson study which aims at integrating the six perspectives, “Teaching Material-Oriented Approach”, “Child-Centered Approach”, “Group Formation based Approach”, “Objective-Based Approach”, “Method-Focused Approach”, “An Approach Based on the Way of Life”, for the lesson planning.

In this study we are to clarify methodologies of analysis and interpretation of the lessons by reviewing the “Joint Research of Lesson studies between five universities and schools”, and refer to the concept of “Lessons”, which have made high influence on Lesson Study in Japan. In addition, we are to clarify what kind of influence for the development of Lesson Study has present on the Lesson study as In-school seminars, which are collaborative research between the university and schools, using a case study.

2. Methodology of lesson analysis in the “Joint Research of Lesson studies between five universities and schools”

2-1. Hokkaido University

Hokkaido University group, which was led by Kiyoji Sunazawa (and Fumio Abe, Tadashi Odagiri, Shuichi Suzuki). They emphasized that lesson study is a theoretical study, at the same time practical study. Theory and practice should be examined or criticized by each other. (Sunazawa 1959, pp.11-12). Hokkaido University group collaborated with Tokoro Elementary School.

The research theme was “cognitive process of children in the teaching each subject”. The aim was to solve the conflict between the thinking of children that have background of the life experience and scientific nature or law which treated in teaching materials. This workshops had held eight times from October 1958 to July 1959, and a research camp for 12 days was held in August 1959. Hokkaido University’s researcher and Tokoro Elementary School’s teacher had special classes, debate, and writing. The outcome was published as the book *Practical Study of the Learning Process* (1959).

The central issues of the Lesson Study were three things. (A) Solving conflict between teaching and learning process (teacher and children, teacher and teaching materials, teaching materials and children). (B) Collecting data about teaching material’s quality and its construction, (C) Combining the research of teaching materials and learning process for analyzing the factors that extend the thinking in children (Sunazawa 1962, pp.181-182, pp.224-225).

So Hokkaido University group put two viewpoints for the lesson analysis. One of them is to understand the lesson from three perspectives (Sunazawa 1959, p.42): (1)the three processes of the lesson (teaching, learning, and the whole of the lesson); (2)three aspects which condition the learning process of children (psychological aspect, logical aspect, and social aspect); and (3)three phases of the cognitive process in the lesson (“cognition” which includes trial and error, “technical cognition” in which children acquire reasonable ideas, and “technical practice” which confidently apply their own strategies).

The other viewpoint is to study both processes of the lesson totally: lesson process (the function and character of the teaching materials) and cognitive process (the communication process of teaching and learning) (Sunazawa 1962, pp.196-197).

Based on these viewpoints, their lesson analysis had four steps. First, collecting data of the school, local condition, children etc. Second, observation and recording of lesson. Third, making “Table of the Relation of the Speaking in Lesson” and “Lesson Profile”. Forth, analyzing the type of communication, teacher’s questioning, and children’s speaking (Sunazawa 1962, pp.202-224).

This group captures the concept of “Lessons” as cognitive process of each child and collective process of children in a class, simultaneously for scientific nature and law that treated in teaching materials, and “Lessons” is also a process of changing thinking and self-reformation of each child by the scientific nature and law teaching materials.

This concept of “Lessons” was born from the view that lesson has a conflicting structure, and how teachers solve the conflict, which is especially teaching materials and children, is the most important point of lessons (Sunazawa 1959, pp.18-24). How teachers confront the conflict of lessons is an issue of judging value. The selected value is presented how organize cognitive process and collective process of children. Therefore, in Hokkaido University group’s lesson study, the way of organization of cognitive process and collective process is discussed.

However, these value judgment of teachers is limited by the value of teaching materials. So Hokkaido University group’s lesson study approached a study of curriculum for solving the conflict of lessons (Suzuki 1975, pp.222-223). This study of curriculum was advanced as lesson study of “Jugyou - syo” style (Suzuki2015, p.8).

2-2. The University of Tokyo

In The University of Tokyo some groups and researchers contributed to lesson studies. In this paper we will focus on Lesson Study of “Kyoujugaku Kenkyuu no Kai(Didactical Studies Division in Association of Scientific Research for Education)”. It was established as local study group for education in 1973 and led by Yoshimatsu Shibata and Kihaku Saito. It was based on collaboration with Shima elementary school in which Saito was the principal of the school.

Shibata pointed out that lesson study was done in collective joint study made by teachers, scholars, and artists the importance for doing scientification in two meaning. One meaning is “to create system of subject, in other words, to create system that teaches scientific basic concepts” (Shibata 2010a, p. 8). Trend of lesson study in 1960s focused only “how to teach” without scientific basis “what to teach”. Against this situation, educational researchers must think that children needed what kind of knowledge, with science basing subject researchers’ cooperation, for creating system of subject. Then, the system that teaches scientific basic concept was created contrary to just scientific system. The local study groups for education developed diverse subject matter or teaching aid in movement of combination science and education: “Suido-hosiki” (= the water supply system method) in mathematics, textbook of “Nippon-go” (=Japanese) in Japanese.

The other meaning is “to make lesson study itself making scientific ones” (Shibata 2010a, p. 8). It required that lesson was developed under the detailed planning. That was to say, it was very

important to make detailed lesson plan. So they analyzed the elementary factors that defined such as goal, contents and methods of lesson and analyzed the lesson which was advanced under the detailed planning, how the elementary factors functioned in actual lesson and how they changed from lesson plan. Shibata bases on lessons analysis and “practical aim for creation of typical lesson and theoretical aim to clarify fundamental conditions and principles of formation of such lesson”(Shibata 2010b, p. 70). In particularly “Kyoujugaku Kenkyuu no Kai” featured “Dramatic lesson” basing on Saito’s practices as typical lesson and studied art of teaching that made the climax of lesson and shook the children’s think.

The concept of “Lessons” of “Kyoujugaku Kenkyuu no Kai” is process to clarify the art of teaching that makes good lesson such as “Dramatic lesson” under combination of science and education as 1960s trend.

2-3. Nagoya University

In Nagoya University, researchers from the educational sociology laboratory and the educational methodology laboratory had constructed the collaborative research systems with many schools energetically.

The leading researcher of educational sociology laboratory was Kentaro Kihara. He and his colleagues had made some studies with Shinkawa elementary school and so on, and they had developed a sociological approach including the attitude surveys on the parents and inhabitants over several years (Kihara 1964).

On the other hand, Takayasu Shigematsu and Kaoru Ueda led the educational methodology laboratory and they had participated in many schools’ lessons for a long time. They proposed the methodology of “Lesson Analysis” in which researchers and practitioners could have collaborative studies as a result of mediation of the “lesson record (concrete verbatim records of lesson)” (Shigematsu 1961). Particularly in Horikawa elementary school and Ando elementary school, they had researched over 20 years, and those lessons got noticed by many educational researchers and teachers in Japan.

In the educational sociology laboratory, they criticized the conventional educational studies that had treated idealistic theories and techniques separately, and they had aimed empirical researches based on objective evidences (Kihara 1958). First, they had the attitude surveys to reveal what the parents or inhabitants demand from education. And they evaluated whether the lessons have achieved the <value> or <goal> which were established according to the surveys. In those ways, they proposed the “Educational Diagnosis”. Then, they tried to reveal the approaches of teachers’ <value> or <goal> multilaterally are realized, and they developed “Communication Analysis” of the lessons in which the teachers’ and children’s acts were comprehended structurally referring to the relationships of the class. For the “Communication Analysis”, they collected children’s information from the observation and sociograms, and they observed each child well with video cameras and analyzer.

Through educational methodology laboratory’s lesson study, researchers and practitioners do the ‘Lesson Analysis’ with lesson records which can be distinguish who spoke in the lesson. Various factors and experiences influence the children’s thought and judgement, and they call the basis of the judgement “Thought System” (Shigematsu et. al. 1963). They thought that education is supposed to change the ‘Thought System’, so their analysis had been trying for clarify the progress of children’s “Thought System”. Furthermore, teacher and his co-researchers set ‘Extract Children’ to improve lessons and analyses by well interpretation of the learning of children (Kodomo no Mitori). Teachers write children’s characteristics individually on the “Seating Chart” and “Karte (like doctors write their patients case)”, and observers or researchers possess these children’s information jointly. In those way teachers leave records of episodes for each child in “Karte”, and teachers filled “Seating Chart”. For the “Seating Chart” teachers pull out the information concerning that lesson referring to the “Karte”.

Kihara et al. analyzed the influence of teacher’s purpose and relationships on the children’s

thought and they aimed at children's unrestrained thought. And they clarify the teaching means to deepen child's thought. On the other hand, in educational methodology laboratory they proposed problem based learning and deep learning which can be anchored in children's "Thought Systems". In those lessons, teachers utilize each child's characteristics and support the children to inquiry into the truth of the life and the subject. And the more children's information they know the more perspectives are provided for finding the discrepancies between child's thought and teacher's planning or inter children's discrepancies (Focusing the discrepancies is the one of the concepts of Relative Relation Research Method).

In Nagoya University, both laboratories have been analyzed lessons through objective evidences. They examined the responses from children which did not turn out the way teacher expected, and they tried to assess how the lessons goes by paying attention to individual children. Teachers have constructed their lesson concepts and skills for the understanding children and contents of subjects through the lesson study. In those lessons, children investigate into their living problems and learn the contents of subjects.

2-4. Kobe University

The Lesson Study of Kobe University(Taro Ogawa and Akio Sugiyama) collaborated with Sugano elementary school located in Buraku-discrimination. Buraku-discrimination is community discrimination by hamlet of birth or occupation and has the social problems of poverty or low academic ability. Dowa-kyoiku (=social integration education) is to overcome those problems.

Ogawa refers to "education that all of the children will be allowed to develop the human ability to maximize regardless of economic disparity against the class education which makes human discrimination" as "National Education" (Ogawa 1980b, p.46) and aims to come true national education. The hardships on realization of national education lay in classism and existence of discriminated children living in the hamlet as victim.

Ogawa and teachers worked on social integration education and found "the truth that learning motivation and achievements is decided by life itself" (Ogawa 1980b, p.104). And they used seikatu-tsuzurikata(=life-based composition) to recognize and to approach children's life by writing her/his life on her/his hand. In addition, they thought that "educational contents played more fundamental role for development of achievement und ability"(Ogawa 1980b, p.209), so they edited supplementary reading material "Haguruma(=Gear)". In "Haguruma" the excellent literatures were collected to "develop correct recognition for human itself along with scientific recognition or society, and to build foundation with awareness for human dignity richly"(Bungakutokuhon 1982, p.6). The theme and orientation of the literatures are what human is. They aimed to raise scientific recognition of human itself through reading literatures, and they educated human who couldn't allow discrimination.

In lesson study with using "Haguruma", it was important that the teachers studied teaching materials to deep recognition for human right. Three steps of read were set for reading literature in process of lesson. First reading is to write the children's first impressions of the literature which include diverse experience of the children's life. Second reading according to the impressions is interpretation of literature through collective thinking. Third reading is to recognize scientifically structure of suppression in literature.

Kobe University collaborated with some schools located in discriminated community and did lesson study using "Haguruma". The lesson aimed that the bottom-class children scientific recognized their life through the literature by writing his life.

2-5. Hiroshima University

In Hiroshima University, there were two styles of lesson study. The one was Laboratory of

Educational Sociology which was led by Teiji Sueyoshi and Tokuo Kataoka, and the other was Laboratory of Educational Methodology which was led by Tadao Sato and Hitoshi Yoshimoto. These two laboratory's lesson study focused on collective process of lessons in common.

Laboratory of Educational Sociology had a background of study of group dynamics in the United States, and an important theme of participation in lessons, and started collaborative study with Hiroshima Kamogawa Junior High School which worked on cooperative learning with using small group in lessons (cf. Sueyoshi and Nobukawa 1965, pp.122-125). Laboratory of Educational Methodology had an idea of East German Didactic's "Einheit von Bildung und Erziehung(Unity of cultivation and education)", and start with collaborative study with Hiroshima Yamauchi Junior High School and Hiroshima Mori Elementary School which had thought of "Douwa Kyoiku" and the study theme "Education of/ by/ for groups" which guarantee the right to learn for all children (Fukazawa and Kurotani 2003, pp.26-27, Yoshimoto and Mori Elementary School 1966, pp.3-4).

The central issue in Laboratory of Educational Sociology's lesson study was clarifying the structure of communication in lessons. The viewpoints were quantity of speaking of teacher and children, kind of speaking, and distribution of those speaking in classroom. In Lesson analysis, lesson record was made by using tape-recorder, and based on this record, the lesson was analyzed its process of communication. Laboratory of Educational Sociology made some type of communication, and carried out experiments which surveyed the change of quantity of speaking of teacher and children, effect of small group in lessons (Sueyoshi and Nobukawa 1965, pp.218-227, pp.322-330).

The central issue in Laboratory of Educational Methodology was advancing "Gakusyu - Shudan - Zukuri (Learning Group Formation)" which was working on creation lessons and children's learning group by lesson study (Fukazawa and Kurotani 2003, pp.26-27). The viewpoints of lesson analysis were whether all children's voice was treated dearly in the lesson, all children were opened the fact of teaching materials, and all children participated for the lesson (Yoshimoto and Mori Elementary School 1966, pp.244-248). In lesson analysis, a lesson record which has two category of teaching act (T) and learning act of children (C) is made (T-C records). From the records, how the state of interaction between teacher act (instruction, explanation, questioning, evaluation word etc.) and learning act of children (speaking, learning activity, expression etc.) in the lesson was analyzed. These viewpoints of lesson analysis was gradually taken shape as the viewpoints of "Study of subject matter", "Composing Question", "Collective Thinking" "Learning Discipline".

The way of analysis and interpretation of lessons in Laboratory of Educational Sociology represented the concept of the "Lessons" that is not a one - sided process of teaching, but liberated and self-directed learning process (Sueyoshi and Nobukawa 1965, p.218).

On the other hand, the way of analysis and interpretation of lessons in Laboratory of Educational Methods represented the concept of "Lessons" that is learning of subject matter certainly, but the quality of lessons is determined by the quality of learning group of children (Yoshimoto and Mori Elementary School 1966, pp.35-36). Interaction between teacher and children in lessons represented the state of learning group of children and teacher's leadership. Therefore, teachers have to improve their leadership and lead learning group of children for more democratic, cooperative, and autonomic through lesson study (Yoshimoto 1979, p.5).

3. The integrated perspective for Lesson Study and a Case Study

We can recognize the concepts of lessons from the "Joint Research of Lesson studies between five universities and schools" as the three "paired-Keywords"; 1. "cognitive-process and collective-process", 2. "combination of education and science and combination of education and life", 3. "relation between the one Child and the classroom as community". These three pairs can mean the "view points" of lesson

analysis.

On the other side, we could remember the importance of six approaches to the lesson planning; 1. “Teaching Material-Oriented Approach”, 2. “Child-Centered Approach”, 3. “Group Formation based Approach”, 4. “Objective-Based Approach”, 5. “Method-Focused Approach”, 6. “An Approach Based on the Way of Life”. These six approaches can be used not only for the lesson planning but also for the lesson analysis.

We will suggest the integrated perspective which is constructed from cross line/ Scope with the three paired “view points” and from vertical line/ Sequence with the six approaches; Table 1.

We try to do lesson analysis the case of a science class of third grade in Hiroshima K Elementary School by using “the integrated perspective” based on lesson study in Japan. The case is the Unit of “Growth of Insect: Butterfly”. In this Unit, children had ten classes; (1) Breeding of butterfly (4 classes), (2) The process of growth of butterfly (4 classes), (3) Structure of body of butterfly (2 classes). K Elementary School have worked on improving lessons by using “*Performance Task*” since 2012. The “*Performance Task*” of this Unit was “Let’s make a picture-story show of the life story of butterfly”.

Some teachers and we had an opportunity for Kyouzaienkkyu (studies of subject matter) and examination of the lesson plan as ‘pre-conference’ in K Elementary School on Wednesday, May 18, 2016. At first we discussed about the subject matter of this lesson focused on the goal of this unit which making picture card show. We decide that we’ll use the specimen which is made by the charge of 6th grade class. A teacher in the school have made specimen for several years from insects which children caught so, these specimens used in this lesson are the subject matter which developed in own school and these butterflies are living in the community that the children are living in.

Second, we discussed how children will capture ‘butterfly’s life’ with focusing on children’s experiments of their life. We tried to reinterpret ‘butterfly’s life’ from children’s sense of life. For example, ‘what’s doing the butterflies around K Elementary school?’ ‘are they finding food?’ ‘are they playing with each other?’ and so on.

Then, we discussed the object and method of this lesson that is to say we discussed what and how children learn with observation of butterflies’ specimen. We discussed the method for observation, for example ‘how many children will observe the specimen together?’ and ‘who will take notes of the observation on the worksheet?’ We decide that we’ll let children take notes on worksheet in pairs, and pass the worksheet on to every pair with adding notes. The method for the observation of this lesson is not only the method of learning but also concerning to the object, so we discussed the method with discussing the object of this lesson.

Based on this pre conference, we observe the case class, which was done by U teacher at fifth class in July ninth 2016. We used a video camera, field notes, and digital camera for observation.

We will pull out a scene of this lesson, which became the topic of the post-conference. When each pair’s worksheet returned to original pair, children confirmed what other pair wrote on their worksheet. In Japan, we call insect’s antenna ‘shokkaku’, and ‘antenna’ means receiving set of radio wave. In this scene; Table 2, children learned not only the name of the function ‘shokkaku’ but also its role (receiving much information by sense of touch).

Table 1 : the integrated perspective which cross “view points” of lesson analysis and “approaches” to the lesson planning

	cognitive process and collective process	combination of education and science and combination of education and life	relation between the one Child and the classroom as community
Teaching Material-Oriented Approach			
Child-Centered Approach			
Group Formation based Approach			
Objective-Based Approach			
Method-Focused Approach			
An Approach Based on the Way of Life			

In this scene, b2 and b3 pair tried to explain their opinion with using two different terms ('shokkaku' 'antenna'). Other pairs noticed well that 'shokkaku' is working as 'antenna'.

The topics of "post-conference" were five points: (1)a speech of b5 student, "Pair?" – children are conscious about learning method, (2)the speech of "Antena" (Cb2), (3)color or character of "butterfly", (4)Structural similarity and difference of boby of butterfly and insect, and (5)explanation about the content of class for the absent student.

Through this observation, we found some suitable teaching act and learning act for Table 1. Table 3 is the result.

Table 2: Transkription of Science Class

Time	Speaker	
01'11"	T	You've got a your worksheet from neighbor pair, right? Ok. Let's compare what you wrote with what other pair wrote in your worksheet, and please express your opinion about what you see. Which pair will present at first? (Most of the students raised their hands.) Ok. b2 please explain your opinion with showing us your worksheet. Do you need pointing stick?
	Cb2	(b2 and b3 stood up together.) Well... we realised... well, that we didn't know is (T: Good.) that there are the one pair of 'shokkaku' (antenna) In addition, that we knew are that butterfly's body is consisted of abdominal region, thorax and head, and there are 'shokkaku' and eyes or butterfly's head. That's all.
	Cb5	Done.
	T	Don't you say anything to they said, everyone?
	Ca	I agree with them.
	T	Ok. Anybody else? Is there any pair to express? So, first pair please.
	Cb4	Yes. That we didn't know are that there are 'shokkaku' and eyes on the head and that there are something like 'antenna' too. And there are 6 legs on the thorax.
	Cb6	We didn't know that the 'shokkaku' is working as antenna but we already knew that there are eyes and 'shokkaku' on the head.
	T	Which pair wrote antenna as 'shokkaku'? (b2 and b3 raised their hands.) You wrote that these functions are 'antenna', but what term other pairs use for express it?
	Cn (some students)	'Shokkaku'.
06'00"	T	So you call these antennas as 'shokkaku', don't you?

4. Conclusion

This study has two results. One, we clarify methodologies of analysis and interpretation of the lessons in the "Joint Research of Lesson studies between five universities and schools", and historical significance of each concepts of "Lessons". The concepts of "Lessons" might have become the backbone of the lesson study in Japan as three-paired-Keywords: "cognitive-process and collective-process", "combination of education and science and combination of education and life", and "relation between the one Child and the classroom as community".

Table 3: Analysis Table of the lesson of K elementary school 3rd grade science class "butterfly"

	cognitive-process and collective-process	combination of education and science and combination of education and life	relation between the one Child and the classroom as community
Teaching Material-Oriented Approach	Observation of Specimen and pair-work	Understanding the structure of butterfly's body with the word of child self	Observation / notes/ discussion using worksheet
Child-Centered Approach	Informal "tweet" and change the role of note-taker	Focusing on the function mouth-drinking straw shokkaku-antenna	Request for some time
Group Formation based Approach	Circulation of worksheet Request for some time		Getting conscious to the public
Objective-Based Approach	Read aloud the goal Setting of the learning problem	understanding the insect's common feature from the observation of the butterfly's specimen	Children will teach the contents of this lesson to the absentee in the next lesson.
Method-Focused Approach	Indication of the contents of the express	Making correction to the Technical term	Circulation of worksheet Observation / notes/ discussion
An Approach Based on the Way of Life	Understanding the relationship between name and features of the butterfly's species	The original subject matter based on children's community	

Furthermore, we suggest "the integrated perspective" which cross six approaches to the lesson planning("Teaching Material-Oriented" Approach, "Child-Centered" Approach, "Group Formation based" Approach, "Objective-Based" Approach, "Method-Focused" Approach, An Approach "Based on the Way of Life") and above three paired-Keywords. The case study of the science class in the K elementary school points out that it is possible to avoid unbalance of the view-points and approach of observation, analysis and consideration of the lesson by using this perspective, and it can be carried out in the dialectical thinking to cross the view-points and approach of observation, analysis, and consideration of the class. This signification is to allow to view the lessons cross, complementary and relatively.

Our next research task is way of “integration” in “the integrated perspective”. We should understand “the integrated perspective” itself through study of more concrete case and teacher training / teacher education or the significance of “the integrated perspective” from the point of view of the person who observes, analyzes and considers the lessons in universities and schools and the international point of view of the lessons.

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