

# School Consultation by Using the Universal Design of Class Checklist to Promote Inclusive School

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インクルーシブな学校をつくるためのユニバーサルデザイン授業チェックリストを活用した教育相談

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**Abstract:** In this research, as a strategy to promote universal design of lessons for all elementary schools and junior high schools in A city, intervention study using checklist and school consultation was conducted in cooperation with A city board of education. Methods were followings. 1) I and A city board of education staffs prepared checklists of universal design of lessons in regular classes with reference to previous research. 2) We carried out questionnaire survey as pretests in November 2017 for all elementary and junior high schools teachers in A City (7 elementary schools, 3 junior high schools, Recovery rate was 100%). 3) From December 2017 to May 2018 we conducted feedback and consultative intervention focusing on the strength and problems of each school. 4) We carried out questionnaire survey as posttests in June 2018. Moreover, the consciousness of the management position teacher like as principal and Special Needs Education Coordinator are important to conduct systematic approach; we add questionnaires to 10 management position teachers and 10 Special Needs Education Coordinators (Recovery rate was 100%). 5) Continuing the consultative intervention with re-focused on each school's features and challenges. By comparing with several schools, the characteristics of their school had come to be seen each other. With the result of pretest and posttest, through face-to-face consultation for goal setting the points that each school wanted to focus on have come to light.

**Key words :** School consultation, universal design of class, inclusive school

## 1. Introduction

Nowadays, we are discussing about “the universal design of lessons” as an improvement strategy for the class, lesson, learning, teaching suitable for all children including children with special needs in Japan. The trends of universal design of lessons are followings.

A society for universal design of lessons was established in 2009 and the society are publishing book series the name are universal design of lessons from 2010 (A society of Universal Designed Education, 2010). The society was taken over by the academic society. Japan Academy of Universal Designed Education was established in 2016. The points of the universal design of lessons presented by Japan Academy of Universal Designed Education are visualization, focusing and sharing. They would like to ensure the tiers of "participation", "understanding", and the "knowledge and utilization"(Japan Academy of Universal Designed

Education, Official Website).

Besides, we are discussing how to adapt Universal Design for Learning (in short, UDL) that developed in the United States to Japan. Universal design of lessons, classes, teaching, and learning are not only Japanese domestic interest but also larger research perspective a part of process of inclusive school. UDL is a research-based set of principles to guide the design of learning environments that are accessible and effective for all. CAST (Center for Applied Special Technology in Massachusetts, Official Website) published 'Universal Design for Learning Guidelines' and they point out three 'networks'. First is Engagement. For purposeful, motivated learners, stimulate interest and motivation for learning. Second is Representation. For resourceful, knowledgeable learners, present information and content in different ways. Third is Action & Expression. For strategic, goal-directed learners, differentiate the ways that students can express what they know. In United States, now endorsed by federal policy and that of many states and districts, UDL informs all of our work in educational research and design, professional learning, workforce development, and publishing.

Turning back to Japan, in 2012 Ministry of Education, Culture, Sports, Science and Technology (in short, MEXT) also quotes universal design in connection with 'Convention on the Rights of Persons with Disabilities' (Ministry of Education, Culture, Sports, Science and Technology, 2012). Under the influence of ratification of the 'Convention on the Rights of Persons with Disabilities', the realization of universal design is required in the field of Japanese education.

At the local government level, for example the Kochi prefectural board of education published guidebooks on universal design of lessons. The contents of the Kochi prefectural universal design of lessons consist of five areas. Those are Learning environment, Presentation of information, Teaching materials / methods, Learning activity, Evaluation (The Kochi prefecture board of education, 2011 and 2013).

Other local government municipalities also published some guidebooks on universal design of lesson. At Saitama City board of education in Saitama prefecture published 'A Guidebook for creating lessons incorporating the idea of universal design' (Saitama City board of education, Official Website). Local governments that do not release their own guidebooks also actively introduce universal design of lessons.

A book by all elementary schools and all junior high schools 650 teachers in Hino City, Tokyo, trial of universal design of lessons was published in 2010 (All teachers at elementary schools and junior high schools in Hino City, Tokyo, Hino City Board of Education, Satoru Onuki, 2010).

In this way, universal design of lessons now hot topic for a concrete index for the teaching and learning improvement which carries out appropriate education of all children including children with special educational needs in Japan.

But at the same time, each school is confused about how to realize the universal design of lessons. Therefore, in this research, as a strategy to promote universal design of lessons for all elementary schools and junior high schools in A city, intervention study using checklist and school consultation (Ishikuma, 1999) was conducted in cooperation with A city board of education.

A city in Kochi Prefecture made own checklist, referring to Hino city's universal design of lessons checklist. A city used this checklist to improve the teaching and learning environment at all elementary and junior high schools in A city.

This research aimed to be able to refer to other regions in the world as a lesson study improvement project of each local government unit as a teaching and learning improvement project of each local government unit, as well as reflection activities using checklists and consultation activities for class improvement and organization creation. This research aimed at an international, cross-cultural, or comparative framework discussion.

## 2. The purpose of this study and research question

In this research, as a strategy to promote universal design of lessons for all elementary schools and junior high schools in A city, intervention study using checklist and school consultation was conducted in cooperation with A city board of education. The focus is on the development of universal design of teaching and learning environment and school consultation support systems to achieve inclusive schools.

## 3. The methods of this study

### 3.1 Methods were followings.

- 1) Our research project team (I and A city board of education staffs) prepared checklists of universal design of lessons in regular classes with reference to previous research.
- 2) Our research project carried out questionnaire survey as pretests in November 2017 for all elementary school and junior high school teachers in A City (7 elementary schools, 3 junior high schools, Recovery rate was 100%).
- 3) From December 2017 to May 2018 we conducted feedback and consultative intervention like as lesson study and visiting consultations, in-school lecture focusing on the strength and problems of each school.
- 4) We carried out questionnaire survey as posttests in June 2018. Moreover, the consciousness of the management position teacher likes as principal and special needs education coordinator is important to conduct systematic approach; we add questionnaires to 10 management position teachers and 10 special needs education coordinators (Recovery rate was 100%).
- 5) Continuing the consultative intervention with re-focused on each school's features and challenges.

### 3.2 Survey sample

As for this research sample, all elementary schools and junior high schools in A city (population is 26,862 in Oct.2018).

The number of teachers is 79 (2017) or 75 (2018) for elementary school and 46 (2017) or 46 (2018) for junior high school.

The principle and vice principle and so on as management position teacher is for elementary school and junior high school, 22 people in total. There are 11 special needs education coordinator. In Japan, at least one special needs education coordinator is clearly to be elected in all elementary school and junior high schools.

Those questionnaire which they answered use for feedback.

Table 1. Survey structure

|               | Teachers  | Management position teachers  | Special needs education coordinator   |
|---------------|---|---|---|
| November 2017 | Pretest: Elementary school survey 47 items, junior high school survey 43 items  | Not implemented   | Not implemented   |
| June 2018     | Posttest: Elementary school survey 47 items, junior high school survey 43 items | Pretest: Elementary school survey 33 items, junior high school survey 33 items  | Pretest: Elementary school survey 33 items, junior high school survey 33 items(Pretest) |
| November 2018 | Revised: Elementary school survey 19 items, junior high school survey 19 items  | Posttest: Elementary school survey 33 items, junior high school survey 33 items | Posttest: Elementary school survey 33 items, junior high school survey 33 items         |

|              |  |   |   |
|--------------|--|---|---|
| June<br>2019 | Focusing survey:<br>Common survey item especially "individual consideration" 19 items, + self-selected item 2 items. | Focusing survey:<br>Common 3 small categories survey items + own school selecting 2 small categories survey items | Focusing survey:<br>Common 3 small categories survey items + own school selecting 2 small categories survey items |
|--------------|--|---|---|

### 3.3 Conclusion & Findings

1) The number of items of the questionnaire set 47 items for elementary school and 43 items for junior high school. The questionnaire made by three large categories, such as learning environment and teaching method in classes, individual accommodations and 15 small categories, such as Structuring the place, Adjustment of stimulation, Clarification of rules, Invention of mutual understanding in class, Structuring time, Invention of information transmission, Promotion of participation, Structure of content, General problems, Problems of learning, Problems of social skills, Problems of attention, Problems of language, Problems of movement, Problems of emotion.

Questionnaire items for elementary school and junior high school teachers are as follows.

Table 2 Questionnaire items for elementary school and junior high school teachers

| Learning environment                       |   |
|--|---|
| Structuring the place                      | 1) The place for learning and teaching things in the classroom is fixed (Only for elementary school teachers).<br>2) The location and placement of the learning and teaching materials are organized at a glance.<br>3) The seating positions are considered with the student's individual characters.  |
| Adjustment of stimulation                  | 4) The notices in the classroom are considered to be concentrated.<br>5) The notices on the front of the classroom are limited to the minimum necessary (Only for elementary school teachers).<br>6) The shelves of the classrooms are blindfolded to prevent unnecessary stimulation.<br>7) It is considered that there is no noise that may be stimulating inside and outside the classroom.<br>8) Exciting children are in the seat position away from each other. |
| Clarification of rules                     | 9) The rules in the class are set to be simple and anyone can execute.<br>10) There is a manual that you can refer to when you do not understand the procedure of role in the class.<br>11) The homeroom teacher checks and evaluates the rules in the class at appropriate timings.  |
| Invention of mutual understanding in class | 12) The teachers clarify each child's goal, communicate it to the individual, and provide consistent instruction about the goal.<br>13) Intentionally set the scene where children help each other and cooperate.<br>14) Teachers explain to parents about the situation and direction of the class so that they can get an understanding at the Parents Association.   |
| Teaching method at Lessons                 |   |
| Structuring time                           | 15) At the beginning of the lesson, give an overall timetable on how to proceed with the lesson.<br>16) At the lesson, make a device to understand what is being done now (Only for elementary school teachers).<br>17) It is devised to convey about the change of timetable as soon as possible.<br>18) (By utilizing timer etc.) teachers devise so that child understands division of time.   |

|                                       |  |
|---------------------------------------|--|
| Invention of information transmission | <p>19) The instruction / communication are not only auditory instructions such as speaking but also visual instructions such as writing black board.</p> <p>20) Avoid abstract expressions and vague expressions and replace them with concrete expressions.</p> <p>21) In the transmission of many matters, devise a method that does not burden the memory, such as making notes, passing notes, etc.</p>  |
| Promotion of participation            | <p>22) Teachers make it easy for children who do not understand to receive advice from the homeroom teacher.</p> <p>23) Teachers devise that there are some opportunities that all children can speak.</p> <p>24) When one task is over, the next thing to do is always prepared.</p> <p>25) The content and approach of the task are gradually changed so that concentration and sustainability can be achieved.</p>                                  |
| Structure of content                  | <p>26) (By using worksheets, etc.), the device is designed to make it easy to understand how to proceed with the study.</p> <p>27) Teachers subdivide the contents of learning (small step) as much as possible about the task.</p> <p>28) A pattern has been introduced to some extent in each lesson to make learn smooth.</p>   |
| Individual support                    |  |
| General problems                      | 29) Appropriate instruction was given based on the individualized teaching plan.   |
| Problems of learning                  | <p>30) It is devised to grasp about the grade level being learned about the subject content and the way of mistake.</p> <p>31) There are some opportunities to go back and learn where children's learning problem is beginning to happen. (For lower grades)</p> <p>32) Information and teaching materials are shared when using a teaching place other than class (for example, resource room).</p>  |
| Problems of Social skills             | <p>33) Teachers are creating groups that children can participate in. (Example small group).</p> <p>34) Teachers have created some opportunities to individually teach the skills required to join the group. (Example talking, greetings)</p> <p>35) Teachers are examining opportunities for small group coaching.</p>   |
| Problems of attention                 | <p>36) Teacher promises with the child how to act in a concrete way, such as what to do when concentration is broken or when they cannot stay still.</p> <p>37) As well as listening to lessons, incorporate specific activities.</p>  |
| Problems of language                  | <p>38) From time to time, teachers ask questions and make sure that children understand the instructions.</p> <p>39) It is made to add an explanation individually to the weak child of the instruction understanding.</p> <p>40) For children who cannot understand with only listening, teacher use pictures, drawings, etc. to compensate.</p> <p>41) Teachers sometimes take time to listen slowly to children who are not good at explaining.</p> |
| Problems of movement                  | 42) Teachers are careful not to refuse the participation of learning from the clumsy of the hand and the poorness of exercise.   |
| Problems of emotion                   | <p>43) Teachers are making chance for children to be praised in the day.</p> <p>44) Sometimes teachers put in activities that children can do my best.</p> <p>45) Sometimes teachers have some opportunities to tell the children about their growing point.</p>   |

|  |  |
|--|--|
|  | 46) Teachers have some opportunities to listen complaints about things that children are suffering in school life. |
|  | 47) Teachers are looking for and presenting something those children like school more.                             |

The questionnaire for management position teachers and special needs education coordinator made by one large category, such as School environment and 6 small categories, such as Organization, Understanding/enlightenment, Discovery, Understanding and analysis, Consideration/support, Evaluation, Transition support.

Questionnaire items for management position teachers and special needs education coordinator are as follows.

Table 3 Questionnaire items for management position teachers and special needs education coordinator

| School environment          |   |
|-----------------------------|---|
| Organization                | 1) The in-school committee was able to operate properly (members, frequency, etc.).<br>2) The interval between the in-school committees was set to be appropriate.<br>3) Information was shared and organized by joint holdings with other sectional meetings.<br>4) In addition to the members of the in-school committee, the necessary persons at that time participated in the in-school committee (teachers, former home teachers, assistant, School Social Workers etc.).<br>5) The conclusions obtained as a result of the review by the in-school committee were effectively utilized and functioned within the school.<br>6) When carrying out the support meeting, the in-school committee examined the main sheet after hearing the views of the parents in advance. |
| Understanding/enlightenment | 7) As the in-school committee, they introduced the necessary materials for understanding developmental disorders etc. to the school teachers.<br>8) As the in-school committee, they set up an in-service training or invited learning opportunities for the school teachers.<br>9) We made an opportunity to deepen individual child understanding by each teacher (for example, Case Study).<br>10) Encouraged the teachers in the school to participate in workshops outside the school necessary for understanding developmental disorders etc.   |
| Discovery                   | 11) We have created an opportunity for each schoolroom to report to the in-school committee about children who have special educational needs.<br>12) We made the opportunity to examine children who have special educational needs in the in-school committee from professional viewpoints (visiting consultation, education consultation etc.).<br>13) About children with special educational needs, we put their name on the list as a grasp child of the in-school committee.<br>14) For children other than those listed on the in-school committee's list, we urged them to the learning situation.<br>15) The in-school committee examined the confirmation of the replacement of the in-school committee's list of the school board inherited from last year.         |

|                            |   |
|----------------------------|---|
| Understanding and analysis | <p>16) The in-in-school committee<sup>1</sup> and the home teacher worked together to create a factsheet of children for the children were listed (listed at the end of the year).</p> <p>17) Based on the factsheet of children, it was linked to the writing of individualized teaching plans.</p> <p>18) In writing individualized teaching plans, collaboration of the expert was carried out (visiting consultation etc.).</p> <p>19) An individualized teaching plan has been written that takes into consideration the content of instruction at the related learning place (resource room and medical institutions).</p>  |
| Consideration/ support     | <p>20) We have had the opportunity to consider the specific method of teaching at the in-school committee with home teacher.</p> <p>21) The in-school committee has set up some opportunities to receive regular advice from the expert on the guidance of the homeroom teacher as needed.</p>  |
| Evaluation                 | <p>22) At the end of the semester, the in-school committee manages the evaluation description of the individualized teaching plan.</p> <p>23) Shared with parents about evaluation of individualized teaching plan.</p> <p>24) Based on the evaluation of the individualized teaching plan, we set the educational target for the next semester and next year.</p> <p>25) We made improvements to make the evaluation objective, such as confirmation with multiple people.</p>   |
| Transition support         | <p>26) As the in-school committee, we adopted a method to ensure an appropriate handover between the previous year's homeroom teacher and the current year's homeroom teacher.</p> <p>27) We confirmed the correction of the factsheet at the end of the year.</p> <p>28) Write new individualized educational plans consistent with the content of the previous year's individualized educational plan.</p>  |
| Cooperation                | <p>29) We provided some opportunities to share information throughout the school about children whose response should be decided throughout the school. (Conduct of general meeting)</p> <p>30) We made some opportunities to communicate with the person in charge about the children who use resource room or medical institutions.</p> <p>31) We had opportunities to continuously collect and examine information about the children we listed at the in-school committee.</p> <p>32) We were able to respond appropriately to the cooperation with parents who are considered to be better not only to be the homeroom teacher but also the in-school committee.</p> <p>33) About child having A city support file, we cooperated with specialized institution, municipal board of education, research institute and were able to hold support meeting systematically.</p> |

2) The questionnaire for all elementary school (from 1<sup>st</sup> to 6<sup>th</sup> grade) and junior high school (from 7<sup>th</sup> to 9<sup>th</sup> grade) teachers in A City were answered. Table 4 is the number of school students, classes and teachers for each school.

B elementary school and C elementary school, D elementary school, E elementary school, F elementary school students go to I junior high school from 7<sup>th</sup> grade. G elementary school students go to J junior high school from 7<sup>th</sup> grade. H elementary school students go to K junior high school from 7<sup>th</sup> grade.

Table 4 The number of each school students (S), classes (C) \* and teachers (T) \*\*

| Elementary school  |     |           |    |     |           |    |     |           |    |    |          |    |    |          |          |     |           |          |    |          |   |
|--------------------|-----|-----------|----|-----|-----------|----|-----|-----------|----|----|----------|----|----|----------|----------|-----|-----------|----------|----|----------|---|
|                    | B   |           |    | C   |           |    | D   |           |    | E  |          |    | F  |          |          | G   |           |          | H  |          |   |
|                    | S   | C         | T  | S   | C         | T  | S   | C         | T  | S  | C        | T  | S  | C        | T        | S   | C         | T        | S  | C        | T |
| 2017               | 105 | 9<br>(3)  | 14 | 470 | 24<br>(7) | 31 | 166 | 10<br>(3) | 13 | 82 | 8<br>(2) | 10 | 78 | 7<br>(1) | 10       | 163 | 10<br>(3) | 15       | 49 | 5<br>(1) | 7 |
| 2018               | 111 | 9<br>(3)  | 13 | 464 | 23<br>(7) | 30 | 183 | 10<br>(3) | 13 | 71 | 8<br>(2) | 10 | 81 | 8<br>(2) | 10       | 159 | 10<br>(3) | 14       | 45 | 5<br>(1) | 7 |
| Junior high school |     |           |    |     |           |    |     |           |    |    |          |    |    |          |          |     |           |          |    |          |   |
|                    | I   |           |    |     |           |    |     |           |    |    |          |    | J  |          |          | K   |           |          |    |          |   |
|                    | S   | C         | T  |     |           |    |     |           |    |    |          |    |    | S        | C        | T   | S         | C        | T  |          |   |
| 2017               | 375 | 15<br>(3) | 33 |     |           |    |     |           |    |    |          |    |    | 88       | 4<br>(1) | 13  | 24        | 4<br>(1) | 10 |          |   |
| 2018               | 375 | 15<br>(3) | 33 |     |           |    |     |           |    |    |          |    |    | 74       | 5<br>(2) | 13  | 27        | 4<br>(1) | 9  |          |   |

\* The number of class shows 'Total class numbers (Special class numbers)'.

\*\* The number of teachers includes Management position teacher and Special Needs Education Coordinator.

The questionnaire evaluation index was from 1 (bad), 2 (mediocre), 3 (good), 4 (very good).

The mean score of questionnaires (Pretest) for elementary school teachers and junior high school teachers as follows.

Table 5 The mean score of questionnaires (Pretest, November 2017) for elementary school teachers and junior high school teachers

|  | Elementary school |     |     |     |     |     |     | Junior high school |     |     |
|--|-------------------|-----|-----|-----|-----|-----|-----|--------------------|-----|-----|
|  | B                 | C   | D   | E   | F   | G   | H   | I                  | J   | K   |
| Learning environment                       |                   |     |     |     |     |     |     |                    |     |     |
| Structuring the place                      | 3.3               | 3.1 | 3.4 | 2.8 | 3.1 | 3.4 | 3.1 | 3.3                | 3.2 | 3.3 |
| Adjustment of stimulation                  | 3.6               | 3.1 | 3.5 | 3.1 | 3.1 | 3.6 | 3.4 | 3.0                | 3.0 | 2.7 |
| Clarification of rules                     | 3.2               | 2.9 | 3.0 | 3.0 | 3.0 | 3.2 | 3.3 | 3.2                | 2.9 | 3.1 |
| Invention of mutual understanding in class | 3.2               | 2.9 | 3.2 | 2.8 | 3.0 | 3.3 | 3.4 | 2.9                | 2.7 | 2.9 |
| Teaching method at lessons                 |                   |     |     |     |     |     |     |                    |     |     |
| Structuring time                           | 3.4               | 3.1 | 3.2 | 3.1 | 3.1 | 3.3 | 3.4 | 3.2                | 3.3 | 3.2 |
| Invention of information transmission      | 3.0               | 3.0 | 2.9 | 3.0 | 3.0 | 3.2 | 3.3 | 3.0                | 3.3 | 3.5 |
| Promotion of participation                 | 3.1               | 2.9 | 3.2 | 2.8 | 3.0 | 3.3 | 3.3 | 3.0                | 3.1 | 3.3 |
| Structure of content                       | 3.4               | 3.0 | 3.2 | 2.9 | 3.1 | 3.3 | 3.1 | 3.1                | 3.2 | 3.2 |
| Individual support                         |                   |     |     |     |     |     |     |                    |     |     |
| General problems                           | 2.8               | 2.8 | 3.0 | 2.6 | 2.8 | 3.2 | 2.8 | 2.8                | 2.8 | 3.1 |
| Problems of learning                       | 2.9               | 2.8 | 2.8 | 2.7 | 3.0 | 3.1 | 3.2 | 2.6                | 2.6 | 2.5 |
| Problems of social skills                  | 2.7               | 2.9 | 3.0 | 2.9 | 3.1 | 3.2 | 3.0 | 2.8                | 2.8 | 2.8 |
| Problems of attention                      | 3.3               | 2.9 | 3.2 | 2.9 | 2.9 | 3.5 | 2.7 | 2.8                | 3.1 | 3.2 |
| Problems of language                       | 3.1               | 3.0 | 3.2 | 3.0 | 3.1 | 3.5 | 3.4 | 3.0                | 3.3 | 3.1 |



|                      |     |     |     |     |     |     |     |     |     |     |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Problems of movement | 2.8 | 2.9 | 3.1 | 2.9 | 3.1 | 3.2 | 3.0 | 3.0 | 3.2 | 2.8 |
| Problems of emotion  | 3.0 | 2.9 | 3.1 | 2.9 | 3.1 | 3.4 | 3.5 | 3.0 | 3.0 | 2.7 |

The survey results showed that the average value of elementary school teacher was 2.9 and the average value of junior high school teacher was 3.0.

3) After giving feedback focusing on the strength and problems of each school, we conducted consultation through visiting consultation, teacher's training meeting, and implementation of student support meetings. Moreover, we advised individual education reasonable accommodations should be connected with the contents of individualized teaching plan.

The mean score of questionnaires (Posttest) for elementary school teachers and junior high school teachers as follows.

Table 6 The mean score of questionnaires (Posttest, June 2018) for elementary school teachers and junior high school teachers

|  | Elementary school |     |     |     |     |     |     | Junior high school |     |     |
|--|-------------------|-----|-----|-----|-----|-----|-----|--------------------|-----|-----|
|  | B                 | C   | D   | E   | F   | G   | H   | I                  | J   | K   |
| Learning environment                       |                   |     |     |     |     |     |     |                    |     |     |
| Structuring the place                      | 3.2               | 3.0 | 3.2 | 2.9 | 3.0 | 3.2 | 3.1 | 3.1                | 3.4 | 3.3 |
| Adjustment of stimulation amount           | 3.3               | 2.8 | 3.4 | 2.9 | 3.1 | 3.5 | 2.9 | 2.9                | 3.2 | 3.1 |
| Clarification of rules                     | 2.8               | 2.6 | 3.0 | 2.8 | 2.6 | 3.3 | 3.1 | 3.1                | 3.0 | 3.0 |
| Invention of mutual understanding in class | 2.8               | 2.5 | 2.7 | 2.8 | 2.8 | 3.0 | 3.1 | 2.8                | 2.9 | 3.1 |
| Teaching method at lessons                 |                   |     |     |     |     |     |     |                    |     |     |
| Structuring time                           | 3.0               | 2.7 | 3.0 | 2.8 | 2.8 | 3.2 | 3.2 | 3.2                | 3.4 | 3.3 |
| Invention of information transmission      | 2.8               | 2.4 | 2.9 | 2.9 | 2.8 | 3.2 | 3.1 | 2.9                | 3.3 | 3.1 |
| Promotion of participation                 | 2.8               | 2.5 | 3.1 | 2.9 | 2.8 | 3.2 | 3.1 | 3.0                | 3.1 | 3.0 |
| Structure of content                       | 2.9               | 2.5 | 3.0 | 2.9 | 2.5 | 3.2 | 3.1 | 3.0                | 3.2 | 3.0 |
| Individual support                         |                   |     |     |     |     |     |     |                    |     |     |
| General problems                           | 2.8               | 2.3 | 2.8 | 2.6 | 2.6 | 3.0 | 2.8 | 2.6                | 3.0 | 2.8 |
| Problems of learning                       | 2.6               | 2.3 | 2.8 | 2.4 | 2.8 | 3.3 | 3.1 | 2.6                | 2.8 | 2.9 |
| Problems of social skills                  | 2.7               | 2.4 | 2.9 | 2.7 | 2.8 | 3.1 | 2.9 | 2.8                | 2.6 | 2.8 |
| Problems of attention                      | 2.7               | 2.6 | 3.0 | 2.9 | 3.1 | 3.4 | 2.9 | 2.8                | 2.9 | 3.0 |
| Problems of language                       | 3.1               | 2.6 | 2.9 | 3.1 | 2.8 | 3.4 | 3.3 | 3.0                | 3.2 | 3.0 |
| Problems of movement                       | 2.7               | 2.5 | 2.9 | 2.9 | 2.9 | 3.2 | 3.0 | 2.7                | 2.9 | 2.9 |
| Problems of emotion                        | 2.8               | 2.6 | 2.7 | 3.0 | 2.8 | 3.2 | 3.0 | 2.8                | 3.1 | 2.7 |

4) Questionnaire as a posttest the average value of elementary school teacher was 2.9, and the average value of junior high school teacher was 3.0.

The mean score of questionnaires for management position teachers and special seeds education coordinator are as follows.

Table 7 The mean score of questionnaires (Pretest, June 2018) for management position teachers and special seeds education coordinator

|                             | Elementary school |     |     |     |     |     |     | Junior high school |     |     |
|-----------------------------|-------------------|-----|-----|-----|-----|-----|-----|--------------------|-----|-----|
|                             | B                 | C   | D   | E   | F   | G   | H   | I                  | J   | K   |
| School environment          |                   |     |     |     |     |     |     |                    |     |     |
| Organization                | 3.1               | 3.1 | 2.9 | 3.1 | 3.0 | 3.1 | 2.8 | 3.1                | 2.5 | 3.2 |
| Understanding/enlightenment | 2.8               | 2.8 | 2.4 | 2.6 | 3.0 | 2.8 | 2.5 | 3.1                | 2.3 | 2.4 |
| Discovery                   | 2.7               | 2.6 | 2.6 | 2.5 | 2.9 | 3.3 | 2.8 | 2.7                | 3.8 | 2.5 |
| Understanding and analysis  | 2.7               | 2.4 | 2.9 | 3.0 | 2.8 | 3.1 | 2.4 | 2.8                | 2.5 | 3.2 |
| Consideration/support       | 2.7               | 3.1 | 2.8 | 2.8 | 2.7 | 3.0 | 2.5 | 2.5                | 3.0 | 2.6 |
| Evaluation                  | 2.3               | 2.4 | 2.5 | 2.3 | 3.0 | 3.2 | 1.5 | 2.8                | 1.5 | 3.1 |
| Transition support          | 2.9               | 2.4 | 3.0 | 2.6 | 2.8 | 3.2 | 2.0 | 2.8                | 4.0 | 3.0 |
| Cooperation                 | 3.2               | 2.9 | 3.1 | 3.1 | 3.1 | 3.4 | 2.5 | 3.2                | 3.6 | 3.4 |

The questionnaire to principals consisted 33 items, focusing on the managing school environment. The average value of the survey results was 2.8.

5) Continuing the consultative intervention with re-focused on each school's features and challenges. By comparing with several schools, the characteristics of their school had come to be seen each other. By comparing with several schools, the characteristics of their school had come to be seen. With the result of pretest and through face-to-face consultation for goal setting the points that each school wanted to focus on have come to light.

For continuing the consultative intervention, we re-examined the questionnaire and intervention method as following reasons. First, the pretest and posttest scores did not improve. Second, questionnaire items are too many; it is difficult to always be aware during class. Third, the large categories such as learning environment and teaching method in classes score were relatively improved; on the other hand individual support score was still challenge for teachers.

We conducted a survey of Individual support only as a modified version.

The mean score of revised questionnaires for elementary school teachers and junior high school teachers as follows.

Table 8 The mean score of revised questionnaires (November 2018) for elementary school teachers and junior high school teachers.

|                           | Elementary school |     |     |     |     |     |     | Junior high school |     |     |
|---------------------------|-------------------|-----|-----|-----|-----|-----|-----|--------------------|-----|-----|
|                           | B                 | C   | D   | E   | F   | G   | H   | I                  | J   | K   |
| Individual support        |                   |     |     |     |     |     |     |                    |     |     |
| General problems          | 2.6               | 2.7 | 3.1 | 2.7 | 3.1 | 3.1 | 3.0 | 2.8                | 3.0 | 3.0 |
| Problems of learning      | 2.8               | 2.8 | 2.8 | 2.6 | 2.9 | 3.1 | 2.7 | 2.5                | 2.8 | 2.8 |
| Problems of social skills | 2.8               | 2.8 | 3.0 | 2.7 | 2.7 | 3.0 | 3.1 | 2.7                | 2.9 | 2.9 |
| Problems of attention     | 3.0               | 3.1 | 3.1 | 2.9 | 2.9 | 3.0 | 2.9 | 2.8                | 3.1 | 3.3 |
| Problems of language      | 3.1               | 3.1 | 3.2 | 3.1 | 2.9 | 3.3 | 3.1 | 3.0                | 3.1 | 3.2 |

|                      |     |     |     |     |     |     |     |     |     |     |
|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Problems of movement | 3.0 | 3.2 | 3.1 | 2.9 | 2.7 | 3.1 | 2.8 | 2.9 | 3.0 | 3.0 |
| Problems of emotion  | 2.8 | 3.0 | 2.9 | 2.8 | 2.9 | 3.3 | 3.0 | 2.7 | 2.8 | 2.9 |

The survey results showed that the average value of elementary school teacher was 3.0 and the average value of junior high school teacher was 2.9.

The mean score of questionnaires for management position teachers and special needs education coordinator are as follows.

Table 9 The mean score of questionnaires (Posttest, November 2018) for management position teachers and special needs education coordinator

|                             | Elementary school |     |     |     |     |     |     | Junior high school |     |     |
|-----------------------------|-------------------|-----|-----|-----|-----|-----|-----|--------------------|-----|-----|
|                             | B                 | C   | D   | E   | F   | G   | H   | I                  | J   | K   |
| School environment          |                   |     |     |     |     |     |     |                    |     |     |
| Organization                | 3.5               | 3.2 | 2.9 | 3.1 | 2.4 | 3.3 | 2.7 | 2.8                | 3.2 | 3.2 |
| Understanding/enlightenment | 2.9               | 3.5 | 2.5 | 2.5 | 2.4 | 2.9 | 2.0 | 2.7                | 2.9 | 3.0 |
| Discovery                   | 3.5               | 3.1 | 2.8 | 2.9 | 2.8 | 3.6 | 2.5 | 2.6                | 3.6 | 3.2 |
| Understanding and analysis  | 3.2               | 3.2 | 2.4 | 3.0 | 2.6 | 3.5 | 2.8 | 3.7                | 3.5 | 3.3 |
| Consideration/support       | 3.2               | 3.7 | 2.9 | 3.0 | 2.5 | 3.4 | 3.0 | 3.1                | 2.9 | 3.4 |
| Evaluation                  | 2.7               | 3.0 | 2.3 | 2.8 | 2.3 | 3.2 | 1.3 | 3.7                | 2.6 | 3.1 |
| Transition support          | 3.1               | 3.3 | 2.4 | 2.8 | 2.7 | 3.8 | 1.8 | 3.7                | 3.5 | 3.6 |
| Cooperation                 | 3.7               | 3.5 | 3.2 | 2.9 | 2.9 | 3.6 | 2.8 | 3.3                | 3.8 | 2.8 |

The average value of the survey results was 2.8.

#### 4. The next steps

This research conclusions and implications lead next steps to future research directions. We will continue research project and analyses the future conclusions from a worldwide perspective.

For teachers, we will conduct a survey with questionnaires in June 2019 as a focused survey. This questionnaire survey will be continued because it has the meaning of the teacher's awareness for universal design of lessons as well as the understanding the actual situation. As a questionnaire improvement point, not only the "individual consideration" category but two self-selected items will be set. This is to have them pursue the universal design of lessons that they want to put their effort into.

For the management position teachers and special needs education coordinator, we will also conduct a survey with questionnaires in June 2019 as a focused survey. Their task is based on the universal design of lessons, in order to create inclusive school organization. We will give revised questionnaire with three common categories and their selection categories. The reasons we revised are as follows.

The first is "Evaluation". Evaluation category has a problem because no improvement is seen. In addition, we judged that there was room for improvement as a practice..

The second is "Cooperation". It is because each school needs to focus on collaboration within the school also, and it is necessary to support On the Job Training, assuming young new teachers as well. In addition, cooperation with special classes within the regular school is required. And more this is because the emphasis

is placed on the setting of support meetings for each student and the creation of support files (individualized education support plans) as without school collaboration.

Third is "Organization". The management position teachers and special needs education coordinator must think about the establishment of a system as indirect teaching skills rather than direct teaching skills.

In addition, the management position teachers and special needs education coordinator will set up two categories that they want to put their strength as a school. The purpose is to have school staffs pursue universal design of lessons that make use of the characteristics of each school by themselves.

Provide feedback on lesson studies and visiting consultations, in-school lecture and continue on consultation. We will discuss specifically how to confirm the strengths of the school and how to improve the weakness.

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<sup>1</sup> Committee for Special needs education led by a principal in order to establish support system through the entire school(References, ISOGAI Keitaro, Recent Policy and Status on Special Needs Education in Japan – Promoting an Inclusive Education System –,NISE Bulletin,Vol. 16,2017,28-32).