# 일본 오키나와 낙도형 통합교육 모델 개발을 위한 발전과제 -낙도의 특수교육 특징과 IEAT평가 결과의 비교분석을 중심으로-

Tasks to Develop the Inclusive Education Model for Remote Islands in Okinawa,

Japan

-Centering on the Analysis of the Characteristics of Remote Islands and the Results of Inclusive Education Assessment Tool (IEAT)-

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#### 요약

본 연구의 목적은 일본 오키나와현에 위치한 낙도의 특수교육 특징과 특수교육 추진현황을 비교 분석하여 낙도형 통합교육 모델 개발을 위한 발전과제를 제안하는 것이다. 이를 위해 일본 오키나와현에 위치한 낙도의 특수교육 시스템을 평가하기 위하여 IEAT를 활용한 설문조사를 실시하였고 설문조사 결과를 바탕으로 t-test를 실시하였다.

연구 결과를 바탕으로 통합교육 시스템 구축 모델 사업 성과보고서(2016)에서 제시한 과제와 본 연구의 분석결과를 비교분석하여 낙도의 통합교육 모델을 개발하기 위한 발전 과제를 다음과 같이 제시하였다. 향후 낙도의 통합교육 모델을 개발하기 위해서는 첫째, 특수교육의 전문성을 확보해야 하며 둘째, 다직종 다기관과의 연계가 이루어져야 할 것이며 셋째, 장애에 대한 이해를 촉진시켜야 할 것이다. 넷째, 장애학생 의 자립성 향상을 위한 노력이 필요하며 마지막으로 교육 시스템과 관련된 공평성을 확보해야 할 것이다.

■ 중심어: | 낙도 특수교육 | 낙도 통합교육 | 낙도형 통합교육모델 | 특수교육 평가 |

#### **Abstract**

This study aimed to suggest the tasks to develop the Inclusive Education Model for Remote Islands by analyzing the characteristics of special needs education in remote islands of Okinawa, Japan and the current states of the implementation of special needs education in them. For these purposes, the survey using the Inclusive Education Assessment Tool (hereafter IEAT) was conducted to evaluate the special needs education system of remote islands of Okinawa and its results were analyzed through t-test.

Finally, the tasks to develop the inclusive education model for remote islands by comparing and analyzing the results of this study with the tasks that were proposed in the Outcome Report on the Project to Build Inclusive Education System Model(2016) were suggested as follows: first, the expertise of special needs education should be guaranteed; second, the network among various professionals and organizations needs to be established; third, the awareness of disabilities needs to be promoted; fourth, the independence of students with disabilities needs to be improved; and finally equal opportunity should be guaranteed.

■ keyword : | Special Needs Education in Remote Islands | Inclusive Education in Remote Islands | Inclusive Education Model for Remote Islands | Special Needs Education Assessment |

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#### I. Introduction

#### Theoretical Backgrounds

The report by the Ministry of Education, Culture, Sports, Science and Technology(MEXT)(2012)[3] suggested that the inclusive education should be pursued to establish the society that its members protect the rights of persons with disabilities and help each other in the situation that the entire number of students has been decreasing but that of students with disabilities increasing.

Han and et al. (2013)[6], however, have pointed out that the ideals and system of inclusive education that consider the cultural and social background of Japan have not been fully established after examining the ideals and systems for inclusive education of Japan and other countries. Furthermore, the Special Committee for the Development of Special Needs Education (2010) pointed out the measures to be carried out for the implementation of inclusive education in the field of education such as the reform of consciousness, the improvement of teaching methods and the improvements of educational environments in the aspects of personnel and materials.

The MEXT has conducted the Project to Build Inclusive Education System Model to promote the inclusive education to solve the problems that have interfered the building and implementation of inclusive education system in Japan. The Project to Build Inclusive Education System Model aimed to collect the successful cases of schools that have provided the proper supports for the studies and school life of students with disabilities, to conduct the studies on the exchanges between students with and without disabilities and the classes which students with and without disabilities participate in together and to distribute the results of the Project. The

Miyako and Yaeyama, the remote islands of Okinawa in Japan, were designated as the subjects of the Project to Build Inclusive Education System Model in 2013.

The Outcome Report on the Project to Build Inclusive Education System Model(2014)[2] showed that there were differences among schools in the levels of the system for students with disabilities such as the regular meetings of intramural committee and the provision of the tailored supports for individual students in Miyako area. Therefore, the guidance and supports should be expanded to all the teachers including teachers of special class, teachers in charge of special education in regular class and teachers in regular class.

Sasayama et al.(2011)[8] pointed out the problems of special needs education in the remote islands and rural areas, which show overall insufficiency of the support system for special needs education as follows: first, there are many areas where don't open up to special needs education in remote islands and rural areas due to the insufficient awareness of special needs education; second, there are not sufficient facilities for special needs education such as schools, medical facilities or nursing facilities; and third, there are differences among areas in the systems to connect special schools and medical facilities and to train teachers.

Even though many issues of the special needs education and inclusive education in the remote islands and rural areas have been raised, however, there have been very few studies on them. In particular, there are almost no studies on them in remote islands.

In this context, this study aimed to suggest the tasks to develop the Inclusive Education Model for Remote Islands by analyzing the current situation of the implementation of inclusive education in the remote islands of Okinawa in Japan.

# 2. Purposes of Study

This study aimed to suggest the tasks to develop the Inclusive Education Model for Remote Islands by comparing and analyzing the characteristics of special needs education of remote islands in Okinawa Prefecture and the current situation of the implementations of special needs education in those islands.

For the analysis of the current situation of the implementation of special needs education in remote islands, the Inclusive Education Assessment (hereafter, IEAT), which was developed by Han, Yano and Yonemizu (2015)[5] was employed.

#### II. Research Methods

# 1. Subjects

To evaluate the special needs education system of remote islands in Okinawa Prefecture, the survey was conducted for 39 special needs education coordinators from Miyako area and 57 from Yaeyama area who participated in the Workshop for Special Needs Education Coordinators, which was held by the Okinawa Prefectural Board of Education between April and May, 2015. In addition, the survey was also conducted for 68 teachers from Miyako area and 49 from Yaeyama area who participated in the course for in-service teachers who want to attain the special education teacher license by Okinawa Prefectural Board of Education in August, 2015.

# 2. Research Methods

For this study, the survey was conducted using the IEAT to evaluate the special needs education system in remote islands of Okinawa Prefecture.

The questionnaires were distributed and collected after explaining the purposes and the privacy protection policy of this study to the participants of the Workshop for Special Needs Education Coordinators in April and May, 2015 and the course for in-service teachers who want to attain the special education teacher license by Okinawa Prefectural Board of Education in August, 2015 and then gaining the agreements from them.

#### 3. Contents of Questionnaire

The questionnaire was composed of the general information on the respondents, the IEAT and the tasks for the development of special needs education of remote islands.

#### (1) General Information on Respondents

General information is divided into two; one is basic general information such as gender and age; and the other is the information on the qualification and experiences related to special needs education such as the retention of special education teacher license, working period in the current position, working period in the special school, working period in the special class, working period as the special needs education coordinator, working period in the Board of Education and the period that respondents have(had) been in charge of special needs education in the Board of Education.

# (2) IEAT

IEAT developed by Han and et al. (2015) is the tool to evaluate the current situation of the special needs education in Japan in the perspective of inclusive education.

11 items of three domains in the IEAT were evaluated using 5-point scale; strongly disagree, disagree, neutral, agree and strongly disagree.

Each answer of questions was changed to the corresponding score (strongly agree = 5, agree = 4, neutral = 3, disagree = 2 and agree = 1) and the subtotals of three domains were added to produce the total score of IEAT.

# (3) The Tasks for the Implementation of Inclusive Education System

As to the tasks to implement the inclusive education system, the opinions were asked to accomplish 11 issues from 11 items of IEAT, which was used by Yano and et al.(2015). Respondents were asked to evaluate each item via four-point scale; 1 = doesn't need to be done, 2 = doesn't need to be done in priority, 3 = needs to be done in priority and 4 = needs to be done in top priority

# 4. Data Analysis

T-test was conducted to analyze the differences among the IEAT scores by the areas (Miyako and Yaeyama) and occupations (special needs education coordinator or others).

# III. Analysis Results

#### 1. Return Rate of Questionnaire

The return rate of questionnaire was 94.37%; 201 respondents out of 213 special needs education coordinators and teachers.

# 2. General Information on Respondents

Among 201 respondents, number of females was 155(77.1%) and that of male, 74(22.4%). Average age of respondents was 37.3 and their ages varied from 22 to 59. 31(15.4%) respondents retain the special education teacher license and 169 (84.1%) don't. The summary of the general information on respondents is

shown in [Table 1].

Table 1. General Information on Respondents

(11-201)		
Items		Average / Standard Deviation
Age		37.31years ±9.08years
Gender		Female 155(77.1%) Male 74(22.4%) No response 1(0.05%)
Retention of special education teacher license		With 31(15.4%) Without 169(84.1%) No response 1(0.05%)
Working period	Total	12.20 years ±9.06 years
	Special school	0.87years ±3.26years
	Special class	0.43 years ±1.47 years
	Special needs education coordinator	0.84 years ±1.66 years
	Board of Education	0.18 years ±1.08 years
	Persons in charge of special needs education in Board of Education	0.01 years ±0.08 years

#### 3. Results of IETA

#### 3.1 Scores of Each Domain of IEAT

# (1) Guarantee of Rights

The scores of items of the domain of Guarantee of Rights varied from 5 to 15 and its average score was 11.59.

#### (2) Improvement in Environment

The scores of items of the domain of Improvement in Environment varied from 5 to 19 and its average score was 12.31.

#### (3) Reform in Curriculum

The scores of items of the domain of Reform in Curriculum varied from 4 to 18 and its average score was 10.72.

If the scores of domains are converted on a maximum scale of 100 points, the score of the Guarantee of Rights was the highest and that of Improvement in Environment was the lowest; the score of Guarantee of Right becomes 77.28;

Improvement in Environment, 61.57; and Reform in Curriculum, 53.63[Figure 1].

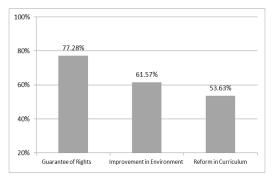


Figure 1. Average Scores of Domains of IEAT

#### 3.2 Scores of Items of IEAT

### (1) Average Score of 11 Items

In the results of the analysis of the average score of 11 items from Q1 to Q11, the score of Q1. The Guarantee of the Right to Education was the highest and Q2. The Guarantees of Extracurricular Activities (3.80) and Equal Opportunity (3.77) were ranked next in descending order.

The score (2.08) of Q11 The Cultivation of the Leaders who work for inclusive society was the lowest and Q9 The Facilitation of the Participation of Community in the inclusive education and Q10 The Promotion of the Awareness of Disabilities were ranked next with the same score of 2.82[Figure 2].

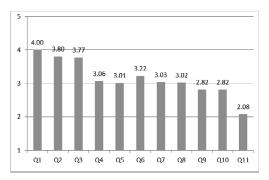
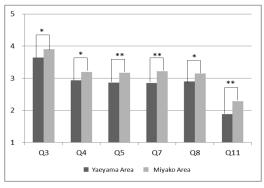


Figure 2, Average Scores of 11 Items of IEAT

(2) Scores of Items by Areas (Results of t-test) The t-test was conducted to analyze the differences in the scores of 11 items by the areas such as Miyako and Yaeyama.

In the results of t-test, the differences were shown in the six items (p<0.05); Q3. the guarantee of equal opportunity (t=-1.82, p=0.035), Q4. Improvement of the learning environment (t=-1.80, p=0.037), Q5. Improvement of the expertise of teachers (t=-2.39, p=0.009), Q7. the network among various professionals and organizations (t=-2.64, p=0.004), Q8. Improvement of independence (t=-1.68, p=0.047) and Q11. the cultivation of the leader (t=-2.87, p=0.002)[Figure 3].



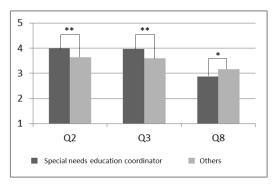
\*p<.05, \*\*p<.01

Figure 3. The t-test Results of the Scores of Items of IEAT by Areas

The t-test results show that the inclusive education system has been developed in Miyako area more than in Yaeyama, which can be caused by the differences of geographical characteristics between two areas. Since, Miyako area is composed of only one island, while Yaeyama area is composed of several islands, it can be assumed that the sharing of information on inclusive education and the utilization of human resources have been easier and the inclusive education system could be relatively more developed.

# (3) Scores of Items by the Types of Occupations (Results of t-test)

The t-test was conducted to analyze the differences in the scores of 11 items by the types of occupations by dividing the occupations into special needs education coordinators and others. In the results of t-test, the differences were shown in the three items (p<0.05); Q2. The guarantee of extracurricular activities (t=3.06, p=0.002), Q3. the guarantee of equal opportunity (t=3.09, p=0.002) and Q8. Improvement of independence (t=2.30, p=0.023)[Figure 4].



\*p(.05, \*\*p(.01

Figure 4. The t-test Results of the Scores of Items of IEAT by Occupations

As shown in the [Figure 5], the scores of Q2 and Q3 given by special needs education coordinators were higher than those by others, but the scores of Q8 given by other occupations were higher than those by special needs education coordinators.

Special needs education coordinators connect and collaborate with organizations or/and employees who are related to special needs education and inclusive education to provide proper supports for the learning of students with disabilities Therefore, it can be assumed that the reason that the scores of Q2 and Q3 given by special needs education coordinators were higher than those given by others is because their priority is the guarantee of the rights of children with

disabilities.

Furthermore, since the special needs education coordinators have the more expertise in special needs education than respondents with other occupations, the evaluation about Q8 would be done more strictly than respondents with other occupations.

# Tasks for the Implementation of Inclusive Education System

The priority of the tasks for the implementation of inclusive education system was investigated based on the 11 items of IEAT.

The results of the survey show that almost every item should be improved. The item that the response of 'needs to be done in top priority' is given most frequently was the task 4. the improvement of learning environment(75.1%). When translating the responses of 'needs to be done in top priority' and 'needs to be done in priority' to 'needs to be done', 99.5% of respondents answered that Task 3. the guarantee of equal opportunity, Task 7. the network with various professionals and parents, Task 8. the improvement of independence and Task 10. the promotion of the awareness of disabilities need to be improved.

If the scores of tasks are compared with those of items of IEAT, even though the average score of IEAT of Q3 the guarantee of equal opportunity was 3.77, which was a relatively high score meaning that the respondents agreed that equal opportunity has been improved, the 99.5% of respondents answered that Q3 still needs to be improved. This result can be interpreted that the more efforts to guarantee the equal opportunity need to be taken; even though children with disabilities have been given the opportunities to participate in various learning and school activities, it wasn't enough to guarantee equal opportunity for students with disabilities.

As to Q11 the cultivation of leader, its scores of IEAT was 2.08, which was the lowest score, but the priority in the ranks of Tasks was also relatively lower than other Tasks. This result could be interpreted that the insufficient awareness of the cultivation of leaders would be led to the responses of the low priority in the Tasks, because the sharing of the information on the cultivation of leader has not been sufficiently carried out.

# IV. Conclusion and Suggestions

This study aimed to suggest the tasks to develop the inclusive education model for remote islands in Okinawa Prefecture, Japan. In results of this study, the tasks to develop the inclusive education model for remote islands were suggested by comparing and analyzing the results of this study and the tasks that were suggested by the Outcome Reports on the Project to Build Inclusive Education System Model(2014).

First, the expertise of special needs education needs to be improved. The Outcome Report on the Project to Build Inclusive Education System Model(2014) also suggested that the expertise of special needs education needs to be reinforced using the experts on special needs education in, around and beyond the target areas.

The reinforcement of the expertise of special needs education was also suggested as the task from the results of this study. In the results of surveying the priority of the tasks based on the 11 items of IEAT, 94.5% responded that Task 5. the improvement of the expertise needs to be done in priority. Furthermore, the expertise of special needs education needs to be reinforced to develop the inclusive education system for remote islands because there are many areas

where the special needs education is not being implemented due to the geographical characteristics of remote islands.

Second, the network among various professionals and organizations should be established. The Outcome Report on the Project to Build Inclusive Education System Model(2014) also suggested that the network among Prefectural School Education Division(Okinawa Prefectural Board of Education), education office, special schools and the Board of Education should be established.

The results of this study also showed that 99.5% of respondents answered that the Task 7. The network among various professionals and organization needs to be done in priority. Since the special needs education system has not been fully established due to the geographical characteristics of remote islands, the network among various professionals and organizations need to be indispensably reinforced to develop the inclusive education model for remote islands.

Third, the awareness of disabilities needs to be promoted. The Outcome Report on the Project to Build Inclusive Education System Model (2014) suggested the expansion of the participants in the seminars that have been originally held for teachers to persons related to the special needs education in all the areas where the Project has targeted.

In this study, Task 10 The Promotion of the Awareness of Disabilities showed the high response rate (99.5%), which shows that the awareness of disabilities should be positively promoted to develop the inclusive education model for remote islands.

The fourth, the independence of students needs to be improved. The Outcome Report on the Project to Build Inclusive Education System Model (2014) suggested that the efforts to understand students with disabilities should be taken in the multi-levels to help them improve their independence.

The results of this study also shows the importance of the improvement of independence of students with disabilities to develop the inclusive education system for remote islands based on the high response rate(99.5%) of 'needs to be in priority' of Task 8 The Improvement of Independence.

Finally, the equal opportunity needs to be guaranteed. Even though this task has not been mentioned by the Outcome Report on the Project to Build Inclusive Education System Model (2014), 99.5% of respondents in this study answered that Task 3 The Guarantee of Equal Opportunity needs to be done in priority to develop the inclusive education model for remote islands.

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