ISSUES OF SPECIFIC EDUCATIONAL CURRICULUM DEVELOPMENT FOR RESOURCE ROOMS AND SPECIAL NEEDS CLASSES IN JAPANESE HIGH SCHOOLS

Mitsuyo SHIMOJO1) Haruna TERUYA2) Aiko KOHARA2)
Changwan HAN2)

1) Okinawa Prefectural Tomishiro Minami Senior High School, Japan
2) Faculty of Education, University of the Ryukyus, Japan

ABSTRACT

The objective of this study was to clarify the issues related to the establishment of School with Resource Rooms and special needs classes and the specific education curriculum development issues in high schools. For this purpose, using Scale C³, data will be collected from the perspective of career education in high schools, and issues based on data will be clarified. Comparison of self-assessment and teacher-assessment there was a discrepancy in some scores' average scores. There was a large gap in scores between self-assessment and evaluation by others in the scores of "mental and physical health". In addition, there was a difference between the scores of "Information expression" and "information processing". In the results of the average area score of items in the Scale C³, the categories with a low average area score were "decision-making" (3.48) and "carrier design" (3.53) in the evaluation by teacher-assessment. In this study, there were differences in what teachers and students perceived to be needs. Without a curriculum tailored to the needs of students, no teaching effect or educational results can be expected. The Scale C³ used in this study can be used for education curriculum development in the future, since it is possible to grasp the needs from the perspective of career education.

Key-words: resource room in high school, special needs education classroom, curriculum, career education

Corresponding author: hancw917@gmail.com (Changwan HAN: Japan)
I. Introduction

In 2016, the Ordinance for Enforcement of the School Education Act were partially amended to stipulate that "special curricula should be established" in high schools. This has enabled the establishment of school with resource rooms in high schools, which were unable to make a particular education curriculum development. This is partly due to an increase in students with special needs in upper secondary schools. According to the number of cases for consideration for "students with disabilities" in public high school entrance examinations in FY2014, the number has been increasing since 2012, and in 2014, the number of cases increased by 101 compared to the previous fiscal year (Ministry of Education, Culture, Sports, Science and Technology; MEXT, 2016). However, among the "students with disabilities" in this survey, PDD (Pervasive Developmental Disorders), ADHD (Attention-Deficit/Hyperactivity Disorder: ADHD; hereafter, ADHD), and ASD (Autism Spectrum Disorder: ASD; hereafter, ASD) have not been determined based on a diagnosis by a doctor or mental health professional, and therefore some students have not been formally diagnosed. As diagnoses are expected to continue increasing, it is possible that special needs classrooms will be established in addition to School with resource rooms in the future due to changing legislation. In doing so, we need to consider students with special needs' education curriculum development.

Although legislation has been enacted, specific education curriculum development remains challenging. Specific education curriculum development may be provided by the School with resource rooms in elementary and junior high schools or by the education curriculum development of special needs classrooms. Currently, elementary and junior high schools are organized in accordance with the Courses of Study for Elementary and Junior High Schools. Specialized curricula may be utilized (Ordinance for Enforcement of the School Education Act, Article 138) where particularly needed. However, in actual education curriculum development, most schools are responsible for teacher of special needs classrooms (Sato & Urano, 2017). There is also the problem that teachers with low levels of expertise must be used because of the low percentage of educators with special support licenses. The same issues may arise in upper secondary schools in the future.

Practical examples of the implementation of special curricula in upper secondary schools include communication skills, stress management, and career education focusing on self-reliance activities, in addition to the content of the regular Courses of Study in High Schools (MEXT, 2017). In particular, the content of career education is indispensable for high school students in terms of fostering their ability to transition to contributing members of society after graduation. In addition, the practice of self-reliance activities is similar to that of "basic and general-purpose abilities" in career education. "basic and general-purpose abilities" consists of "human relationship formation skill", "self-understanding and self-management skill", "basic skill of respond to tasks" and "career planning skill" (Central Council for Education, 2011). This suggests that career
education is an important factor in organizing special curricula in upper secondary schools.

This study aimed to clarify the issues related to the establishment of schools with resource rooms and special needs classrooms and the specific education curriculum development issues in high schools. For this purpose, data will be collected from the perspective of career education in high schools, and issues based on data will be clarified.

II. Methods

1. Subjects and Procedures

The survey was completed by 158 students in the first year of a high school in Okinawa Prefecture and also the HR teachers’ assessment data of 158 students in charge of the class. The data were collected by mail between July and September 2018. A total of 158 data accomplished questionnaires were collected among the 158 that had been distributed, but of these, only 145 questionnaires (students) and 157 questionnaires (teachers) could be analyzed because of the incomplete responses of the others. After receiving a request for participation from the principal, the students who were able to participate and their HR teachers completed the questionnaire. Students completed the self-assessment scale (high school version) and teachers completed the scale for assessment others while observing the students' school life.

2. Scale for Coordinate Contiguous Career (Scale C³)

Scale C³ was developed as a tool for evaluating and providing continuous support for the career development of high school students into working people (Han, Numadate, Goy, et al., 2018). Currently, scales for self-assessment and others are being developed. Self-assessment scales (for high school students) are highly reliable (Teruya,Yano, Shimojo et al., 2018).

The Scale C³ consists of two domains: “personality” and “career.” “Personality” includes five sub-domains: “mental and physical health”, “inattention”, “hyperactivity/impulsivity”, “adherence”, and “self-esteem”. In the domain of “career”, there are four sub-domains: “human relationship formation skill,” “self-understanding and self-management skill,” “basic skill of respond to tasks,” and “career planning skill.” Within the “human relationship formation skill” sub-domains, there domain additional sub-domains of “appreciating diversity,” “communication skills,” “social skills,” and “self-understanding and self-management skill”, which is further broken down into the sub-domains of “understanding one’s role,” “self-motivation,” “stress tolerance,” and “basic skill of respond to tasks” that are “information acquisition,” “information expression,” “information processing,” and “career planning skill” that are “decision-making” and “carrier design.” The total number of items included in all sub-domains is 92.
Assessments were performed using five choices: "1 = very good", "2 = slightly correct", "3 = neither", "4 = not very good", and "5 = almost none". The score is summed for each sub-domain, and the lower the domain score, the higher the need for that domain.

3. Analytical method

After determining the actual status of students with special needs extrapolated from each domain, the issues of establishing special needs classrooms are discussed. Students with special needs is extrapolated from the scores of self-assessment and others' assessment. The calculation method is "(mean score) - (2standard deviation: SD)" based on the calculation criteria for the cut-off value of IN-Child Record (Han, Yano, Kohara et al., 2017).

In addition, issues in the curriculum will be examined from the perspective of career education from domains with low scores from self-assessment and assessment of others and domain with high scores. With regard to domain in which there is a large gap between self-assessment and the assessment of others, education curriculum development issues will be examined from the perspective of career education.

III. Results

1. Analysis of the situation of students with high special needs

The actual status of students with special needs differs in "information expression," "information processing," and "decision-making." There was also a difference between self-assessment and teacher-assessment by others in terms of "communication skill" and "self-motivation." In terms of "communication skills," 10 (6.4%) teacher-assessment were found to be in high demand, compared to 4 (2.8%) on a self-assessment basis. In addition, 9 students (6.2%) answered "self-motivation" while 13 (8.3%) answered "self-motivation" for teacher entry. This suggests that although the students themselves feel there is a need, there is a discrepancy between the students' perceptions and the teachers' perceptions.
<Table 1> Number of students with special needs

| Domains               | Sub-domains                        | Special needs students n(%) |
|-----------------------|------------------------------------|----------------------------|
|                       |                                    | Self-assessment (n=145) | Teacher-assessment (n=157) |
| Total score           |                                    | 4(2.8)                    | 2(1.3)                     |
| Personality           |                                    |                            |                            |
|                       | Mental and physical health         | 3(2.1)                    | 2(1.3)                     |
|                       | Inattention                        | 10(6.9)                   | 4(2.5)                     |
|                       | Hyperactivity/impulsivity          | 10(6.9)                   | 11(7)                      |
|                       | Adherence                          | 3(2.1)                    | 2(1.3)                     |
|                       | Self-esteem                        | 4(2.8)                    | 3(1.9)                     |
| Career                |                                    |                            |                            |
|                       | Appreciating diversity             | 8(5.5)                    | 10(6.4)                    |
|                       | Communication skill                | 4(2.8)                    | 10(6.4)                    |
|                       | Social skill                       | 5(3.4)                    | 8(5.1)                     |
|                       | Understanding one’s role           | 4(2.8)                    | 2(1.3)                     |
|                       | Self-motivation                    | 9(6.2)                    | 13(8.3)                    |
|                       | Stress tolerance                   | 4(2.8)                    | 3(1.9)                     |
|                       | Information acquisition            | 7(4.8)                    | 8(5.1)                     |
|                       | Information expression             | 7(4.8)                    | 0(0)                       |
|                       | Information processing             | 14(9.7)                   | 0(0)                       |
|                       | Decision-making                    | 8(5.5)                    | 0(0)                       |
|                       | Carrier design                     | 9(6.2)                    | 4(2.5)                     |

When there is a need for both the domain of "inattention" and "hyperactivity/impulsivity", attention deficit/ hyperactivity disorder (ADHD) tendencies are indicated (Han, Kohara, Yano et al., 2017). In addition, when there is a need for both "adherence" and "communication skill" domains, there is a tendency for autism spectrum disorder (ASD). Three students (2.1%) had a tendency towards ADHD, and two (1.3%) had a tendency to self-assessment. In addition, the ASD tendency was 0 (0%) for self-assessment and 1 (0.6%) for Teacher-assessment by others (Table 2).

<Table 2> Number of ADHD or ASD trend students

| Tendency                        | Special needs students n (%) |
|---------------------------------|------------------------------|
|                                 | Self-assessment (n=145) | Teacher-assessment (n=157) |
| ADHD tendency                   | 3(2.1)                    | 2(1.3)                     |
| ("Inattention" and "Hyperactivity/impulsivity") |                     |                            |
| ASD tendency                    | 0(0.0)                    | 1(0.6)                     |
| ("Adherence" and "Communication skill") |                     |                            |

2. Comparing domain score of the Scale C³

Table 3 shows the mean scores for the self-assessment and the other party's teacher-assessment domains and the average item scores in the domain of students with special needs.
1) Comparison of each domain

Comparison of self-assessment and teacher-assessment by others revealed that there was a discrepancy in some domains average scores. The domains were "mental and physical health" (10.04), "adherence" (5.89) and "information expression" (6.37). Self-assessment scores are lower in these three domains. The student felt that there is a need, but this suggests that there is a difference between the student's perception and the teacher's perception.

2) Comparison of the average item score in the domain

In the domain of self-assessment, the high score of items were "social skill" (4.11) and "hyperactivity/impulsivity" (4.09). The region with the lowest score was "adherence" (3.18). From this, it can be seen that students felt there is a need in the domain of "adherence."

Looking at the average score of items in the other party's teacher-assessment domain, the domains with the lowest scores were "decision-making" (3.48) and "career design" (3.53). These two domains are sub-domains of "career planning skill". In other words, teachers felt there is a need for students' career planning skills. Therefore, we found that there were issues related to career planning skills development.

IV. Discussion

This study aimed to clarify the issues related to the establishment of School with resource rooms and special needs classrooms and the specific education curriculum development issues in high schools.

In the analysis of the actual state of students with special needs, there was a large gap in scores between self-assessment and teacher-assessment in the domains of "Mental and physical health". In other words, it appears that students are more aware of the need for "Mental and physical health" than teachers. "Mental and physical health" is characterized by a variety of social problems such as depression (Han, Numadate, Goya et al., 2018). Also, since about 2% of students show a tendency towards ADHD, it is expected that the number of students in the emotional and behavioral class will increase when a special needs class is established in high schools. Education curriculum development will require programs that address mental and physical health trends and ADHD characteristics.

In addition, there was a difference between the domains of "Information expression" and "Information processing." In the domain of "Information expression", 14 students (9.7%) were self-assessed by students with special needs and 0 students (0%) by teacher-assessment. In addition, 7 students (4.8%) self-assessment and 0 students (0%) teacher-assessment were included in the "Information expression" field. This domain is included in the sub-domain of "Basic skill of respond to tasks". "Basic skill of respond to
"Tasks" refers to the basic abilities needed to deal with issues such as schooling and work (Han, Numadate, Goya et al., 2018). In other words, the domains of "information processing" and "information expression" are the basic domains of learning. With regard to the basics, although students feel there is a need, teachers may feel there is no need. There are many cases in which students' self-reliance, such as self-reliance activities, is included in the special education curriculum development of high schools. However, acquiring basic academic abilities is considered to be the foundation of future career development. When organizing special curricula in upper secondary schools, it is also necessary to make efforts to improve basic academic ability.

| Domains                  | Sub-domains (Sub-domains average score) | Self-assessment (n=145) | Teacher-assessment (n=157) | score difference |
|--------------------------|-----------------------------------------|-------------------------|---------------------------|------------------|
| Mental and physical health | 42.15 (3.52)                             | 52.57 (4.41)            |                          | 10.04            |
| Inattention              | 27.24 (3.37)                             | 27.25 (3.89)            |                          | 0.01             |
| Hyperactivity/impulsivity| 24.52 (4.09)                             | 27.24 (4.54)            |                          | 2.72             |
| Adherence                | 19.10 (3.18)                             | 24.99 (4.17)            |                          | 5.89             |
| Self-esteem              | 17.99 (3.60)                             | 20.69 (4.14)            |                          | 2.70             |
| Appreciating diversity   | 15.46 (3.86)                             | 16.02 (4.01)            |                          | 0.56             |
| Communication skill      | 26.74 (3.73)                             | 31.01 (4.43)            |                          | 4.27             |
| Social skill             | 20.56 (4.11)                             | 20.97 (4.19)            |                          | 0.41             |
| Understanding one's own role | 11.04 (3.68)                             | 11.25 (3.75)            |                          | 0.21             |
| Self-motivation          | 10.14 (3.38)                             | 10.82 (3.61)            |                          | 0.68             |
| Stress tolerance         | 10.48 (3.49)                             | 11.44 (3.81)            |                          | 0.96             |
| Information acquisition  | 41.61 (3.82)                             | 43.76 (4.38)            |                          | 2.15             |
| Information expression   | 26.79 (3.83)                             | 33.16 (4.69)            |                          | 6.37             |
| Information processing   | 28.08 (4.01)                             | 26.00 (3.72)            |                          | 2.08             |
| Decision-making          | 10.43 (3.48)                             | 10.43 (3.48)            |                          | 0.00             |
| Career design            | 15.12 (3.78)                             | 14.13 (3.53)            |                          | 0.99             |
In the results of the average domain score of items in the Scale C3, the domain with a low average item score were "decision-making" (3.48) and "carrier design" (3.53) in teacher-assessment. Both are sub-domains of "career planning skill", "career planning skill" is the ability to choose and utilize various information on how to live, and to make decisions and plans on one's own, thereby forming a career (Han, Numadate, Goya et al., 2018). This suggests that teachers feel there is a need for students' career planning skills.

The results of this study revealed that "basic skill of respond to tasks" and "Career planning skill" domains of special need for high schools and are issues of education curriculum development. According to the results of the nationwide survey, the percentage of elementary schools giving guidance on "basic skill of respond to tasks" and "career planning skill", and junior high schools and senior high schools on "basic skill of respond to tasks" was low (National Institute for Educational Policy Research, 2013). Therefore, it can be seen that the practice of "basic skill of respond to tasks" and "career planning skill" is still lacking at present. In the future, assistance in these domains will be needed, as this domain will become an issue in the implementation of special education curriculum development in high schools.

The limitation of this study was that the data collection was only from first year of high school in Okinawa prefecture. There are major differences in scholastic ability and actual conditions of student among high schools. Despite the limitations of the study, structured tools were used to capture the needs of all students and teachers. It was a meaningful study in terms of understanding the needs from the point of view of career education. In this study, the data were insufficient to allow statistical differences in the results to be addressed. In the future, it is necessary to increase the number of schools and state statistical differences, and it is necessary to consider the curriculum in depth.

The principal is responsible for specific education curriculum development and is primarily responsible for special needs classrooms and school with resource rooms. In this study, there were differences in what teachers and students perceived to be needs. Without a curriculum tailored to the needs of students, no teaching effect or educational results can be expected. Therefore, it is necessary to ascertain the needs using scientific tools. The Scale C3 used in this study can be used for education curriculum development in the future, since it is possible to grasp the needs from the perspective of career education.
References

1) Central Council for Education (2011) Kongo no gakko ni okeru kyaria kyoiku shokugyo kyoiku no arikata ni tsuite (toshin) (in Japanese).

2) Changwan HAN, Chisato NUMADATE, Hikaru GOYA & Haruna TERUYA (2018) Development of Scale for Coordinate Contiguous Career: Scale C3. *Journal of Inclusive Education*, 4, 1-20. doi: 10.20744/incleedu.4.0_1.

3) Changwan HAN, Natsuki YANO, Aiko KOHARA, Haejin KWON, Mamiko OTA & Atsushi TANAKA (2017) The Verification of the Reliability and Construct Validity of the IN-Child Record: Analysis of Cross-sectional Data. *Total Rehabilitation Research*, 5, 1-14. doi: 10.20744/trr.5.0_1.

4) Haruna TERUYA, Natsuki YANO, Mitsuyo SHIMOJO & Changwan HAN (2018) The Verification of Reliability for Self-assessment (High School Student's Version) of Scale for Coordinate Contiguous Career (Scale C3): Analysis using Okinawa Prefectural High School Student's Data. *Journal of Inclusive Education*, 5, 53-60. doi: doi.org/10.20744/incleedu.5.0_53.

5) Masahiko SATO & Hiros hi URANO (2017) Current State of Curriculum Design in Special Curriculum and Its Consequential Liability to Teachers. *Bulletin of the Center for Educational Research and Practice, Faculty of Education and Human Studies, Akita University*, 39, 127-136. doi: 10.20569/00003233

6) Ministry of Education, Culture, Sports, Science and Technology (2017) Koutou gakkou ni okeru “Tsukyu ni yoru shido” jissen jirei syu (in Japanese).

7) Ministry of Education, Culture, Sports, Science and Technology (2016) Heisei 27 nendo kouritsu koto gakkou nyugakusya senbatsu ni okeru “syogai no aru seito” ni taisuru hairyo no kensu. (in Japanese).

8) National Institute for Educational Policy Research (2013) Kyaria kyoiku・shinro shido ni kansuru sougou teki jittai tyosa dai ichi ji hokoku (in Japanese).
Asian Journal of Human Services
VOL.15 Ocober 2018
© 2018 Asian Society of Human Services
Editor-in-Chief Masahiro KOHZUKI
Presidents Masahiro KOHZUKI · Sunwoo LEE
Publisher Asian Society of Human Services
Faculty of Education, University of the Ryukyus, 1 Senbaru, Nishihara, Nakagami, Okinawa, Japan
FAX: +81-098-895-8420 E-mail: ashs201091@gmail.com
Production Asian Society of Human Services Press
Faculty of Education, University of the Ryukyus, 1 Senbaru, Nishihara, Nakagami, Okinawa, Japan
FAX: +81-098-895-8420 E-mail: ashs201091@gmail.com
CONTENTS

ORIGINAL ARTICLES
Using Videos to Analyze the Effectiveness of START Education for Japanese Nursing Students
Kazuyuki AKINAGA et al., 1

Effects of the OSCE to Motivate Students to Learn Before Clinical Practice
Yuko FUJIO et al., 13

The Current Status and Its Implications of Public-Private Partnerships for Official Development Assistance in Korea: Focusing on Disability-Inclusive Development Cooperation
Juhee HWANG et al., 25

Effects of a Structured 8-week Nordic Walking Exercise Program on Physical Fitness in the Japanese Elderly
Kimiko YAMAMOTO et al., 38

Study of “Individuality” on Nursing Care Job
Kimiko YAMAMOTO et al., 52

SHORT PAPERS
A Comparison of the Factor Structure of the Self-Harm Antipathy Scale and related Demographic Characteristics between Korea and Japan
Yoshimi AOKI et al., 66

Issues of Specific Educational Curriculum Development for Resource Rooms and Special Needs Classes in Japanese High Schools
Mitsuyo SHIMOJO et al., 76

REVIEW ARTICLES
Importance of Physical Activity and VO₂max: Five Major Determinants of VO₂max
Masahiro KOHZUKI et al., 85

Importance of Physical Exercise in Oldest-old Adults: A Literature Review Study
Chaeyoon CHO et al., 93

Published by
Asian Society of Human Services
Okinawa, Japan