

Efforts and Effectiveness in Improving Knowledge and Skills of Vocational Assessment for Teachers Supporting Career Decisions of Students with Intellectual Disabilities

Aya Imai¹, Kazuaki Maebara^{2,*} and Jun Yaeda³

¹Special Support Attached to the Faculty of Education and Human Sciences, Akita University, Japan

²Faculty of Education and Culture, Akita University, Japan

³Faculty of Humanities, Tsukuba University, Japan

Abstract: *Background:* The number of options available to people with disabilities has gradually increased in Japan. At educational institutions where students with disabilities are enrolled, teachers must understand the various ways of life and provide appropriate guidance and support based on the actual conditions of individual students so that students can independently choose their career paths through self-selection and self-determination.

Objective: This study aimed to examine the effect of an intervention using a vocational assessment training program on eight teachers at a special needs school in Japan.

Methods: The level of knowledge and skills was assessed before and after the intervention. Intervention effects were analyzed through the Self-Assessment for Students and Counselors-Revised tool using the Wilcoxon signed-rank test, with corresponding samples for differences in mean scores before and after the intervention. In addition, the difference in the mean pre- and post-intervention scores for teachers with 10 or more years of upper secondary school experience (high experience group) and those with less than 10 years of upper secondary school experience (low experience group) was calculated.

Principal Verdicts: Indicated that the training program intervention helped teachers recognize the importance of vocational assessment and subsequently improve their teaching. Furthermore, the number of years of experience in upper secondary schools influenced the effectiveness of the intervention.

Conclusions: It was suggested that this training program would be effective for professionals who have acquired basic knowledge and skills in vocational rehabilitation.

Keywords: Assessment, special needs schools, career guidance, vocational rehabilitation, transition support.

1. INTRODUCTION

A career is important to most individuals. In particular, for persons with disabilities who often encounter barriers to participation in society, work is a meaningful part of their lives [1]. Supporting persons with disabilities to work not only improves their actual living conditions but also contributes to their positive growth, identity formation, and career development. Supporting them to overcome challenges and obtain success in their career can positively promote their self-efficacy and self-concept [2]. For people with disabilities, work plays a major role in maintaining their lives and identity formation [3]. Supporting self-determination and proactively helping young adults with disabilities to make a smooth transition from school to society is especially important [4-7].

In Japan, teachers support career choices in special needs schools, which are primarily responsible for providing transition support. However, Japanese

teachers face certain difficulties. Maebara *et al.* [8] reported on the challenges faced by Japanese teachers in understanding and implementing the concept of self-determination as well as their students' independent choice of career paths. While such a person-centered approach that supports self-determination makes it possible to provide support that respects the individuality of students from diverse backgrounds and to achieve smooth transition support for them [9, 10], it can be inferred that these measures are not being implemented. This is due to environmental factors, such as teachers' busyness [11], but the lack of knowledge and skills related to employment and transition support induces an unstable implementation of support [12]. In Japan, no transition support specialists are involved in the domains of employment support or education. This situation calls for collaboration between employment support and education specialists involved in transition support so that both areas overlap.

The reasons behind the demand for such transition support are positive changes in the perception of the employment of persons with disabilities in Japan and

*Address correspondence to this author at 1-1, Tegata-Gakuenmachi, Akita, 010-8502, Japan; Tel: +81 18-889-2548; Fax: +81 18-889-2548; E-mail: maebara-kazuaki@ed.akita-u.ac.jp

improvements in the legal system. Regarding the social participation of persons with disabilities in Japan, the "Law for Comprehensive Support for the Daily Life and Social Life of Persons with Disabilities" and the "Law for Employment Promotion, etc., of the Disabled" have led to the enhancement of welfare services and employment support for persons with disabilities. These legislations have led to the developing of a community-based society in harmony with people with disabilities. In addition, with an increase in the statutory employment rate, changes in the industrial structure, and the introduction of diversity management by companies, the perception of society, especially companies, toward the employment of persons with disabilities has changed positively. According to the Survey on Employment of Persons with Disabilities by the Ministry of Health, Labour and Welfare in Japan, the number of employed persons with intellectual disabilities has significantly improved from an estimated 73,000 in FY2008 to an estimated 189,000 in FY2018 [13]. Thus, a foundation is now in place for people with disabilities to enjoy a wider range of options for their way of life and to realize social participation based on self-determination.

In response to this social situation, special needs schools, which play a central role in the education of persons with disabilities in Japan, need to play a major role in supporting this transition. In Japan, special needs schools are required to provide guidance and support for the transition from school to community life so that students can independently choose their career paths through self-selection and self-determination [14]. Teachers are responsible for providing transition support and career guidance to students. In addition, they conduct educational activities to help students with disabilities acquire knowledge and skills to facilitate a smooth transition to community life. Therefore, teachers play an all-encompassing role. A typical example of the support provided by teachers in this role is practical job assessments at workplaces. Job assessment is an invaluable opportunity for students to consider their vocational aptitudes and future plans, and it functions as a learning activity that contributes to the development of their ability to make independent career choices and cultivate vocational awareness. Through such learning activities, teachers can provide appropriate guidance and support based on the actual situation of each student, enabling career guidance based on the student's independent choices [15].

However, teachers who play such a major role lack the necessary expertise for transition support. In

Japan, although teachers are responsible for transition support and career guidance, the acquisition of knowledge and skills for accurate guidance and support based on the actual conditions of individual students is currently left to the discretion of individual teachers [16, 17]. The development of a training program to support this ability is expected to contribute not only to the growth of teachers but also to the realization of social participation based on students' independent career choices. In particular, this study examined teachers' efforts and their effectiveness in improving knowledge and skills in vocational assessments. This vocational assessment is a basic support tool for persons with disabilities to understand their vocational goals, examine future possibilities, and select the most appropriate services for transitioning into corporate employment [18, 19]. Although teachers are expected to be able to perform assessments from an educational perspective in educational settings to support the transition from education, they face difficulties in performing assessments from a vocational perspective, which is a major aspect of the transition support perspective. The ability of teachers to conduct vocational assessments is thought to enable them to understand the characteristics of students' disabilities and to support them by making use of their strengths in social participation [20, 21]. Therefore, this study attempted to implement an initiative to promote the improvement of knowledge and skills in the vocational assessment of teachers involved in special needs education and examine the effectiveness of this initiative.

2. METHODS

2.1. Survey Subjects

Eight teachers belonging to the upper secondary section of a special needs school located in a rural area of Japan, which provides education for students with intellectual disabilities, participated in the study (Table 1). Teachers belonging to the upper secondary school are involved in career guidance for the students; they have basic knowledge of students' social life after graduation.

2.2. Intervention

Two interventions were conducted between December 2021 and mid-February 2022. The first one consisted of a 90-minute on-demand lecture on vocational assessment. The content of the lecture was related to the methods, contents, and tools of

Table 1: Survey Target

| No | Gender | Age | Years of affiliation | Years in high school | Years of experience |
|----|--------|------|----------------------|----------------------|-----------------------|
| 1 | F | 20's | 7 | 2 | Low experience group |
| 2 | M | 20's | 3 | 3 | |
| 3 | F | 30's | 11 | 3 | |
| 4 | M | 40's | 22 | 10 | High experience group |
| 5 | F | 30's | 16 | 11 | |
| 6 | F | 50's | 30 | 12 | |
| 7 | M | 40's | 25 | 18 | |
| 8 | M | 40's | 23 | 21 | |

Note: Age and years of work experience are as of February 2023.

vocational assessment, which are widely used in employment support settings. It was designed to provide teachers with basic knowledge of vocational assessment. The second intervention consisted of a face-to-face 60-minute exercise using a vocational assessment tool known as the "Checklist for Supporting Transition to Work" [22]. During the exercise, the teachers were divided into three groups. Each group used a checklist to evaluate one student in the case study. The teachers then discussed their perspectives and difficulties in the evaluation.

2.3. Survey Items

2.3.1. Perceptions of Performing Vocational Assessments

Participants were asked to indicate their perceptions of the difficulty, perceived usefulness, and interest in conducting vocational assessments in their practice.

- Difficulty: 1 = easy, 2 = slightly easy, 3 = undecided, 4 = slightly difficult, 5 = difficult
- Usefulness: 1 = not useful, 2 = slightly useful, 3 = neither, 4 = slightly useful, and 5 = useful.
- Interest: 1 = painful, 2 = slightly painful, 3 = undecided, 4 = slightly pleasant, and 5 = pleasant.

2.3.2. Self-Assessment for Students and Counselors-Revised (SASC-R)

The SASC-R consists of a total of 70 items: users (9 items), health and education (15 items), social aspects (9 items), economy (12 items), employment (11 items), and employer support (14 items). Regarding the possession of knowledge and skills for each item, 0 = no knowledge or skill (I have no knowledge or skill), 1 =

I have some knowledge or skill (I have minimum knowledge or skill), 2 = I have general knowledge or skill (I have average knowledge or skill), 3 = I have some specialized knowledge or skill (I have more than average knowledge or skill), and 4 = I have enough knowledge or skill to train someone as a professional (I have enough knowledge or skill to train someone). This study used the survey results of Maebara and Yaeda's [26] study on vocational rehabilitation workers in Japan. Out of a total of 70 items, the top 20 items responded that they had more knowledge and skills and asked for a response.

2.4. Analysis Method

For the perception of self-improvement, the number of respondents was obtained for each stage of each item, and changes in the number of respondents before and after the intervention were compared. The SASC-R checklist was used to calculate the mean score for each item. The difference between the mean scores before and after the intervention was examined using the Wilcoxon signed-rank test with the corresponding sample.

Next, to compare the effects of the intervention according to the number of years of high school affiliation, we calculated the difference in the mean scores between the pre-and post-intervention periods for teachers with more than 10 years of upper secondary school experience and those with less than 10 years of upper secondary school experience.

2.5. Research Ethics

Participants were informed that personal information would not be identified and that the data would be strictly controlled. We obtained consent for the

research use of the survey results. This study was approved by the Ethics Review Committee for Research on Human Subjects in the Bills Area of Akita University (No. 4-38, dated December 8, 2022).

3. RESULTS

3.1. Pre- and Post-Intervention Score Changes on the SASC-R

The Wilcoxon signed-rank test with the corresponding sample was used to examine the difference in mean scores before and after the intervention for 20 items of the SASC-R (Table 2). The results showed the mean scores for "Information on social resources related to job coach support" ($p=0.020$), "Assessment of the status of understanding disability" ($p=0.020$), "Consideration of the job description in which the person with disabilities is engaged" ($p=0.014$), "Understanding the possibility of job modification for the person with disabilities" ($p=0.015$), and "Basic communication" ($p=0.039$),

"Evaluating users' attitudes toward work" ($p=0.024$), "Providing specific support for employers' perceptions of people with disabilities" ($p=0.014$), and "Understanding colleagues' attitudes toward people with disabilities" ($p=0.016$). The difference between the mean scores before and after the intervention was significant at the 5% level.

Next, the number of teachers whose perceptions changed after the intervention is expressed as a dotted plot (Figure 1). No change was observed in the perception of difficulty; however, regarding the perception of usefulness and interest, many teachers found the assessment useful and interesting.

3.2. Effect of Years of Upper Secondary School Affiliation on Pre- and Post-Intervention Changes

To determine the magnitude of the pre-and post-intervention changes, we calculated the difference in the mean scores between pre-and post-intervention for teachers with 10 or more years of upper secondary school experience (high experience group) and

Table 2: Pre- and Post-Intervention Changes in SASC-R Scores (N=8)

| Items | Pre | | Post | | p-value |
|--|------|------|------|------|---------|
| | Mean | SD | Mean | SD | |
| 1. Guidance for being able to engage in job search activities | 2.50 | 1.31 | 3.00 | 0.93 | |
| 2. Knowledge of job search and other vocational services and support for using them | 2.38 | 1.30 | 3.13 | 1.13 | |
| 3. Consideration of specific support tailored to individual persons with disabilities in the workplace | 2.63 | 1.06 | 3.38 | 0.92 | |
| 4. Introduction to social resources related to job coach support | 1.88 | 1.36 | 2.50 | 1.41 | |
| 5. Basic knowledge of job coach support | 2.13 | 1.36 | 2.75 | 1.39 | |
| 6. Identification of key persons in the user's workplace | 1.63 | 1.06 | 2.75 | 1.28 | |
| 7. Information on social resources related to job coach support | 1.75 | 1.39 | 2.63 | 1.19 | * |
| 8. Assessment of the status of understanding of disabilities | 2.00 | 0.93 | 3.38 | 0.74 | * |
| 9. Examination of the job description in which the person with disabilities will be engaged | 2.25 | 1.17 | 3.63 | 0.74 | * |
| 10. Assessing the possibility of changing the job duties of the person with disabilities | 1.63 | 1.20 | 3.00 | 1.20 | * |
| 11. Guidance for basic communication | 2.88 | 0.84 | 3.88 | 0.64 | * |
| 12. Assessment of the user's attitude toward work | 2.25 | 1.04 | 3.38 | 0.74 | * |
| 13. Specific understanding of the employer's perception of persons with disabilities | 2.00 | 0.93 | 2.75 | 1.04 | |
| 14. Knowledge of private social resources and support for their use | 2.13 | 0.84 | 2.88 | 0.64 | |
| 15. Specific support for employers' perceptions of people with disabilities | 1.88 | 0.99 | 3.13 | 1.13 | * |
| 16. Identification of structural issues faced by the company | 1.88 | 0.84 | 2.25 | 1.04 | |
| 17. Assessment of users' soft skills | 2.25 | 1.17 | 3.00 | 0.93 | |
| 18. Knowledge of local support resources and support for their use | 2.25 | 1.28 | 3.13 | 1.13 | |
| 19. Understanding the attitudes of co-workers toward people with disabilities | 1.88 | 0.99 | 3.25 | 1.04 | * |
| 20. Guidance on how to maintain motivation at work | 2.38 | 0.92 | 3.13 | 0.84 | |

* $p<0.05$.

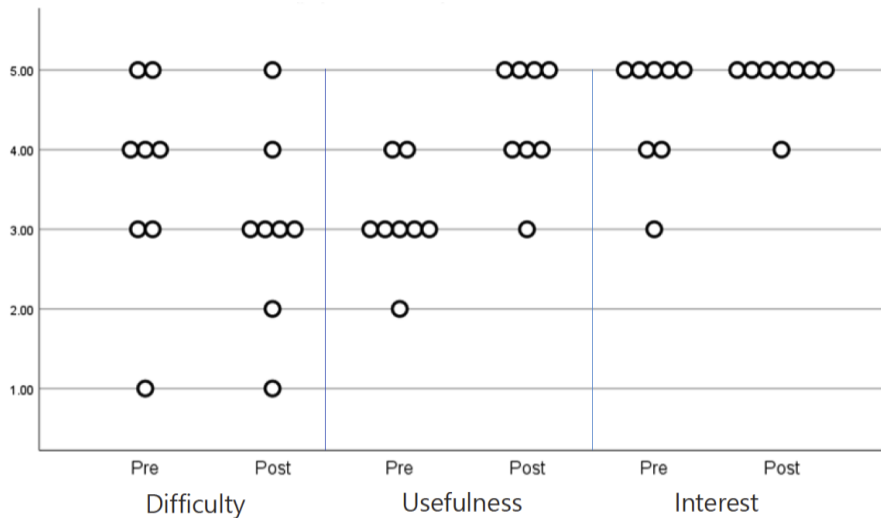


Figure 1: Pre- and post-intervention changes in perceptions of vocational assessment.

Table 3: Score Difference before and after Intervention by Years of Experience

| Items | Years of experience | Pre | Post | Pre-post difference |
|--|---------------------|-----------|-----------|---------------------|
| | | Mean (SD) | Mean (SD) | |
| 1. Guidance for being able to engage in job search activities | Low | 1.0(0.82) | 1.3(0.94) | 0.3 |
| | High | 1.8(1.33) | 2.4(0.49) | 0.6 |
| 2. Knowledge of job search and other vocational services and support for using them | Low | 1.0(0.82) | 1.3(0.94) | 0.3 |
| | High | 1.6(1.36) | 2.6(0.80) | 1.0 |
| 3. Consideration of specific support tailored to individual persons with disabilities in the workplace | Low | 1.0(0.00) | 1.3(0.47) | 0.3 |
| | High | 2.0(1.10) | 3.0(0.00) | 1.0 |
| 4. Introduction to social resources related to job coach support | Low | 0.3(0.47) | 0.7(0.94) | 0.4 |
| | High | 1.2(1.47) | 2.0(1.26) | 0.8 |
| 5. Basic knowledge of job coach support | Low | 0.7(0.94) | 1.0(0.82) | 0.3 |
| | High | 1.4(1.36) | 2.2(1.33) | 0.8 |
| 6. Identification of key persons in the user's workplace | Low | 0.3(0.47) | 1.0(0.82) | 0.7 |
| | High | 0.8(1.17) | 2.2(1.17) | 1.4 |
| 7. Information on social resources related to job coach support | Low | 0.3(0.47) | 1.0(0.82) | 0.7 |
| | High | 1.0(1.55) | 2.0(1.10) | 1.0 |
| 8. Assessment of the status of understanding of disabilities | Low | 0.7(0.47) | 1.7(0.47) | 1.0 |
| | High | 1.2(0.98) | 2.8(0.40) | 1.6 |
| 9. Examination of the job description in which the person with disabilities will be engaged | Low | 1.0(0.82) | 2.0(0.82) | 1.0 |
| | High | 1.4(1.20) | 3.0(1.10) | 1.6 |
| 10. Assessing the possibility of changing the job duties of the person with disabilities | Low | 0.0(0.00) | 1.0(0.82) | 1.0 |
| | High | 1.0(1.10) | 2.6(0.80) | 1.6 |
| 11. Guidance for basic communication | Low | 1.3(0.47) | 2.0(0.82) | 0.7 |
| | High | 2.2(0.75) | 3.2(0.40) | 1.0 |
| 12. Assessment of the user's attitude toward work | Low | 0.7(0.47) | 2.0(0.82) | 0.3 |
| | High | 1.6(1.02) | 2.6(0.49) | 1.0 |

(Table 3). Continued.

| Items | Years of experience | Pre | Post | Pre-post difference |
|--|---------------------|-----------|-----------|---------------------|
| | | Mean (SD) | Mean (SD) | |
| 13. Specific understanding of the employer's perception of persons with disabilities | Low | 0.3(0.47) | 1.0(0.82) | 0.7 |
| | High | 1.4(0.80) | 2.2(0.75) | 0.8 |
| 14. Knowledge of private social resources and support for their use | Low | 1.0(0.82) | 1.3(0.47) | 0.3 |
| | High | 1.2(0.75) | 2.2(0.40) | 1.0 |
| 15. Specific support for employers' perceptions of people with disabilities | Low | 0.0(0.00) | 1.0(0.82) | 1.0 |
| | High | 1.4(0.80) | 2.8(0.40) | 1.4 |
| 16. Identification of structural issues faced by the company | Low | 0.3(0.47) | 0.3(0.47) | 0.0 |
| | High | 1.2(0.75) | 1.8(0.75) | 0.6 |
| 17. Assessment of users' soft skills | Low | 0.7(0.94) | 1.0(0.00) | 0.3 |
| | High | 1.6(1.02) | 2.6(0.49) | 1.0 |
| 18. Knowledge of local support resources and support for their use | Low | 0.7(0.94) | 1.0(0.00) | 0.3 |
| | High | 1.6(1.20) | 2.2(0.75) | 0.6 |
| 19. Understanding the attitudes of co-workers toward people with disabilities | Low | 0.0(0.00) | 1.3(0.94) | 1.3 |
| | High | 1.4(0.80) | 2.8(0.40) | 1.4 |
| 20. Guidance on how to maintain motivation at work | Low | 1.0(0.00) | 1.3(0.47) | 0.3 |
| | High | 1.6(1.02) | 2.6(0.49) | 1.0 |

teachers with less than 10 years of upper secondary school experience (low experience group) (Table 3). For all items, the difference in mean scores between pre-and post-intervention was greater in the high-experience group than in the low-experience group.

4. DISCUSSION

4.1. Change in Perceptions of Vocational Assessment as a Result of the Intervention

The results confirmed that vocational assessment training, consisting of on-demand lectures and face-to-face exercises, changed teachers' perceptions of vocational assessment. In particular, the intervention was considered to have increased the usefulness of vocational assessments and teachers' interest in them. The following statements regarding this benefit and interest were identified in the open-ended responses received after the intervention. First, regarding the usefulness, the responses contained the following statements: "useful for considering the direction of support," "can understand the current situation of the student," "can make a comprehensive assessment," and "can be used as an indicator of career development." In other words, these statements prompted teachers to recognize that the assessment was useful for grasping students' actual situation and for implementing guidance and support based on their

understanding of the situation. Next, with regard to interest, the following responses were received: "Multiple eyes can guide future educational activities," "getting aligned with the content will be a good opportunity to reacknowledge the actual situation of the students," and "I found that my everyday conversations with colleagues contained elements of the assessment." In other words, these responses indicate that through the intervention, teachers were able to share their perceptions with their colleagues and felt that they had gained a more accurate understanding of the student's circumstances. In summary, the findings suggest that this intervention has the potential to improve teachers' attitudes toward teaching students with disabilities.

4.2. Changes in Vocational Assessment Skills and Knowledge

As a result of the intervention, teachers were considered to have improved their skills and knowledge in the following content-related items that were easy to apply in daily educational practice. The item "8. Assessment of the status of understanding disabilities" is essential for teachers to implement appropriate daily instruction and support for students [27]. Furthermore, the items "9. Examination of the job content in which the person with disabilities is engaged," "11. Guidance

for basic communication," and "12. Assessment of the user's way of thinking about work" are aspects that teachers are actively assessing in their daily career guidance [28]. In relation to the items "10. understanding the possibility of job change for people with disabilities," "15. Specific support for employers' perception of people with disabilities, " and "19. Understanding of colleagues' attitudes toward people with disabilities," teachers sometimes examined students' job possibilities in the field training guidance situation, and they were able to understand the relevance of the knowledge gained through the intervention [29]. In relation to item "7. Information on social resources related to job coach support," although the roles of teachers and job coaches are different, Japanese teachers often provide job coach-like support for student employment during students' field training [30] and the relevance of this type of teacher duty to knowledge and skills may have improved.

Conversely, items that had little relevance to teachers' daily practice or they felt were important but could not acquire the relevant expertise due to the focus on the assessment were considered to have no change in the perception of knowledge and skill possession before and after the intervention. For example, with regard to "20. Teaching how to maintain motivation at work," the results may have been influenced by the fact that teachers experienced difficulty in actual teaching and support situations. However, they recognized the need to acquire such skills [31, 32]. The 20 items of the SASC that were used as the outcome of the current intervention's effectiveness were the top 20 items that Japanese vocational rehabilitation workers, who were responsible for social participation after graduation, utilized to indicate that they possessed knowledge and skills in the study by Maebara and Yaeda [26]. Unsurprisingly, the results between teachers and vocational rehabilitation workers differed due to their varied roles. However, the intervention effects of the items indicated by vocational rehabilitation workers were significant for the group with the most years of experience as upper secondary school teachers responsible for supporting students' transition to social participation. Upper secondary school teachers play the role of coordinators who collaborate with companies and employment support organizations in the students' transition to employment [33]. Therefore, this experiment suggests that the presence of basic knowledge and skills as a prerequisite in vocational rehabilitation makes this

intervention in vocational assessment rather effective. It is necessary to discuss how to teach this prerequisite basic knowledge and skills of vocational rehabilitation to teachers or determine which other professionals would benefit from this intervention in the future.

5. CONCLUSIONS

In this study, an intervention was conducted to impart knowledge and skills of vocational assessment to teachers, and its effectiveness was examined. This intervention may help teachers realize the importance of vocational assessment and subsequently improve their educational instruction. In addition, the number of years of upper secondary school experience impacted the effectiveness of the intervention, suggesting that basic knowledge and skills in vocational rehabilitation are necessary for the intervention. To develop future training programs, it is essential to consider how to acquire basic training knowledge and skills. In particular, setting up training programs to accommodate teachers' busy schedules is challenging.

In the future, it will be important to deal with the feedback method of the assessment results in the training program to achieve accurate guidance and support for teachers regarding career guidance based on each student's actual circumstances. Additionally, it was suggested that this training program would be effective for professionals who have acquired basic knowledge and skills in vocational rehabilitation. In future research, we would like to verify the effectiveness of this program among professionals other than teachers. In addition, since this study was conducted with a small number of participants (eight teachers), it is not clear whether the overall trends could be depicted. Therefore, considering that teachers with less than 10 years of high school experience have shorter years of work experience themselves and that the training was short, further research is needed. However, there have been no surveys on assessment training for teachers or to identify its effectiveness. We would like to conduct a detailed investigation in the future to examine the content of more effective training programs that support teachers in acquiring the expertise related to transition support and career guidance.

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CONFLICT OF INTEREST

No potential conflict of interest was reported by the authors.

REFERENCES

- [1] Trombly CA. Occupation: Purposefulness and meaningfulness as therapeutic mechanisms. *The American Journal of Occupational Therapy* 1995; 49(10): 960-972. <https://doi.org/10.5014/ajot.49.10.960>
- [2] Strong S. Meaningful work in supportive environments: Experiences with the recovery process. *The American Journal of Occupational Therapy* 1998; 52(1): 31-38. <https://doi.org/10.5014/ajot.52.1.31>
- [3] Dunn EC, Wewiorski NJ, Rogers ES. The meaning and importance of employment to people in recovery from serious mental illness: Results of a qualitative study. *Psychiatric Rehabilitation Journal* 2008; 32(1): 59-62. <https://doi.org/10.2975/32.1.2008.59.62>
- [4] Furuya T, Mitani Y. Self-determination of Persons with Intellectual Disabilities [in Japanese]. *J Nagoya Women's University, Humanities Soc Sci* 2004; 50: 41-53.
- [5] Horiuchi H. Study on support for children with intellectual disabilities: Relocation process from institutionalized living to community-based living [in Japanese]. *Japanese J Soc Welf* 2008; 49(2): 58-70.
- [6] Strauser DR. Introduction to the centrality of work for individuals with disabilities. In: Strauser DR (Ed.). *Career development, employment, and disability in rehabilitation*. New York: Springer Publishing Company 2014; pp. 1-10.
- [7] Wehmeyer ML, Shorgen KA, Little TD, Lopez SJ. Introduction to the self-determination construct. In: Wehmeyer ML, Shorgen KA, Little TD, Lopez SJ (Eds.). *Development of self-determination through the life-course*. New York: Springer Publishing Company 2017; pp. 3-16. https://doi.org/10.1007/978-94-024-1042-6_1
- [8] Maebara K, Hagiwara M, Yamaguchi A, Doi Y, Yaeda J. Attitudes toward the promotion of self-determination among teachers in special needs schools in Japan. *Bulletin of the Global Center for Higher Education Akita University* 2023; 4: 33-43.
- [9] Hagner D, Kurtz A, May J, Cloutier H. Person-centered planning for transition-aged youth with autism spectrum disorders. *J Rehabil* 2014; 80(1): 4-10.
- [10] Gervy R, Gao N, Tillman D, Dickel K, Kneubuehl J. Person-centered employment planning teams: A demonstration project to enhance employment and training outcomes for persons with disabilities accessing the one-stop career center system. *J Rehabil* 2009; 75(2): 43-49.
- [11] Matsuda N. Effects of school training to teachers on composite learning at special schools for the mentally handicapped [In Japanese]. *Yamaguchi University, Faculty of Education Research Review* 2023; 72: 189-197.
- [12] Fujii A, Ochiai T. The survey of the knowledge and required for transition teachers in high school divisions of special needs education with intellectual disabilities: Based on the opinions of transition teachers in high school divisions of special needs education with intellectual disabilities [in Japanese]. *Hiroshima University Graduate School of Education Bulletin* 2011; 60: 119-126.
- [13] Ministry of Health, Labour and Welfare. Result of the FY 2008 Survey on Employment of Persons with Disabilities. Available from https://www.mhlw.go.jp/stf/newpage_05390.html. 2023.5.21 (referenced on May 22, 2023)
- [14] Utsumi J. Transition to a new career guidance "transition support". Matsuya K (Eds.). *Individualized transition support to support independence: From School to Society* [in Japanese]. Daiyosha 2004; pp. 9-28.
- [15] Nawaoka Y, Maebara K. A case report of improvement of career education using vocational rehabilitation techniques at special support school for children [in Japanese]. *Bulletin of Center for Educational Profession Enhancement, Faculty of Education and Human Studies Akita University* 2020; 42: 105-111.
- [16] Fujii A, Kawai N, Ochiai T. The relevance between satisfaction and frequency with transition teachers' competencies in special needs schools' school-to-work Transitions [in Japanese]. *Bulletin of the Center for Special Needs Education, Graduate School of Education, Hiroshima University* 2017; 15: 23-31.
- [17] Hamana M. A research on career guidance of special support high school [in Japanese]. *Shitennoji University Graduate School Research Review* 2020; 14: 56-76.
- [18] Roessler RT, Rubin SE. (Eds.) *Case management and rehabilitation counseling* 2nd ed. pro-ed, Texas; 1992.
- [19] Maebara K. *Manual for Conducting Employment Assessments by Employment Transition Support Offices: Revised edition* [in Japanese]. Revised edition FY 2020 Health and Labor Sciences Research Grant (20GC1009) Research Report 2021.
- [20] Shimoda H, Okada A, Kanazawa T, Matsuda N. Assessment towards the field training in an intellectual disability student: Analysis in the descriptive content of the profile created using the General Aptitude Test Battery [in Japanese]. *Bulletin of the Faculty of Education, Gunma University, Humanities and Social Sciences* 2010; 59: 113-124.
- [21] Shimizu H. Development of TTAP informal assessment (CSC) area edition [in Japanese]. *The Japanese Journal of Autistic Spectrum* 2018; 15(2): 5-14.
- [22] National Institute Vocational Rehabilitation. Checklist for Transition to Work Assistance. National Institute Vocational Rehabilitation [in Japanese]; 2007. https://www.nivr.jeed.go.jp/research/kyouzai/19_checklist.html
- [23] Kundu M, Schiro-Geist C, Dutta A. A systems approach to placement: A holistic technique. *J Forensic Vocational Anal* 2005; 8: 21-30.
- [24] Yaeda J, Kundu M, Nishimura S. Self-perceived knowledge and skills of job coaches in Japan. *Work* 2013; 45(2): 279-285.
- [25] Kundu M, Dutta A, Chan F, Torres V, Fleming K. Vocational rehabilitation counselor training needs assessment and competence measure: An exploratory factor analysis. *Rehabilitation Research, Policy, and Education* 2011; 25(3): 113-126. <https://doi.org/10.1891/2168-6653.25.3.113>
- [26] Maebara K, Yaeda J. Knowledge and skills of employment support possessed by Japanese vocational rehabilitation workers. 12th ASHS Congress in Seoul; 2023.
- [27] Okano, Y. A study of special curriculum establishment based on an assessment: Daily educational activities utilizing individual curriculum design in classes for special needs children [in Japanese]. *Online Journal of Humanistic Education* 2018; 1(10): 299-308. Available from <http://id.nii.ac.jp/1413/00003058/>
- [28] Imai A, Maebara K. Educational practices that contribute to career development of students in special needs schools

- (intellectual disabilities) [in Japanese]. Bulletin of Center for Educational Profession Enhancement, Faculty of Education and Human Studies Akita University 2023; 45: 133-143.
- [29] Imai A, Maebara K. Qualitative study to examine how teachers can use the evaluation results of workplace training to promote career education in special needs schools [in Japanese]. Journal of Japan Association of Universities of Education 2023; 41: 15-23.
- [30] Maruyama A. Survey and research on workplace training at companies for special needs schools for the intellectually challenged [in Japanese]. Journal of Development and education for children with Disabilities 2011; 15: 10-12.
- [31] Kawasaki T, Saito N, Ito M, Ito K. Career situation and problems of career education in schools for special needs education: Based on the home economics teachers' attitude survey and the US LCCE program [in Japanese]. Journal of the Japanese Society of Curriculum Education 2020; 43-3: 11-22.
- [32] Fujii A, Kawai N, Ochiai T. Career transition teachers' perplexion at special needs schools for intellectual disabilities: From analysis of free writing texts about teacher support systems, effective instruction methods for school-to-work transition [in Japanese]. Bulletin of Takamatsu Junior College, Takamatsu University 2014; 60, 61: 111-128.
- [33] China A. A survey on the relationship between the job scope and the perceived sense of burden of career guidance counselor in school for the intellectually disabled: Potential coordinator of career guidance counselor [in Japanese]. Japanese J Vocational Rehabilitation 2008; 22(1): 2-13.

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