

# Which Skills Do Students with Intellectual Disabilities Need for Pursuing Leisure Activities After Graduation? A Survey among Vocational Rehabilitation Practitioners in Japan

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**Abstract:** *Background:* Leisure activities contribute to the quality of life and continuation of employment for individuals with disabilities. However, education related to leisure activities is inadequate in special needs schools in Japan.

*Purpose:* This study aimed to clarify which components of leisure guidance are considered important by vocational rehabilitation practitioners in Japan.

*Methods:* An online survey was conducted in 337 branches of the Support Center for Employment and Livelihood of Persons with Disabilities in Japan.

*Results:* Employment support practitioners recognized the importance of teaching students how to use their leisure time outside of working hours and helping them cultivate skills necessary to engage in leisure activities, regardless of whether they were still in school or had already graduated. In school, importance was placed on providing activities aimed at expanding leisure opportunities after graduation. For the period after graduation, the emphasis shifted to acquiring specific abilities necessary for engaging in leisure activities with other people, such as money management and securing means of transportation.

*Conclusion:* This study provides a direction for optimizing the quality of leisure guidance for individuals with special needs. The findings can help improve teaching practices in special needs schools and enhance the effectiveness of transition support for students with disabilities.

**Keywords:** Leisure, vocational rehabilitation, special needs education, transition support, quality of life.

## 1. INTRODUCTION

In recent years, students with disabilities in Japan have been able to transition well to competitive employment after graduation due to the existence of a more favorable environment for the transition. According to Japan's Ministry of Education, Culture, Sports, Science, and Technology, 32.7% of students with intellectual disabilities who graduated from special needs high schools in March 2022 transitioned to competitive employment [1]. The employment quota system drives employment promotion for people with disabilities. The employment quota for companies, set at 2.3% in 2023, is expected to increase to 2.5% in 2024 and 2.7% in 2026 [2]. Against the backdrop of policies promoting employment for people with disabilities, the proportion of companies employing people with disabilities has been increasing annually [3]. Each year, there is a growing societal expectation for special needs schools, which play a central role in supporting students with disabilities to transition from students to active members of society. Special needs schools are expected to provide education that meets these societal expectations.

However, it is essential to focus on job retention when transitioning students with intellectual disabilities into employment. For individuals with disabilities who often encounter barriers to social participation, securing employment holds significant significance [4, 5]. Job retention for people with disabilities not only has economic benefits but also serves as a strategy to overcome the difficulty of finding new employment [6]. Furthermore, working is crucial for enhancing personal self-esteem, social status, and community participation [7, 8]. Supporting individuals with disabilities to tackle their work challenges and helping them experience success can improve their self-efficacy and self-concept [9, 10]. Additionally, employment is significant in the context of maintaining a satisfying life and forming an identity for individuals with disabilities [11]. Job retention for individuals with special needs requires several factors, such as an inclusive workplace culture [12], career development support from practitioners [13], family support [14, 15], having social skills and soft skills [16], and robust self-determination [17, 18].

It has been reported that improving quality of life through enriched leisure activities impacts job retention. Leisure activities also improve the quality of life [19-22]. For those who have been unable to work for extended periods because of disabilities, the

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balance between work and leisure is often disrupted [23, 24]. Leisure activities are necessary to rediscover the meaning of everyday life [25]. Stability in occupational life, including leisure time, contributes to job adaptation and continued employment [26-29].

Leisure guidance is currently implemented in special needs education in Japan to prepare students for social participation after graduation. The "Guidelines for Learning in Special Needs Schools," which serves as the instructional guideline for special needs education in Japan, states that "it is necessary not only to guarantee a living and earn wages through work but also to find a sense of purpose through lifelong learning and experiences in learning, culture, and sports, and to connect with people" [30], emphasizing the importance of leisure. It also states that "leisure is essential for enriching life, as well as for spending school life and future occupational life in a healthy manner" [31]. Based on these guidelines, teachers involved in special needs education conduct leisure-oriented education. There have been reports on leisure guidance provided during holidays in special needs schools [32-34] and leisure activities carried out during classes [35-40]. However, most of these practices merely increase the repertoire of leisure activities and fall short of providing education aimed at enriching social life after graduation [41]. It is necessary to optimize leisure guidance activities in a way that helps students acquire various skills that would support their life-long well-being [42-45].

In special needs education, leisure education must prepare students for social participation after graduation. Students require support to transition from student hood to a working life successfully. However, it is difficult to say whether leisure guidance is being conducted from the perspective of transition support. For students with intellectual disabilities, leisure activities in their education promote enhanced social participation after graduation and, above all, career development. For students who, because of their intellectual disability, need help with their learning, the teaching related to leisure activities in their education is teaching them the foundations for this lifelong learning and lifelong development after graduation. To improve special needs education in Japan, discussing strategies for transition support is crucial. Therefore, this study aims to obtain basic data to examine the current practice of leisure education for students with intellectual disabilities. To this end, the study seeks to clarify the content of leisure guidance that vocational rehabilitation practitioners who are engaged in

providing employment support after graduation consider necessary in special needs education.

## 2. METHODS

### 2.1. Participants

The study participants were practitioners involved in employment support at 337 branches of the Support Center for Employment and Livelihood of Persons with Disabilities (SELP), which is part of Japan's vocational rehabilitation institutions.

### 2.2. Procedure

From November 1 to November 30, 2023, a request letter was mailed to all 337 SELP branches. The letter included a URL directing them to an online survey.

### 2.3. Survey Items

#### *Basic Attributes*

Participants were asked to provide information on their sex (male, female, other), the highest level of education (junior high school, high school, vocational school, junior college, university, graduate school (master's, doctorate)), age as of March 31, 2024, and years of employment support experience.

#### *Leisure-Related Activities*

The leisure-related activities investigated in this study consisted of 13 items, as shown in Table 1.

These leisure-related activities were derived from a literature review on leisure guidance in Japan [46] and a qualitative analysis of interview surveys conducted with high school teachers at special needs schools for students with intellectual disabilities: the six categories referenced were "abilities necessary for enriching leisure," "students' challenges," "guidance content," "challenges in school-based guidance," "parents' awareness," and "perceptions of leisure." Based on these categories, the original survey items were created.

This study aimed to identify the gap between special needs school teachers' perceptions of leisure instruction content and those of vocational rehabilitation practitioners. To this end, the study was developed based on practice research articles in special needs schools and a qualitative survey of special needs school teachers to enhance the validity of the survey items.

**Table 1: Leisure-Related Activities**

No.	Items
1	The ability to choose one's desired leisure activities
2	The ability to pass the time during short breaks
3	Having friends to play with on holidays
4	Spending time together with others
5	Understanding the psychological importance of leisure
6	Gaining various activity experiences that lead to leisure
7	Understanding how to use time outside of the workplace
8	Acquiring money management skills necessary for leisure activities
9	Securing means of transportation necessary for engaging in leisure
10	Acquiring a repertoire of easily accessible activities
11	Knowing one's strengths and weaknesses in activities
12	Connecting with organizations that support leisure activities
13	The ability to find places for leisure activities

#### 2.4. Data Analysis

A paired t-test was conducted to examine the differences in the mean importance scores between the 13 items related to leisure-related activities during schooling and post-graduation.

#### 2.5. Research Ethics

The front page of the survey questionnaire explained the protection of personal information and other ethical considerations. The participants were informed that completing and submitting the questionnaire would be considered their informed consent. Additionally, approval was obtained from the Research Ethics Committee for Studies Involving Human Subjects at the Tegata Campus of Akita University (Approval No. 5-37, dated October 11, 2023).

### 3. RESULTS

#### 3.1. Basic Attributes

Responses were obtained from 126 SELP-affiliated practitioners. The survey targeted practitioners from 337 SELP branches in Japan, yielding a response rate of 37.4%. The basic attributes of the survey participants are listed in Table 2.

The highest level of education among participants was a university degree, with 79 individuals (62.7%) holding this qualification. Additionally, the average

number of years of employment support experience among participants was 12.5 years.

#### 3.2. Content of Leisure Guidance Recognized as Important

The top five items of leisure guidance recognized as important by practitioners during school and after graduation are shown in Tables 3 and 4, respectively.

The Cronbach's $\alpha$  coefficients for the survey items as a whole, which were conducted to check reliability, were 0.89 for the importance of guidance during school and 0.93 for the importance of guidance after graduation, confirming that the results were sufficiently consistent.

For both the schooling period and post-graduation, practitioners recognized the importance of having activities to develop the skills and knowledge necessary for engaging in leisure activities, such as knowing one's preferred activities, acquiring money management skills needed for leisure activities, being able to choose leisure activities, and understanding how to use time outside of work. However, differences were observed between the two periods. During schooling, practitioners emphasized gaining various activity experiences that led to leisure and aimed to expand leisure activities after graduation. By contrast, after graduation, they insisted on the importance of concretizing the skills and methods necessary for actualizing leisure activities, such as securing transportation for leisure activities.

**Table 2: Basic Attributes**

	<b>N</b>	<b>%</b>
Total	126	100.0
Male	67	53.2
Female	58	46.0
Other	1	0.8
<b>Highest level of education</b>	<b>N</b>	<b>%</b>
Junior high school	0	0
High school	12	9.5
Vocational school	18	14.3
Junior college	14	11.1
University	79	62.7
Graduate school	3	2.4
	<b>Mean</b>	<b>SD</b>
Age	46.1	9.89
Years of experience	12.5	9.32

SD: Standard Deviation.

**Table 3: Top Five Rankings of Importance during Schooling**

<b>Ranking</b>	<b>Items</b>	<b>Mean</b>	<b>SD</b>
1	Knowing one's strengths and weaknesses in activities	4.43	0.67
2	Acquiring money management skills necessary for leisure activities	4.39	0.70
3	The ability to choose one's desired leisure activities	4.25	0.81
4	Gaining various activity experiences that lead to leisure	4.18	0.74
5	Understanding how to use time outside of the workplace	4.17	0.82

SD: Standard Deviation.

**Table 4: Top Five Ranking of Importance after Graduation**

<b>Ranking</b>	<b>Items</b>	<b>Mean</b>	<b>SD</b>
1	Acquiring money management skills necessary for leisure activities	4.41	0.68
2	Knowing one's strengths and weaknesses in activities	4.24	0.79
3	Securing means of transportation necessary for engaging in leisure	4.17	0.76
4	The ability to choose one's desired leisure activities	4.16	0.82
5	Understanding how to use time outside of the workplace	4.11	0.79

SD: Standard Deviation.

### 3.3. Differences in Perceived Importance between Periods

To examine whether there were differences in the perceived importance between the periods, a paired t-test was conducted (Table 5).

The results indicated that the items related to expanding leisure activities, such as "having friends to play with on holidays" ( $p < 0.01$ ), "spending time with others" ( $p < 0.01$ ), "gaining various activity experiences that can be linked to leisure" ( $p < 0.01$ ), and "knowing one's strengths and weaknesses in activities" ( $p < 0.01$ ),

**Table 5: Differences in Perceived Importance between the Periods**

Items	During schooling		After graduation		t-score	p-value
	Mean	SD	Mean	SD		
The ability to choose one's desired leisure activities	4.25	0.81	4.16	0.82	1.14	
The ability to pass the time during short breaks	3.81	0.89	3.90	0.89	-1.08	
Having friends to play with on holidays	3.74	0.95	3.50	0.95	3.21	**
Spending time together with others	3.91	0.89	3.66	0.84	3.52	**
Understanding the psychological importance of leisure	3.81	0.89	4.02	0.79	-2.85	**
Gaining various activity experiences that lead to leisure	4.18	0.74	3.88	0.75	3.89	**
Understanding how to use time outside of the workplace	4.17	0.82	4.11	0.79	0.66	
Acquiring money management skills necessary for leisure activities	4.39	0.70	4.41	0.68	-0.38	
Securing means of transportation necessary for engaging in leisure	4.16	0.83	4.17	0.76	-0.21	
Acquiring a repertoire of easily accessible activities	3.81	0.82	3.77	0.86	0.55	
Knowing one's strengths and weaknesses in activities	4.43	0.67	4.24	0.79	2.75	**
Connecting with organizations that support leisure activities	3.83	0.89	3.86	0.80	-0.33	
The ability to find places for leisure activities	3.86	0.88	3.89	0.77	-0.40	

\*\* $p < 0.01$ .

SD: Standard Deviation.

were significantly more important during schooling. Conversely, the item "understanding the psychological importance of leisure" ( $p < 0.01$ ), which is related to incorporating leisure into maintaining vocational life, was significantly more important after graduation.

#### 4. DISCUSSION

The results of this study reveal which aspects of leisure guidance for students with intellectual disabilities are considered important by vocational rehabilitation practitioners. Practitioners identified the importance of instructing students on the skills and knowledge necessary to execute leisure activities after graduation. These skills include knowing one's strengths, acquiring the money management skills required for leisure, being able to choose leisure activities, and understanding how to spend time outside work. Supporting the acquisition of these skills and preparing environments conducive to leisure activities are said to promote positive social activities [47-49]. Leisure guidance is crucial for improving the social participation and quality of life of students with disabilities. However, even if they participate in leisure activities, the lack of opportunities to interact with non-disabled peers often results in social exclusion [50, 51]. Providing leisure guidance not only helps individuals with disabilities maintain their health but also contributes to their communities [52, 53]. Therefore,

teachers at special needs schools and practitioners supporting social participation must adopt a perspective that enables students to engage in inclusive leisure activities. This would require systematic guidance and support from schools in the post-graduation period.

The study highlighted that during schooling, building interpersonal relationships for performing leisure activities (making friends to play with on holidays and spending time with others) and enhancing preparedness for leisure activities (gaining various activity experiences and understanding one's own strengths and weaknesses) were recognized as important. In contrast, after graduation, securing transportation for engaging in leisure activities, which is an essential ability for executing leisure activities, and understanding the psychological importance of leisure were recognized as important. Understanding the psychological importance of leisure is crucial for maintaining stable social participation after graduation. If leisure is perceived merely as a way to kill time, it can lead to considering leisure activities as meaningless, potentially worsening the health of individuals with disabilities [54]. To ensure that students enjoy the leisure activities performed using skills taught during schooling and appreciate their benefits post-graduation, they must understand the psychological importance of leisure. Teachers and practitioners should maintain a perspective that connects guidance

during schooling with post-graduation support, providing continuous transition support. The differences in perceptions of leisure-time guidance between teachers and vocational rehabilitation practitioners, which were found in the results of this study, may be useful in planning for the treatment, support, and education of individuals with intellectual disabilities. This is because, when supporting individuals with intellectual disabilities, it is essential that the collaboration of various professionals, not only in education but also in medicine and vocational rehabilitation, is essential, and these members must have a common goal of supporting the lifelong development of the individual. The results of this study show that there is a gap in this goal and provide a perspective on how educators and practitioners involved in support can unify their goals. The results of this study have the potential to lead to suggestions for the next steps toward this improvement, especially as the system that facilitates this professional collaboration is not fully functioning in Japan. Therefore, the collaboration between special needs education and vocational rehabilitation in Japan needs to be reconsidered from the perspective of transition support [55].

### LIMITATIONS AND FUTURE RESEARCH

This study clarified the importance of developing various abilities in leisure guidance, as recognized by vocational rehabilitation practitioners. Yamada and Maebara report on a practical study to promote awareness among students with intellectual disabilities about the importance of leisure time in social participation after graduation from special needs schools based on the results of this study [56]. Although there is a need for further improvement of this practice, it is important as a new initiative in schools. It also highlighted the need for further investigation into the specific practices of leisure guidance within special needs education. Future research should address this issue and examine the practical aspects of leisure guidance as a part of transition support for students with disabilities.

### CONCLUSION

The major contribution of this study was the identification of perspectives on leisure guidance by vocational rehabilitation practitioners engaged in postgraduate support. Leisure does not hinder work; it offers significant benefits similar to those of employment, such as self-esteem and social

integration [57]. Although teachers at special needs schools recognize the necessity of leisure guidance, they lack a clear perspective on the extent to which it should be implemented in school education. This study provides insights that could help improve the practices of special needs schoolteachers and enhance the effectiveness of transition support for students with disabilities. In developing the program for teaching skills related to leisure activities to students with intellectual disabilities, it is essential to take into account not only the usual considerations in schools, such as the difficulty of understanding students with intellectual disabilities but also the perspective of lifelong development as they live in society after they graduate from school. The differences in perceptions in this study not only inform Japanese teachers of this perspective but also provide suggestions for points of improvement.

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### CONFLICT OF INTEREST

No potential conflict of interest was reported by the authors.

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