

Development of Inclusive Education in Japan Higher Education System

Moskvina O.

Novosibirsk State Technical University
Novosibirsk, Russia
kov3@inbox.ru

Kolishkina S.

Novosibirsk State Technical University
Novosibirsk, Russia

Savina T.

Novosibirsk State Technical University
Novosibirsk, Russia

Abstract—The article touches upon the issue of the basic concepts of inclusive education in Japan in relation to people with disabilities, ways to eliminate the "environmental" and "attitudinal" barriers in Japanese universities, the main activities of the University Centers for supporting students with disabilities, and the types of assistance they provided. The article analyses statistical data on the number of students with disabilities in Japan and identifies the immediate tasks for the development of the system. In addition, the article describes the legislative framework of inclusive education in Japan, the teaching model for students with disabilities at the universities of Tokyo, Hiroshima and Tsukuba. Finally, the article identifies the perspective tasks for further work towards the adaptation of students with disabilities in the Japanese society, including the system of higher education.

Keywords—*inclusive education, Japanese Universities, people with disabilities, Disability Services Office*

I. INTRODUCTION

Nowadays, Japan is one of the leading countries introducing the education for people with disabilities at all stages of schooling, from elementary to higher and secondary vocational education. In inclusive education, Japan, in the shortest time, moved from discrimination of people with disabilities and their physical elimination from society, which lasted almost until the end of the XVIII century, to building the most favorable conditions for people with disabilities at the present stage.

For Japan, the Convention on the Rights of Persons with Disabilities, adopted at the UN session in 2006 and signed by Japan in 2007, provided a significant impetus for developing this type of education. Since that time, Japan began to build a legislative framework for a barrier-free environment, an inclusive education system at all stages of schooling, and patronage programs for people with disabilities.

The inclusive approach in the education system of Japan began to develop when a "social" model has replaced a "medical" model, which defines disability as impaired health and only supports disabled people with social protection. In modern society, the "social model" states that a cause of disability is not a disease itself but physical ("environmental") and organizational ("attitudinal") barriers, stereotypes and

prejudices in society. This is explicitly stated in the Convention, 2006: "Disability is a result from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others"[1].

Today, the National Center for Supporting Disabled Persons, the Japanese Organization for Supporting Students with Disabilities, etc. have been established to coordinate actions to promote inclusive education in Japan. Now, it can be observed that higher education for people with disabilities in Japan has achieved a lot of success. The process of inclusion people with disabilities in society, including an access to education, in Japan is going on in two directions: the elimination of "environmental" and "attitudinal" barriers [2].

In order to eliminate "environmental" barriers, there have been made infrastructure improvements in universities according to new architectural requirements of a "barrier-free environment". Also, individual pathways for students with mobility disabilities across territory of university were designed. In order to overcome "attitudinal" barriers, there are internal high school volunteer programs to assist students with disabilities. These programs involve students who have completed special preparatory courses. Besides, there are municipal and state programs of social wellbeing of persons with disabilities.

The term "disabled" in Japan's legislation refers to "a person over 18 years old who has impaired body functions listed in the Table attached to the Law, and who has a Certificate of Disability issued by a Prefecture Office of a place of residence [3]. However, the term "disabled" is regarded in mass media as incorrect and implies a replacement for "limited / challenged" [4]. Therefore, instead of "disabled" the authors will use the term "people with disabilities".

In Japan, there are several well-known university centers for working with students with disabilities: the University of Tsukuba Support Centre, the University of Tokyo Barrier-Free Access Center, the University of Hiroshima Accessibility Center.

II. RESULTS AND DISCUSSION

In order to ensure inclusive education, a Japan's university sets the following institutions: University Administration which determines a university's policy towards students with disabilities; each faculty has an employee who is responsible for information support for students with disabilities at all stages of education; a Department for supporting students with disabilities which is responsible for patronage; Insurance and Advisory Services which provide emergency and psychological assistance. State universities, which have students with disabilities, are centrally funded by the Ministry of Education of Japan to build an inclusive learning environment. Funding comes from the state budget, while private universities receive funding from a special fund. Town and city councils fund city universities.



Fig. 1. Model of education for students with disabilities at the University of Tokyo

At the University of Tokyo, the University Administration, Faculty Departments and Disability Services Office (DSO) share financial, material and expert activities [5]. In order to improve cooperation, there is a “triangle of support” - where the University assumes financial responsibility, the DSO provides professional expertise, i.e. develops assistive technologies and leases equipment, trains staff, provides escort specialists during training, examinations and testing), and some departments provide staff and physical support in learning process, special conditions for studying and accommodation).

The University general meeting, which is held twice a year, addresses issues of promoting a barrier-free access to the whole territory and other important issues related to the work of the DSO. The DSO consists of 37 faculty members and staff (as of June 1, 2016), including the Managing Director, the Office Director, the Branch Directors and the staff in charge from the University Departments. The DSO holds symposia on barrier-free support at the University of Tokyo (since 2003) and participates in the development of the University regulatory acts. For all students with disabilities, the Center (DOS) conducts lectures on career opportunities and events in cooperation with the University Center for Career Support for students. A similar university-wide support system is developed at the Universities of Hiroshima and Tsukuba [6].

According to research of the Japanese Student Support Organization, in 2011, 807 universities in the country (66.9% of universities in Japan) provided opportunities for students with disabilities. The number of students with disabilities was 10,236 people (0.032% of all students in Japan). In 2011, the

number of graduates with disabilities was 1,439 people, of whom 214 people continued their education, and 677 were employed. For comparison, in 2013 the number of universities increased to 811 (68.2% of universities in Japan), and the number of students with disabilities was 13,449 people (0.42%). In 2013, 1881 people graduated from universities, of which 247 continued their education, and 919 were employed. By 2015, the total percentage of students with disabilities at the Bachelor's, Master's and postgraduate levels was 0.66, and now there is an upward trend [7]. For instance, while in 2011, 649 people totally blind or visually impaired were enrolled in universities in Japan, in 2015 there were already 720 people.

TABLE I. NUMBER OF STUDENTS WITH DISABILITIES IN JAPAN IN 2015

Type of degree	Total number of students (persons)	Number of students with disabilities (persons)	Students with disabilities percentage %
Bachelor's Degree full-time course	2 557 010	16 424	0.64
Bachelor's Degree correspondence course	169 125	1 866	1.10
Master's Degree full-time course	246 110	1 242	0.50
Master's Degree correspondence course	3 995	39	0.98
Specialist	1 464	20	1.37
Total	2 977 704	19 591	0.66

In accordance with Japan Law, universities are equipped with ramps, special toilets for disabled people, guide tracks and signs for the blind and visually impaired, special information panels using braille, sound signals for people with hearing disabilities, etc., which is already a norm for educational institutions in Japan.

TABLE II. NUMBER OF STUDENTS WITH HEARING IMPAIRMENT IN JAPAN IN 2015

Type of impairment	High school (persons)	College (persons)	Vocational college (persons)	Total (persons)	Ratio %
Deafness	569	5	3	577	2.7
Hearing impairment	1 001	57	40	1 098	5.1
Speech impairment	56	4	2	62	0.3
Total	1 626	66	45	1 737	8.0

In case the technical equipment of educational institutions does not meet the standards of “barrier-free environment” (for example, some buildings of university are architectural monuments and are not subject to rebuilding, such as in the Waseda University, the Otanomizu University or the Hokkaido State University, and others), in order to prevent discrimination of students with disabilities, there are special programs to facilitate the adaptation of such students in an education institution. Universities are required to track movements of students with disabilities on territory of institution and build individual conditions for them. However, individual conditions imply an environment in which ordinary students and students with disabilities would study in the same place at the same time.

The employees of university or employees of public organizations and medical institutions, as well as volunteers from the number of ordinary students of university, carry out patronage by providing individual assistants or qualified assistance to a student with disabilities.

Volunteer activities of ordinary university students to support students with disabilities are a way to deepen

understanding and communication between students, and friendships in student community. The work of professionals in the "support groups" is paid by university. It is carried out under the supervision of teachers and rehabilitation centers for students with disabilities at these universities [8].

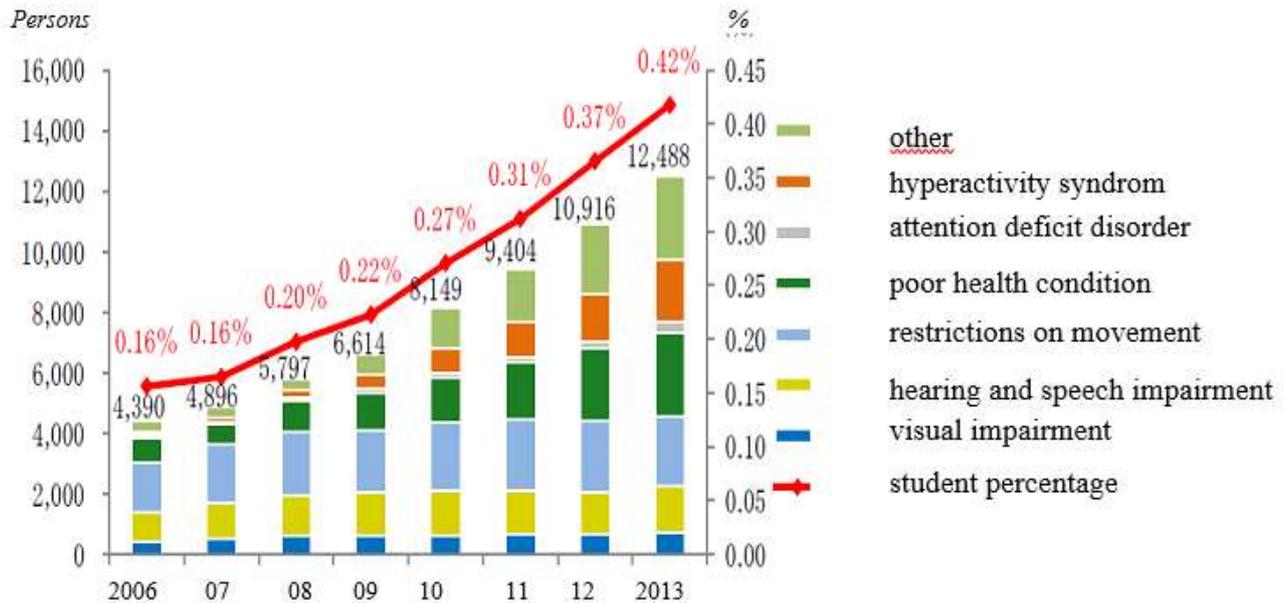


Fig. 2. Statistics on education of the visually impaired in Japan

Up to 2004, there were very few people with disabilities enrolled in universities in Japan, and, accordingly, there was no single university-wide system for supporting people with disabilities. Thanks to the initiative teachers, who took the lead in supporting students with disabilities, necessary structural units were established in leading universities. For example, in 2000, when two students entered the University of Hiroshima (one - completely deaf and another one - blind), the Volunteer Center for Disabled Persons appeared at the university. Professor Sano (cultural anthropologist) set the Centre. She later established the University's Accessibility Center, which is still working successfully, and became its first Director. For volunteer students and people with disabilities, she started a co-educational course for everyone who wants to undergo Bachelor's and Master's degrees. According to Professor Sano, her goal is "a world where accessibility (for people with disabilities and the elderly) is a usual thing to all. Accessibility is not a problem for individuals, it is our problem." She acknowledges that in Japan there is still not so much done for people with disabilities, as reflected in world standards. [9].

Satoshi Fukushima, a professor at the University of Tokyo, is an example of a person with disabilities who made incredible efforts to succeed in life. He was born in 1962 as a healthy baby, but at the age of three, he suffered an inflammatory disease. As a result, he lost his right eye. At the age of nine, he lost his left eye due to glaucoma. A few years later, his hearing began to get worse, and by the age of 18, he became completely deaf. In 1987, he was the first deaf-blind graduate of the University of

Tokyo. In 2001, Satoshi Fukushima began teaching at the University of Tokyo. He is an author and a co-author of many books. In Japan, his book *Unusual Day at Watanabe's House* is very popular. Working at the University of Tokyo, he has always helped other people with disabilities to gain self-esteem and become useful to society. In 2003, Satoshi Fukushima got the *Time Man of the Year* award. His success inspired many people and provoked discussion on the role of people with disabilities and their rights in Japan's society [10].

Satoshi Fukushima himself considers his merits very modest, assigns the main role to his mother, friends and relatives. His mother accompanied him everywhere, using braille for communication, tapping it on the hand of her son. Then this method was called "finger braille". Satoshi Fukushima thinks that his greatest success is the opening of the Center in Japan (2009), like Helen Keller's National Center for the Deaf and Blind in the United States. It is a major research and educational center for training and rehabilitation of deaf and blind people. The Minister of Health of Japan emphasizes the importance of the Center, since about 22,000 deaf-blind people live in Japan, 10% of them live in Tokyo [11]. With the support of Professor Fukushima, the Center for Barrier-Free Access for Students with Disabilities was opened at the University of Tokyo in 2004. Also, he teaches at the Center for Barrier-Free Education at the Faculty of Integrated Education.

Currently, there are about 600 universities in Japan, 457 of which are private. According to 2018 statistical data, there are

more than 2.5 million students in the country, and most of them attend small private universities. A student can enter a state university only with a full secondary education. The admission of applicants takes two stages: the National Center for University Entrance Examinations (NCUEE) tests applicants by the requirements of the Joint First Stage Achievements Test (JFSAT) [12]. If an applicant passes this test successfully, he can proceed to the entrance exam at the university. If an applicant gets maximum grades for the first test, he / she can apply for a place in the most prestigious universities of the country.

TABLE III. TYPES OF ASSISTANCE TO STUDENTS WITH DISABILITIES IN UNIVERSITIES OF JAPAN

Type of assistance	Number of high schools	Percentage of support
Transmission of information from a textbook	10	3.8
Travel assistance	1	0.4
Reading aloud	3	1.1
Sign language translation	64	24.2
Note taking	144	54.5
Computer note taking	115	43.6
Video subtitles	71	26.9
Tutor or study assistant activities	25	9.5
Extended time of exam, a special classroom	12	4.5
Preparation of special methods of answering exam questions	14	5.3
Permission to bring and use a personal computer	24	9.1
Transmission of written text, including instructions	100	37.9
Special classroom	15	5.7
Assistance during practice	63	23.9
Preparing a special seat in a classroom	150	56.8
Use of hearing aid and microphone	112	42.4
Use of special tables, chairs	13	4.9
Use of computer software to read aloud	16	6.1
Permission to record audio in a classroom	43	16.3
Providing a rest room	173	65.5
Extracurricular assistance	18	6.8
Other	4	1.5

The main feature of university curriculum in Japan is a clear division into special and general disciplines and sciences. During the first two years of study, students take courses in general sciences, such as History, Social Studies, Foreign Languages, Philosophy and Literature, as well special courses on the chosen major. The next two years focus on the disciplines in the field of expertise chosen by a student. The duration of study is the same everywhere, regardless of a major – getting a degree takes four years (students in Medicine and Veterinary study two years more). Finally, a student receives a Bachelor's degree. After getting this degree, a student can take a Master's Degree course, staying at university for further two years, or do research, submit thesis and receive a Ph.D.

Students with disabilities have an opportunity to take any university course (each university has more than one hundred). All universities are multidisciplinary. The choice of areas of training for Bachelors varies in different universities.

Basic concepts of High School Supporting Centres activities for students with disabilities:

- Provision of socio-psychological support and barrier-free access at the request of a student
- Required areas of work
- Human resource training
- Disability issues research and development of assistive technology
- Applicants informing through corporate sites on contacts of regional and national resource organizations.

The objectives of the University Centers for students with disabilities:

- Assistance on entrance tests
- Support system of academic, tutor and volunteer assistance
- Improving accessibility
- Support during training classes and lectures)
- Support in everyday life (in / outside university)
- Assistance in finding employment [13].

Special structural units of universities for students with disabilities widely use internal networking. Before entering university, a student makes a request to a Center (on-line request is available), where he / she describes his needs and submits necessary health documents, fills in a medical questionnaire, and, if necessary, has an interview and consultation with a Centers' specialists. After getting a piece of written confirmation from a Center, a student can have special conditions in entrance exam (a type of support is discussed before exam). Assistance during entrance exam is provided according to Special Points of Consideration for physically disabled applicants who take exams at the National Center for University Entrance Examinations (Braille exam, reading text aloud, etc.) [14].

Currently, the National Association for the Study of Persons with Disabilities under the leadership of Satoshi Arakawa is responsible for the development of inclusive education in Japan [15]. Thanks to the activities of this organization, by 2018 more than 100 Japan's universities are ready to provide special types of assistance to students with disabilities.

III. CONCLUSION

The analysis of Japan's universities policy towards students with disabilities shows that:

- The education of students with disabilities is a holistic process.
- Education is a structure where parts are intimately interconnected and explicable only by reference to the whole.
- There is a qualified result of the formation of education at a certain stage, step, or level. In this regard, education has parameters, level hierarchy, etc. The main substantive and

essential condition of education is the compliance of these levels and steps with the quality levels of shaping education. This is a kind of “sum”, or rather, a system of knowledge, skills, competencies (i.e., a certain information system), which has its own structure and limits.

- Education is not only practical and theoretical training, but also learning a lifestyle. Thus, educational space of a university makes conditions not only for mastering a set of competencies, but also for formation of social competencies, the social capital of a student, which determines the social and professional resource in life activities. In fact, education provides conditions for adaptation and rehabilitation potential of students with disabilities.
- Education is regarded as the most important resource for getting professional skills and abilities, and can also serve as an integral system of social rehabilitation services, that enable the “third” mission of university to fulfil. Thus, the components of training and education are complemented by a social rehabilitation component.
- The adjustability of educational routes for students with disabilities in training modules (disciplines) should be ensured by combining and choosing different forms of education, adapting educational programs to the needs of students with disabilities in general.
- Continuity of education allows developing a professional confidence of students with disabilities systematically, accurately and comprehensively.

Current ways of developing the system of teaching students with disabilities in Japan’s universities:

- Barrier-free education
- Active work with external structures: schools, centers, employers
- Further development of the research base
- The introduction of electronic and distance education in universities

In order to do this, the following tasks are set:

- Identification of an option / strategy for learning and individual socio-psychological support for students with disabilities in educational programs.
- Development of an algorithm for the modernization of the educational environment for teaching students with disabilities in the areas of education and the components of the model.
- Designing a system of social and psychological support for students with disabilities at the pre-university, university and post-university stages
- Designing educational environment necessary to provide special educational conditions for students with disabilities.

- Development of the tools of assessment the effectiveness and efficiency of a training model and individual socio-psychological support for students with disabilities [16].

In Japan, people are optimistic about significant changes in the lives of people with disabilities who have not yet received the desired support, especially in the field of education in the 21st century.

References

- [1] Convention on the Rights of People with Disabilities. Conventions and agreements. UN. Retrieved from: http://www.un.org/ru/documents/decl_conv/conventions/disability.html
- [2] Guidance on support to students with disabilities for teachers and university staff. Japanese Organization for student services. Retrieved from: http://www.jasso.go.jp/gakusei/tokubetsu_shien/guide_kyouzai/guide/index.html
- [3] Act to facilitate the movement of people with disabilities, the elderly, etc. (Law on accessibility). Ministry of Land, Infrastructure, Transport and Tourism of Japan. Retrieved from: <http://www.mlit.go.jp/jutakukentiku/build/barrier-free.html>
- [4] O. Moskvina, “The Changes in the Lexical Composition of the Modern Japanese Language,” in *Intercultural Communication: linguistic aspects*, Novosibirsk: NSTU, 2015, pp. 295-300.
- [5] S. Kolishkina, “On some Aspects of Higher Education of People with Disabilities in Case of Japan,” *Philosophy of Education*. Novosibirsk: NSPU, No. 3, pp. 237-248, 2014.
- [6] Support for students with disabilities. Centre to support students with disabilities at the University of Tsukuba. Retrieved from: <http://www.human.tsukuba.ac.jp/shien/pshien/1.php>
- [7] The income situation of people with disabilities in higher education. Japanese Organization for student services. Retrieved from: http://www.jasso.go.jp/tokubetsu_shien/chosa_kenkyu/koudairenkei/index.html
- [8] T Komatsu, “With people with disabilities in Japan,” Waseda University. Retrieved from: <http://www.waseda.jp/sem-muranolt01/KE/KE0208.html>
- [9] Accessibility Centre of Hiroshima University. Retrieved from: <http://www.achu.hiroshima-u.ac.jp>
- [10] The disability Services Office of Tokyo University. Retrieved from: <http://ds.adm.u-tokyo.ac.jp/en/overview/history.html>
- [11] “Report on the results to support students with disabilities in higher education and specialized secondary schools in 2018,” Japanese Organization for student services. Retrieved from: <http://www.jasso.go.jp/kouhou/press/press140318.html>
- [12] Y. Hirose, “OUJ’s new challenge: the supporting systems for the students with disabilities in the Open University of Japan,” *Journal of the Open University of Japan*, pp. 93-99, 2014. Retrieved from: http://www.lib.ouj.ac.jp/nenpou/no32/32_07.pdf
- [13] Japan student services organization (JASSO). Retrieved from: <http://www.jasso.go.jp/gakusei>
- [14] Basic Law on Education. Ministry of Education, Culture, Sports, Science and Technology of Japan. Retrieved from: <http://law.e-gov.go.jp/htmldata/H18/H18HO120.html>
- [15] A. Demeshina and S. Viryukina, “Comparative analysis of inclusive education in Japan and Russia,” in *World Science: problems and innovations*, 2017, pp. 173-176.
- [16] S. Shiga, “Building an educational environment to enhance the adaptation of graduates with special needs,” Kanagawa High school, 2018, pp. 38-41. Retrieved from: <http://www.nise.go.jp/cms/resources/content/14283/20180410-133156.pdf>