A Study on Increasing the Employability of Office Workers with Visual Disabilities

(Research reports # 116) Summary

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Thanks to the innovation of information technology, development of support equipment, and improved training and grant systems, the possibility of people with visual disabilities employed as office worker is increasing. In this study, actual examples of how people with visual disabilities conduct their work were collected in Japan and abroad. We hope that this study as well as the leaflet entitled 'Increasing the Employability of Office Workers with Visual Disabilities' will be of help to company personnel and the support center professionnals to further promote the employment of persons with visual disabilities.

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Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers.(JEED)
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2 Research Period
FY2011 to FY2012

3 Composition of the Research Report
 Introduction Purpose and Method of Research
 Chapter 1 Persons with Visual Disabilities and Office Work
 Chapter 2 State of Persons with Visual Disabilities Performing Office Work
 Chapter 3 Vocational Support and Expansion of the Employability of Persons with Visual Disabilities Overseas concerning Office Work
 Chapter 4 Research Summary

4 Background and Purpose of Research
Regarding the expansion of vocations for persons with visual disabilities, two main areas have been focused on: new health-related jobs which can be conducted with the qualifications for traditional occupations (massage, acupuncture and moxibustion), and office tasks that have been facilitated with the development of voice-output computers and the internet. Successful cases have been reported in both of those areas.

Concerning office tasks, thanks to the computers and network systems, information is made accessible for people with visual disabilities. They can now conduct various types of jobs such as human affairs, product managements, accounting and training. They are specialists in certain areas, which is true not only with people who became visually impaired after starting their career, but also those who were visually impaired before they started working. There are also many cases where companies try to develop their workers’ career so that they can be a specialist.

The purpose of this study is to gather information on the present situation of the employment of visually disabled people in Japan and abroad, to clarify the problems in the workplace regarding job expansions, and by analyzing them, to find out the factors hindering their equal employment opportunities in job placement and development.

5 Method
(1) Information Gathering/Translation/Analysis Regarding Situation in Japan and Overseas
a. Information in Japan
- Information on assistive technology and support given by education/training institutions was collected via publications, websites, information from JEED (Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers), and by visiting related facilities and institutions.
b. Information overseas
- Information regarding the support programs for office work job placement in the UK and Australia was collected through the internet.
- With the cooperation of support organization for people with visual disabilities (Royal
National Institute of Blind People (RNIB) and Vision Australia), questionnaires were sent to people with visual disabilities and their supervisor. In addition, there were examples of people that were published online. Then, the answers to the questionnaire and the cases collected on websites were translated and analyzed. In total, there were eight cases for the UK and seven cases for Australia.

- Results of our study were reported at the Vocational Rehabilitation Research Meeting held by National Institute of Vocational Rehabilitation and other conferences.

(2) Information Given by Specialists
Information was gathered from specialists in our organization and outside it, regarding the present state of assistive technologies, the use of screen readers, and the examples of support given to office workers with visual disabilities.

(i) Lectures were given by following outside specialists: 1) a representative of a support organization whose services included job-coaching, 2) a company selling computers for visually disabled people (they also provide training for visually disabled employees and their coworkers), and 3) a vocational center professional who has over 30 years of experiences of training people with disabilities. In addition, a joint meeting was held to discuss issues with the office workers with disabilities, their supervisors and employment support professionals.

(ii) Vocational training and employment support specialists (internal staff member) at the National Vocational Rehabilitation Center for Persons with Disabilities and National Kibi-Kogen Vocational Center for Persons with Disabilities were interviewed regarding the situation of vocational training, support services, and placement of office workers with visual disabilities.

(3) Case Survey
In order to understand how visually disabled office workers work, interviews were conducted to those who were introduced to us by support organizations in the Tokyo metropolitan area and vocational training institutions within our organization (JEED). The questions to be asked were sent to the persons to be interviewed beforehand, so that we can conduct the interview efficiently. Interviews were, in general conducted for employees with visual disabilities and their supervisors or personnel in human affairs division. The ten people in the cases studies are as follows:
### Overview of survey results for the case studies

<table>
<thead>
<tr>
<th>Business category</th>
<th>Location</th>
<th>Employment status</th>
<th>Tasks performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Manufacturing</td>
<td>Rural area</td>
<td>Permanent position</td>
<td>Management of an arrival-exit-time (time card) control system in general affairs department, development/maintenance/control of human affairs and payroll systems</td>
</tr>
<tr>
<td>2 Sale of medical supplies</td>
<td>Tokyo</td>
<td>Permanent position</td>
<td>Help desk work in IT department (and includes calling outside computer companies when repairs are needed)</td>
</tr>
<tr>
<td>3 Information &amp; communication</td>
<td>Tokyo</td>
<td>Permanent position</td>
<td>Recruitment work in human resources department, interview with students with disabilities, consultation support for employees with disabilities</td>
</tr>
<tr>
<td>4 Temporary staffing</td>
<td>Rural area</td>
<td>Telecommute</td>
<td>Collection of public tender information using the internet</td>
</tr>
<tr>
<td>5 Construction industry</td>
<td>Tokyo</td>
<td>Fixed-term contract</td>
<td>Making conference minutes, coordinating medical checkup reservation and updating company’s homepage content</td>
</tr>
<tr>
<td>6 Manufacturing and sales</td>
<td>Tokyo</td>
<td>Permanent position</td>
<td>Making product catalogs, answering email inquiries and writing pamphlets</td>
</tr>
<tr>
<td>7 School management</td>
<td>Tokyo</td>
<td>Permanent position</td>
<td>Creating in-house mail magazines and newsletters for outside subscribers</td>
</tr>
<tr>
<td>8 Assisted living residence for elderly people</td>
<td>Metropolitan area</td>
<td>Permanent position</td>
<td>Attending to visitors, creating documents</td>
</tr>
<tr>
<td>9 Local government officer</td>
<td>Metropolitan area</td>
<td>Permanent staff</td>
<td>Consultation support at consumer affairs center and making of consultation manuals</td>
</tr>
<tr>
<td>10 Local government officer</td>
<td>Metropolitan area</td>
<td>Permanent staff</td>
<td>Consultation at child counseling center</td>
</tr>
</tbody>
</table>

### 6 Summarized Results of the Study

1. **Collection/Translation/Analysis of Information on Japan and Overseas**
   
2. **Information in Japan**
   
   a. **Information in Japan**

   The following is the observation made based on the analysis of collected information:

   (i) In regards to the assistive technologies, screen reader software has advanced. There are more than three companies that manufacture screen reader software compatible with Windows 7 in Japanese language. People with visual disabilities choose and one or more software in accordance with the workplace computer and network environment.

   (ii) Persons with partial sight use touch screen systems (eg. iPad) as a portable CCTV. The use and know-how for new devices are spreading through the network and are gradually becoming popular. Regarding blind people, they can access to information through voice-output software and function. However, they are still handicapped in terms of typing speed and time needed for confirming the typed content.

   (iii) Regarding training and placement support, training given with the cooperation of companies and job coaching supports are some of the new approaches being taken in the past few years and are attracting attention. Since cooperating with HelloWork (public employment security office) and Vocational Rehabilitation Centers for Persons with Disabilities, cases with services provided by job-coaches are increasing, especially in the Tokyo metropolitan area.

   (iv) Japan Organization for Employment of the Elderly, Persons with Disabilities and Job Seekers (JEED) is actively involved in the effort of improving the employment situation of people with visual disabilities, and is involved in publishing manuals on employment.
management and training.
(v) For the support of workers who became visually disabled after they started working, peer counseling organizations play an important role, and further cooperation with them and employment support organization is necessary.

b. Information Overseas
Based on the information on the employment support systems and the support services provided by the support organization for people with visual disabilities in the UK and Australia, we could observe the following common characteristics between the two countries.
(i) The employment rate of persons with visual disabilities in both countries is lower than that of non-disabled people, and both countries are trying to rectify this situation through various measures.
(ii) In both countries, assistive technology is valued highly as a means of compensating their disability.
(iii) In the UK, government provides services that can be tailored to individual needs, and a government employment support program for persons with disabilities covers training to workplace settlement. This includes the explanation of the aim of non-discrimination law, the Equality Act, to persons with disabilities and their potential employers.
(iv) When seeking employment in the UK, work experience is highly valued; however, there are fewer opportunities for persons with visual disabilities to gain experience. Therefore, employment support institutions for persons with visual disabilities provide occasions for work experience for people with visual disabilities within their organizations and with the cooperation of the outside companies, thus making the people more confident about working in the actual workplace.
(v) In the UK, assistive technologies purchased through a governmental financial support system during the work experience period, can be transferred to the new company when they are hired, thus reducing the procedures necessary when hiring a disabled person.
(vi) In Australia, thorough support is provided in terms of assistive technology. A governmental program finances the purchase of equipment needed for training and employment. The support organization for people with visual disabilities even assess the workplace for accessibility and check whether screen readers can be used in the workplace network system before the person is hired.
(vii) Vision Australia, which is the major support organization for people with visual disabilities, employs a consultant with corporate work experience, actively seeks the needs of companies in cooperation with the national recruitment coordinator, and tries to find potential job offers before they are on the market.

(2) Interview with Specialists
The following insight was given from the outside specialists.
(i) “JAWS for Windows” (Screen reader software) is widely used because it can deal with various situations and is flexible. However, as the software have many function, trainings are needed to master it. One of the problems that have been pointed out was the fact that there are workers who are left unskilled without sufficient training.
(ii) By knowing how office works are conducted in actual situationed, a new issue was found and this has given a new insight on how to ask questions.
The following information was obtained from specialist within JEED.
(iii) Every year, approximately ten persons with visual disabilities are accepted at the National Vocational Rehabilitation Center for Persons with Disabilities (NVRCPD). Concerning their clients, job placement opportunities are low and the period before being hired is longer for
totally blind people compared to partially sighted people. This is because employers tend to be concerned about their safety with commuting and that disabled employees tend to take longer before they can effectively conduct the tasks given to them.

(iv) There have been examples of on-site training with cooperation of private companies, however, the number of occurrences does not increase because the company personnel have to be immersed in the planning and operation of the training programs. When training is to be conducted on-site in a rural area, support from Local Vocational Rehabilitation Centers for persons with disabilities and HelloWork may also be necessary.

(v) NVRCPD published a training manual entitled “Vocational Training Manual for People with Severe Visual Disabilities I - within the training centers” (2010). It describes the teaching material used for visually disabled persons, and can be utilized at general training centers when they accept a visually disabled person.

3) Case Survey
The following characteristics were seen based on the case survey.
(i) In order to efficiently perform office work, it is essential to master basic vocational skills such as typing, word processing and the usage of spreadsheet software. It is important that visually disabled people are efficiently trained to master these skills when aiming for office jobs.

(ii) Tasks concerning general affairs and human affairs are nowadays conducted mainly by email other electronic methods, thus tasks that can be handled by people with visual disabilities are increasing.

(iii) It can be said that operations involving email newsletters and websites are a vocational area which persons with visual disabilities can perform efficiently by using assistive technology, even though support from others may be necessary when creating tables and layouts.

(iv) Data collection using the internet is an operation that persons with visual disabilities can efficiently perform. This type of job is also interesting since it potentially opens up opportunities for telecommutes.

(v) From the examples of local government officers, we learned that their job assistants are helping them deal with the handwritten materials, and sorting out large amounts of documents. We also learned about the incompatibility of screen reading software with the workplace computers and systems. When one of the officers had to use the same computers as others in the workplace, the computer was not fully compatible with the screen reading software he used. The problem of upgrading screen reader version in order to catch up with the version upgrades of computers was also pointed out.

4) Research Summary
The following efforts are important for the expansion of vocational area in office work for persons with visual disabilities.

(i) Japanese language has many Kanjis with the same pronunciation so knowledge on what Kanji to use for a word is necessary when writing with Japanese screen readers. Knowledge on what Kanas to add is also necessary. Training for accurate typing and Japanese language writing skill is important as a precondition for being able to use the assistive technologies.

(ii) Standardization of the detail reading methods may be necessary to facilitate the use of screen readers, in addition to the effort of providing high function screen readers at a reasonable price.
Note: Japanese screen readers read out texts in natural Japanese. However, when the user wants to know what Kanji is used, it also has a function to indicate what Kanji is used. For example, 花 (flower) and 鼻 (nose) are both pronounced ‘hana’. When the user chooses to use the detailed reading mode, Japanese screen readers tell him/her what kanji is used, by saying ‘hana of florist’s’ or ‘hana of otolaryngology’. However, in the present screen readers, the words used are different according to the manufacturers of screen readers. This is why standardization is needed.

(iii) In order to support career development of workers with visual disabilities, in-house training prior to employment and job coaching for adapting to work situations and to expand the range of tasks is important, in addition to adjusting to the workplace.

(iv) In order to ensure accessibility to certification and qualification tests, adjustments that are made case-by-case, are necessary. When an externship is required for a certificate / license acquisition, the site of externship should be adapted to the person’s disability and some tests are given on-line. Public support for the adjustments may also be necessary. There are various aspects that should be considered from the perspective to assure rights to persons with disabilities.

(v) Short-term job experiences are given to university students in Japan. It is expected that these opportunities will be utilized further by people with severe visual disabilities, since these occasions will give people confidence, and in addition will allow companies to achieve a better understanding of persons with disabilities.

(vi) In order to upgrade skills for adaptive technologies, workers with visual disabilities do attempt to improve their skills on individual bases; in most cases, the individuals request support from their alma mater or vocational training institutions. It may also be necessary to include these efforts for improvements in the individual training programs given by companies.

(vii) Workers cannot avoid being influenced by various unexpected changes, such as organizational changes, amplification of disabilities or deterioration of health. When these changes occur, flexible responses and close cooperation with medical/welfare institutions is important.