

# How We Can Support International Students' Job Hunting in Japan Seamlessly

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**Abstract:** This paper describes our study where we have aimed to support international students' job hunting in Japan with our developed career support system. Career support for international students in Japan is an urgent issue since it is a Japanese government policy to increase the number of international workers. A questionnaire survey revealed that top two anxieties that international students have were language-related and lack of information. The result of our previous evaluation demonstrated that the users benefited from the system, while it revealed some agendas to deal with. Reflecting its result, a new career support system is scheduled to be designed in 2018 aiming for the enrichment of the career support contents and enhancement of seamless interaction among users. It is expected to contribute to the enhancement of the employment rate of international students in Japan.

**Keywords:** Career support, e-Book, international students, job-hunting, learning log system, seamless learning

## 1. Introduction

According to Japan Student Services Organization (JASSO), 267,042 foreign students are studying in Japan as of 2017. "Japan Revitalization Strategy 2016" declared by the Japanese government includes the increasing of the number of international workers who got jobs after graduation. They set the goal from 30% to 50% of the international job hunting students find jobs in Japan. Therefore, career support for international students has become an urgent issue to tackle with.

Job-hunting process is complicated in Japan. It imposes a heavy workload on their academic life. Students start job-hunting more than 1 year before graduation. They start with writing CVs (curriculum vitae) and entry sheets, taking exams, written or web-based, such as general knowledge tests, aptitude tests, and personality tests, participating group discussion observed by recruiters, and getting group interviews and individual interviews at the final stage until they finally obtain an official job offer. We believe that with the help from IT technology, this heavy workload could be lightened.

The emergence of IT technologies such as multimedia technology, Internet technology, ubiquitous and mobile technology provoked new learning concepts such as WBL (web based learning), CSCL (computer supported collaborative learning), and MAL (mobile assisted learning) (Ogata & Uosaki 2012). Besides, various kinds of learning supports have been made into reality by accessing resources of web sites, or by linking learners and numbers of learning objects (Inoue et al., 2014). But no such system as to support international students' career path has been developed so far. There are two objectives in this study. One is to specify what kind of anxieties they have in the process of job-hunting in Japan. The other is to propose effective career support system to facilitate their job hunting process. We believe that our system will contribute to the enhancement of the employment rate of international students in Japan.

## 2. Questionnaire Survey

A paper-based questionnaire survey was conducted to find out what kind of anxieties they had. Ninety-seven international students participated in the questionnaire survey. They were asked to answer the question, "Are you anxious about job search in Japan? If so, mark all reasons that apply."

The result of the survey showed that the top two anxieties that foreign students had about job search in Japan were 1) language-related anxieties: writing CVs and entry sheets (writing skill) and job interviews (listening and speaking skills) and 2) anxieties about how to get information (Figure 1).

As for the Japanese language ability, there are glossaries of job-hunting related technical terms which are rarely used in daily conversation. Therefore even advanced learners of Japanese need to learn these vocabularies. In addition, the fact that 54 students selected "I don't know know-how need to look for a job in Japan" and/or "I don't know how to get information" means that it is very important to convey necessary information to job-hunting students.

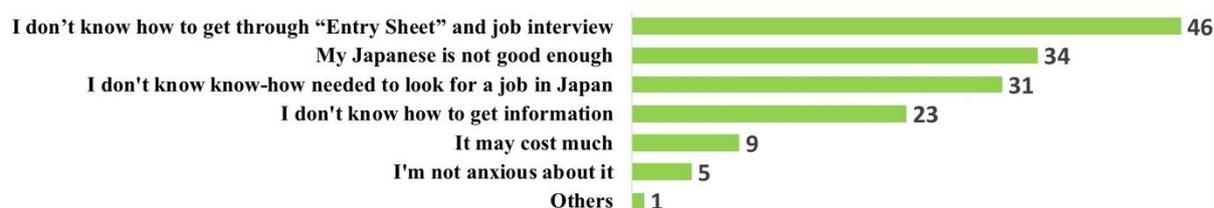


Figure 1. Anxious factors about job search in Japan.

In order to diminish their anxieties 1) and 2), SCROLL Career Support has been now in progress. SCROLL (System for Capturing and Reusing Of Learning Log) will be described in the next section.

### 3. SCROLL

SCROLL has been developed to support learners to record what they have learned as a log using a web browser and a mobile device and to share them with other learners anytime and anywhere seamlessly beyond the limits of time and space (Ogata et al. 2014). Therefore it fits most for international students who are learning about the job hunting system and job-hunting related terms in Japan in an informal learning setting. Its main functions are as follows:

- i. Recording: The system facilitates the way learners record their newly learned terms on the server. For example, when a learner comes across a new word, he can upload it to the system with texts, images, video, or pdf files. Translation is facilitated by Google translate.
- ii. Recommendation: The SCROLL recommendation function works as follows: when a learner uploads a new word to the system, the system checks if the same log or related logs have already been uploaded or not and shows the related terms to the learner. Then the system links learners' new log with their past log. It assists the implementation of seamless learning by making linking learners' present learning with their past learning, and also by linking a learner's learning with that of other learners.
- iii. Quizzes: It is reported that the quiz function is effective in reinforcing students' memory (Li et al. 2013; Uosaki et al. 2013). The quiz function also assists in linking their present learning with their past learning. Four types of quizzes (multiple-choice and yes-no quiz with images and texts) are generated automatically by the system. These quizzes are generated according to a learner's profile, location, time and the results of the past quizzes they took.
- iv. Reviewing: TimeMap proposed by Johnson and Wilson (2009) was implemented so that learners could review where and when they acquired their knowledge at a glance. It provides learners with better opportunities to review their learning.

### 3.1 E-book System

E-Book function was implemented to SCROLL (Kiyota et al.2016). It consists of database and EPUB (Electronic PUBLication; one of the eBook formats) File Folder. On EPUB-viewer, learners can take various actions, such as page turning, page jumping, bookmarking, highlighting, adding logs, taking memos, looking into the web dictionary and searching by keywords.

### 3.2 Past SCROLL Career Support System

The objective of the system was 1) to share job-hunting related information among job-hunters, 2) to organize and reinforce their knowledge. According to the pilot evaluation conducted in Uosaki et al. (2016), It helped users share job-hunting related knowledge. The system is expected to play an important role as information supplier. However, according to the result of the five-point-scale questionnaire, e-Book system did not gain good feedback compared with SCROLL. Mean score of e-Book was 3.3, while that of SCROLL was 4.1. Therefore with the refinement of e-Book contents, more detail examination of effectiveness of our system will be conducted.

## 4. New SCROLL Career Support System

Our future works include enrichment of the career support contents in e-Book and enhancement of seamless interaction among users to share knowledge anytime anywhere. In order to facilitate seamless user interaction, we are planning to implement a chat function with a bot system. A new career support system is scheduled to be designed during 2018. Our ultimate goal is to contribute to the increase of employment rate of international students in Japan.

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