Introduction

Against the backdrop of the current severe employment situation, major changes in the industrial economy and its employment style and other trends in Japan over recent years, efforts to provide career and vocational guidance to the younger generation has become increasingly essential. Within this environment, occupational information plays an extremely important role in supporting the vocational-based education of young people who have yet to develop awareness about the future, and encouraging them to think in terms of personal career development. The Occupation Hand Book for Youth (OHBY) was developed in 2002 as a PC-based guidance system to help empower young people from junior high school to college age launch independent and productive searches for occupation-related information. It is designed for use in combination with psychological testing to facilitate effective career-based education. By targeting these goals, the OHBY has emerged as one of the leading occupational information tools available in Japan today.

In this article, we profile the policy behind the development and design of the OHBY. We also provide guidelines to serve as a reference for group counseling, individual use or other applications of the system at the junior and senior high school career education classes, counseling centers, which serve as the primary venues for its use.

1.1 Career Counseling and Occupations

In the midst of the rapid changes in today’s economic, industrial and social fabric, Japan has entered an era in which individuals require the ability to independently select and pursue life-long careers. When choosing a lifestyle for the future and thinking of life as a type of “stage drama”, the selection of one’s role (occupation) in that “play” is the most important factor destined to influence that person’s life. Furthermore, to develop and achieve one’s chosen occupational career requires adaptation, self-enlightenment and adjustments to
deal with the constantly changing environment and conditions.

The action of selecting and developing an occupation or career follows a process that consists generally of the six steps outlined as follows:

**[Six Steps]**

A Understanding personal desires and traits  
B Understanding the content of various occupations  
C Trial occupational experience  
D Counseling by experts  
E Scrutiny, selection and implementation of options  
F Adaptation, self-enlightenment, career development

This process does not conclude when one graduates from school. Rather, it is repeated continually during the promotions and reassignments that take place at companies, transitions in technology, career changes, retirement and other occupational career processes that occur throughout one’s lifetime. For younger people, whether or not they thoroughly experience and master this career determination process is a factor that will impact their occupations for life.

Among the steps outlined in this process, Japan lags far behind in “B” (understanding occupations). This poor understanding of occupations is a major reason why students lose sight of study goals at the junior and senior high school level, and is also linked to the increasing occurrence of changing jobs, a shift away from working, unemployment among graduates, the recent rise in the percentage of permanent part-time workers known as “freeters”, and other concerning trends.

1.2 The Importance of Occupational Information in Career Counseling

1) Within the realm of career counseling, occupational information is of primary significance in enabling individuals to independently pursue their own potential and determine their unique course in life.

In other words, occupational information gives visible shape and form to future careers when devoting thought to “one’s own career,” a concept that normally conveys a somewhat abstract and strange impression. In conducting career counseling, such information fulfills the following functions:

① Providing basic information for correctly determining one’s future.
2) In addition to this, occupational information fulfills the following development functions through the search for such information at all school levels, starting with identifying occupations of interest to the individuals involved.

- **Elementary school:**
  - Learn about the existence and role of various types of occupations
  - Understanding of social significance and functions, develop occupational interests

- **Junior high school:**
  - Expand occupational interests, promote self-understanding
  - Select further schooling (employment) directions linked to one’s own future

- **Senior high school:**
  - Select occupations based on self-understanding
  - Select employment or further schooling directions appropriate for oneself

- **College:**
  - Deepen self-understanding and narrow down occupation focus
  - Securing employment and selecting occupation based on future career choice

1.3 Defining Occupational Information Demanded in Career Counseling

The need exists for the following types of occupational information within the realm of career counseling.

- **Reliable information with full occupational-based content.**
- **Information capable of generating occupational interest and volition from readers.**
- **Efforts to provide various types of occupational information to stimulate readers to think about possible careers.**

Leading examples of such information in the United States include the Occupational Outlook Handbook (OOH) and Dictionary of Occupational Titles (DOT), while in Japan there is the Occupational Handbook (Adult Edition: 1998). Regarding well-known computer-assisted self-career guides (CACG), there is Discover, SIGI and O*net in the U.S., the CD-ROM version of the aforementioned Occupational Handbook, Career Insight and other systems.
However, as all of these systems were developed for the use of college students and adults in mind, they are complex and time-consuming to fully utilize.

1.4 Distinguishing Characteristics of the OHBY

The OHBY was developed to address this situation, and contains the following distinguishing characteristics.

① Developed from the results of many years of occupational research in vocational awareness and other areas.

② A simple computer assisted career guidance system (CACGS) containing occupational information, various types of search systems, psychological tests and other features.

③ Primary targets are junior and senior high school students, but also able to support the needs of both college students and upper grade elementary school students.

④ Facilitates the understanding of 430 titles of occupations with abundant photographs, illustrations and moving images, along with statement and brief summaries.

⑤ Utilizes insights from frontline education and counseling to facilitate flexible use linked to class schedules, teaching methods and other parameters.

⑥ Designed for self help-based use by students and other target users, enhancing both vocation- and self-understanding and assisting in the selection of occupations.

The OHBY (CD-ROM) is categorized into occupational information and occupation search sections. If the conventional Occupational Handbook (printed booklet version) can be considered as an encyclopedia focusing on statement, this OHBY can be considered as an electronic illustrated reference filled with useful visual images.

2.1 Composition of the OHBY

1) The OHBY Occupational Information

The occupational information contained in the OHBY is designed to generate interest and knowledge in various occupations among young people from early in life (during their junior and senior high school years), inspire occupational awareness and support career counseling.
To this end, the number of occupations listed in this resource has been expanded from the 300 titles in the conventional Occupational Handbook to 430 titles. In addition, the statement on these occupations is now more concise in content, while visual information has been improved from the previous photographs to also include illustrations and moving images.

The OHBY occupational information is organized into the following framework.

[Occupational Information Composition]

“What types of occupations are available?”
Statement on work content.

“Let’s have a look using photographs!”
Use of four photographs and two illustrations in total to explain work content and situations.
Moving images used for certain occupations.

“How to enter certain occupations”
Use of charts and statement to show the academic career, credentials and other background conditions required to enter certain fields of work.

“Finding out more”
Statement on working conditions, locations, persons engaged in certain jobs, etc.

“What occupations are similar?”
Examples of occupations that resemble each other in certain aspects

“Asking seniors in the field”
Talking with graduates of the same school who are now working or other people engaged in certain occupations about their work motivation and satisfaction.

2) The OHBY occupation search system consists of the following features:
Occupation Panorama
Occupations are divided into 12 fields by industry, profession, workplace traits and other categories. This classification reflects the actual image,
atmosphere and other aspects of these occupations in a format that is easy to understand.

Job Town Search
Industries and business establishments, as well as the occupations therein, are displayed using an occupation map divided into nine separate regions. This enables users to locate various types of occupations encountered in their daily life or in their communities.

Keyword Search
Occupations can be researched using words related to things, people, data and other areas. Enables easy search of occupations via words of interest or concern to users.

Work Discovery Test
Use of vocational interest or aptitude tests to look up occupations deemed as appropriate for the individual. Also functions as a tool for self-discovery and analysis.

Syllabary Index
Direct searches of vocational categories by occupational title.

3) My Note
The “My Note” function allows users to record the details of how they utilized the OHBY following actual use of it. Personal-use records in personal computers are used to grasp the progress made to date, and highlight the points that should be focused on in the future. This is a useful function for recording and evaluating the use of the OHBY for school teachers career counselors, as well as enabling them to provide follow-up guidance.

In this regard, the OHBY offers various methods of use, such as personal use (self-use) with PCs, man-to-man use in career guidance by counselors and others, group-based learning in schools and other environments, collective training or group counseling using liquid-crystal projectors and other support methods.
2.2 Developing Occupational Understanding, Career and Occupational Learning

Understanding and interest in occupations evolves through a growth process according to the school level and other factors.

The OHBY has not been designed with elementary school children (fifth and sixth graders) as targets. Even so, elementary school students do possess interest and a certain degree of understanding in regards to occupations. There are numerous different occupations recorded in the OHBY, with elementary school students also expressing interest and ample understanding of occupations and occupation visuals (photos, illustrations and moving images) that they observe on an everyday basis. In the occupation search systems in particular, use of Job Town Search, Keyword Search and other functions facilitates the exploration of occupations from illustrations or familiar matters, thereby providing strong guidance.

At the junior high school level, students experience a rapid increase in the knowledge and information they have regarding occupations, although biases are also identified. Due to this, it is initially important for children in this age group to come into contact with and observe various types of occupations, and learn about occupations in a well-balanced manner. Meanwhile, a thorough awareness of the different occupations available based on experiences to develop this awareness, field trips and other methods should nurture spontaneous self-understanding of those occupations.

For senior high school students, focusing on a certain degree of occupational understanding and critical awareness toward career issues, it is important to instill direction about their own futures based on self-understanding. Regarding occupational understanding in terms of their own career decisions, it is vital to achieve deeper and more detailed knowledge of occupations as barometers of the careers toward which they will eventually aspire.

2.3 Systematic Understanding of Occupations

In “Occupation Panorama,” vocations in the 12 occupational fields are consolidated and categorized. These are not occupational classifications designed for the sake of compiling statistics or other purposes. Rather, they are classifications that reflect the reality of industries, workplaces and other contributing factors. With regard to representative occupations in each major vocational field, it is vital to learn not just the names, but also the primary
contents of the work as well. This serves to nurture the ability to view vocations systematically, and is an effective means of making comparisons with occupations in other fields, surmising about occupations in the same field and so forth. In this way, Occupation Panorama not only teaches the user how to categorize and systematize occupations, but also provides an important occupational search menu in an analytical context.

For junior high school students, there is a considerable increase in the volume of memories concerning the occupations and work that they observe in daily life or through various media. However, at the same time there is a tendency not to consolidate or be aware of such memories. Moreover, in many cases the impressions or memories of occupations are not accompanied by knowledge of the actual job names. Therefore, it is important for students at this age level to use places or situations as clues for stimulating thoughts and awareness of the work and occupations that they have observed in life to date.

The “Job Town Search” supports this. First, an occupation map is used to search out occupations (indicated by illustrations) from frequently visited places, districts, establishments or companies. In hospitals, for example, in addition to physicians and nurses, users will become aware that technicians perform tests and other types of medical treatment and various other people are also employed at those facilities. Proceeding from that stage, investigations are made into what types of workplaces and occupations exist in regions and locations that users have either visited or not visited. This fosters understanding of the existence of regions and places (locations) suitable for the functioning of certain industries and occupations, and an increasing grasp of the corresponding connections between business categories and occupations and other relations between industry and occupation.

2.4 Specific Occupation Searches

Even if the students posses a knowledge of the many occupations and types of work that exist in the world, at first most will be attracted to areas in which they have personal strengths or interest. Therefore, learning about and discovering oneself will assist in fostering an interest in and understanding of occupations, as well as in selecting specific occupations or careers. Providing support on this front is the “Work Discovery Test.” This is a simplified version of the “Vocational Readiness Test” developed by the Japan Institute for Labor Policy and Training by reducing the number of questions in the original
version. It is structured to enable junior and senior high school students to easily grasp the distinguishing features of their own interests and aptitudes, and then search for occupations that are in line with those traits. For carrying out complete examinations and diagnoses, use of the aforementioned “Vocational Readiness Test” (for junior and senior high school students), the “Vocational Preference Inventory” (VPI) system (for college students and above) and other helpful tests are recommended.

“The Keyword Search” enables occupations to be easily researched from words linked to interests or other related matters. This search is comprised of linkage to things (T), people (P), data (D) and other quantities. These things, people and data are the fundamental standards used to classify occupations. This is why the occupations searched through the use of keywords resemble those displayed in the Occupation Panorama. This function is suitable for elementary schools students and first- and second-year junior high school students as a search menu for use at prior to the Occupation Panorama. These are age groups in which systematic knowledge and understanding of occupation names and content and other vocational-based development has yet to occur.

The “Syllabary Index” searches for occupations by occupational title, and compiles lists consisting of the occupations on file and related vocational fields. This index facilitates simpler and faster searches when the name of the specific occupation is known. While this menu is necessary for conducting searches, it is not so effective in terms of providing occupational understanding or guidance.

2.5 Understanding of Industrial Society and Occupation Selection
* “Learning About Occupations”

With regard to occupational knowledge, relying only on everyday life and experiences (and failing to learn about occupations in a systematic fashion) tends to result in fragmented and biased information. The goal here is to use occupation search systems and occupational information to learn about various vocational matters in a balanced fashion, and develop a comprehensive grasp of the “overall world of occupations.” For junior and senior high school students, it is preferable to read such information after conducting occupation searches and browsing through occupational information, or around the time the students take field trips to visit actual businesses. Such tours and other visits are used to promote information gathering, thus raising overall
understanding and evaluation skills with regard to occupations. It is possible to utilize career guidance, vocational-related briefings and other forms of group training to introduce or explain about the “the world of occupations.”

* “Occupation Selection Guide”

Efforts to encourage occupation searches, information gathering and self-discovery are not limited to the time frameworks available for career counseling and learning sessions. Sooner or later, all students will encounter the need to make concrete selections about their future careers. To prepare for this, it is vital to learn about the sequences and the essentials of career and occupation selection. For junior and senior high school students, examining these materials based on a certain degree of progress in career learning and vocational readiness will enhance such effects.

At this stage, career guidance, employment briefings and other group training sessions may also be used to explain the basic steps of “occupation selection.”

2.6 Key Points in Using Occupation Information in Career Guidance and Learning

Let us now summarize the goals and key points of the use and application of OHBY by specific school level.

1) Use by Age and Development Stage

Elementary school students (fifth and sixth graders):

Rather than “occupations” as such, students in this age group become aware of important work or activities in society through their daily lives or informative experiences. With the OHBY, elementary school students are also provided with easily understood images and visual information about work in general. In terms of occupation searches, they begin by using “Job Town Search” and “Keyword Search.”

Junior High School Students:

This is the most fertile period for the learning of occupational information. Systematic occupational knowledge and experiences are used to promote self-understanding. Fast-paced occupational development is encouraged each academic year, with care taken to guard against gender-based biases in
occupational aspirations. At this stage, repeated use is made of all the OHBY functions and information.

Senior High School Students:
At this level, it is important to instill direction in one’s own path in life, based on self-understanding. This extends beyond just information concerning occupations, careers and other areas. Along with this, improvements are made in selection skills. Also used to gain more detailed occupational information about careers or preferred vocations are the Occupational Handbook (Adult Edition) and various other information sources concerning industries, companies and so forth.

College students (first and second year):
For students with inadequate career awareness (particularly pertaining to occupations) and self-understanding, use of the OHBY during their first and second years in college is recommended. Following this, it is useful to supply more detailed occupational information and related information, as well as offer individual career counseling sessions.

2) Uses Linked to Situations and Targets
Schools:
Use of the OHBY in social studies classes and other learning situations. Use of the OHBY for career counseling and education. Effective for group use in computer rooms.

Individuals:
Use of the OHBY by students themselves at school or at home (self-use).

Group Training:
Use at employment seminars and other occasions. Format favors use by multiple PCs and an instructor to provide guidance. If possible, set up liquid-crystal projectors or other equipment in advance for screen displays and explanations.

Career Counseling Rooms:
Ready access for self-use at counseling room resource corners or PCs.
Guidance provided upon request from users.

Career Counseling:
- For individual consultations use with counselor guidance. In group counseling sessions use to coordinate with group applications.

3) Use Adapted to Career Counseling Plans and Programs
- It is important for career counselors to adapt the abundant information and functions of the OHBY to the specific contents and planning of the guidance used at the school.

4) Contents of Occupational Information Supplied
   ① The number of occupations, list composition and other aspects of the information supplied vary according to vocational development, needs, regions and other parameters of the target users.
   - As the OHBY lists over 400 occupations, it is capable of responding to a wide range of needs and applications.
   ② Number and types of occupations
   - Core occupations: 50~100 occupations (representative occupations within the occupational classifications)
     - Core occupations are essential for systematic learning of occupations in general.
   - Related occupations: Occupations with connections to the core occupations
     - Approx. 200~300 occupations (including major occupations within smaller grouping of occupations)
     - Helpful for further expanding preferred occupation choices.
   - New occupations: Occupations with future potential that is emerging through technical innovations and other professionalization.
     - Occupations for which demand in recent years has increased, both socially and economically.
   - Occupations of interest: Occupations that junior and high school students are able to form mental images of, and want to learn about or experience.
   - Other: Local industry occupations based on regional districts, traditional skill vocations, etc.
3 Occupational Information Contents

Basic information:

In the OHBY, based on the categories “What type of occupations are available?” and “How to enter certain occupations,” together with visual data, information is supplied along the lines of “Finding out more,” “Asking seniors in the field” and “Similar occupations.”

Detailed information:

There are limits to the categories and the contents of the information that can be supplied through the OHBY. As a result, the following types of detailed information are needed to instill greater knowledge about the final stage of the occupation selection process and occupations preferred for employment. The Occupational Handbook (Adult Edition), various types of statistics, books and materials about credentials and licenses, psychological tests and numerous other information resources and tools will be used in such cases. In the United States, most of the information categories listed below have been processed into database form, and are available for viewing on websites.

(Detailed Information Category Examples)

Labor conditions: Wages, working hours (holidays), work environment, etc.
Number of workers and worker attributes
Employee growth rate, occupational outlook
Vocational aptitude, interest and characteristics
Credential and license test subjects, training facilities
Related information: Recruiting and job-hunting information
Industry and trade information
Company and management information
Region-specific industry and occupation information
Education and training information, training facility information

5) Use via Linkage with Psychological Tests or Diagnostic Systems

The OHBY is equipped with simple tests that, along with other occupational information, enhances the understanding of efficiency in search methods, occupations, aptitude and other qualities. This is based on the administration of thorough psychological tests, and the analysis of the test results.

The results of and occupations indicated by the simple tests contained in
the OHBY conform to the General Aptitude Test Battery (GATB) and Vocational Preference Inventory (VPI) systems, but are not identical to those systems. The OHBY tests take into consideration the fact that junior and senior high school students are still developing and are therefore flexible in their attitudes. The tests are thus set up to flexibly express the personal type and work direction of each individual. In other words, they are designed to avoid excessively narrowing down occupation types, and instead extend across a number of different types (depending on the individual’s answers) presenting a broad range of related occupations. The activity of checking occupations best suited to individuals from among the categories displayed is important and significant in terms of fostering self-understanding and occupational understanding in each student.

6) Use with Set Practice Themes

Enhanced effects of career education are achieved when the OHBY is not used in its original form, but rather when the OHBY occupational information and search functions are utilized to implement career education themes that are elaborated through independent skills and resources.

One of the career education themes used widely at junior high schools and other levels is “Occupation Investigation.” This is quite similar to the method of collecting and coordinating occupational information with the Occupation Handbook.

The outline of this approach is as follows.
Theme Practice Example: “Occupation Investigation”

- Theme aims:
  Nurturing skills to collect, analyze and utilize occupational information.
  Understand the social role of occupations.
  Learn about the links between occupations and oneself, and consider one’s own lifestyle.

- Theme contents:
  1. “Investigate Occupations”
     ① Refer to various different occupations from the OHBY Job Town Search (investigate by location) and Occupation Panorama (investigate by occupational classification).
2. Learn more about occupations of interest by accessing the “JobJobWorld” occupational information website (http://www.shigotokan.ehdo.go.jp) supplied in “The Vocational Museum” and examining the moving images.

3. Select the occupations to be researched.

2. “Depict Persons in Specific Occupations”

① Visit and interview persons engaged in selected occupations, and use that information in combination with sketches of the work scenes to investigate the social role of these occupations and compile the results in writing.

② Present personal creations in class.

3. “Compile in Newspaper Format”

① Compile the results of the interviews for presentation in school newspapers, booklet form or other formats.

② Don’t forget to thank and report back to all cooperating interviewees. Another useful reference of examples by academic year or school level is the “OHBY User Guide” (a standard attachment to the OHBY package).

References


