

1. Objectives

The Japan Institute for Labour Policy and Training (JILPT) is an incorporated administrative agency and since its foundation, has been developing research programs in accordance with themes associated with medium-term labor policy challenges the Ministry of Health, Labour and Welfare has presented, and carrying out its research activities for its first mid-term plan (from October 2003 to March 2007). This report summarizes findings from a project research carried out on “the labor market infrastructure development for Members¹ of the project raised and discussed the following two questions before starting detailed studies on “the labor market infrastructure development for human resources development:”

- (1) Why is “the labor market infrastructure development for vocational skills human resources development” an important issue?
- (2) How can we, focusing attention on important things, understand the current situation of “the labor market infrastructure for human resources development” and analyze its problems?

In the first section of this report we summarize our discussion on the two questions, before planning detailed research methods based on the discussion.

A. Why is “the labor market infrastructure development for human resources development” an important issue?

Japanese policies on human resources development have changed significantly following revisions of “Vocational Training Act” in 1969 and in 1978 and the introduction of “Human Resources Development Promotion Act” in 1985. In other words, Japanese policies have shifted their focus from public vocational training to promotion of

human resources development led by private enterprises, by introducing more flexibility into vocational training criteria to feedback needs of enterprises, and recognizing importance of on-the-job training (OJT) as well as of off-the-job training (Off-JT, collective training which usually takes place away from normal work situations) as effective training for vocational work.

Factors behind these changes include in-house human resources development actively taking place in response to the growth of internal labor market and a general emphasis on on-the-job training in Japanese industries. Government policies concerning vocational training were in the 1950s aimed at introducing a mechanism to form Western-style socially prevailing skills, but later made major changes in accordance with actual growth of industries. Since then, Japanese policies on human resources development have regarded enterprise-sponsored human resources development as fundamental, and the national government has only facilitated and supplemented such development. (Izumi 1985, Taniguchi 1997)

The Human Resources Development Promotion Act provides that the national government shall formulate basic human resources development plans and shall indicate the framework of related policies in a medium to long-term perspective. The Eighth Basic Plan for Human Resources Development was formulated in July 2006. This Project Research started when the Seventh Basic Plan was being implemented. The Seventh Basic Plan refers to “the labor market infrastructure development for human resources development” as summarized below.

Recent technical innovation and economic globalization have been causing industry-wide structural changes, and at the same time, workers’ job

¹ Members of this Vocational Development Project Research are shown in P.162 Some of the members have been changed and new members have been recruited due to personnel reshuffles and expansion of the scope of the research, yet the basic focus of the research has remained unchanged.

consciousness and forms of employment are getting more diversified. Accordingly, there is concern about increasing mismatches between jobseekers' skills and experience and demands of the labor market due to higher labor mobility and enterprise-wide need for more active duty reassignment. To ensure employment stability and expansion, the current situation requires environments that facilitate human resources development by workers and by employers as well as improvement in labor supply and demand. In other words, what is essential are environments that enable workers and employers to access relevant information on the labor market, including information on job opportunities, and provide opportunities for workers to evaluate their own vocational ability and learn in vocational training courses in accordance with their intended vocational goals for their career development. A socioeconomic infrastructure for human resources development that enables the labor market to effectively function will play roles of these environments. The above Basic Plan discusses necessary policies, by grouping the infrastructure into four systems: (1) systems supporting workers' career development; (2) systems providing easy access to information on the labor market, including information on job opportunities and needs for human resources development; (3) effective vocational ability evaluation systems for workers including white collar workers; and (4) systems providing various educational training opportunities. (Ministry of Health, Labour and Welfare 2001)

From the above description, we can learn that "the labor market infrastructure development for human resources development" means infrastructure development concerning human resources development that enables the labor market to effectively function, or infrastructure development that enables workers and/or employers to willingly and voluntarily carry out relevant vocational development. However, such infrastructure is yet to be fully established, and that is why this issue now attracts so much attention.

As described before, Japanese policies concerning human resources development had focused on in-house vocational development backed by

traditional long-term employment practices since the 1970s. In the early 90s, following increasing labor mobility, the idea of individual-oriented vocational development was introduced (The Sixth Basic Plan for Human Resources Development 1996). As parts of specific measures, in order to encourage individual growth and development, "Training and Education Benefits System" was established in 1998, in which individuals, instead of places of business, are entitled to partial refunds of expenses incurred with training courses. Yet, this benefit system lacked systematic approach for generating environments that encourage individuals to willingly get involved in vocational development both in and outside of their workplaces. The Seventh Basic Plan for Human Resources Development is characterized by the national government's willingness to upgrade these environments as a part of its responsibility.

Accordingly, in discussing "the labor market infrastructure development for human resources development," first, we should consider the key roles that individuals play in vocational development as well as enterprises. Considering how the government has handled this issue up until now, we believe more attention should be given to individual-oriented vocational development. Secondly, while systematic improvement of the infrastructure in a broader sense both in and outside of enterprises should be discussed, we need to examine more the infrastructure that assumes Off-JT and human resources development outside of enterprises, given the government's past policies largely dependent on enterprise-sponsored OJT and other in-house vocational development.

B. How can we, focusing attention on important things, understand the current situation of "the labor market infrastructure for human resources development" and analyze its problems?

What kind of research is to be planned on "the labor market infrastructure improvement for human resources development"? We believe that, clarifying the current situation, which will serve as the basis for policy planning, and extracting related problems will constitute the foundation of the research. Since the

concept of “infrastructure” is vast, we cannot even start a survey for identifying the current situation until which areas should be focused and how are determined. For this purpose, we have to sort out what has been made clear by earlier studies and examine what needs to be clarified. Research on the labor market infrastructure is not an established academic discipline, and we can say few preceding studies have addressed this subject and at the same time, many preceding studies have addressed this issue from viewpoints encompassing various areas. Conducting exhaustive study from the latter’s perspective is beyond our capacity, and we have examined preceding studies concerning only human resources development policies, which is a mere part of numerous subjects concerning this issue. Then we presented two sub-themes as shown below.

First, what have we already learned about the conventional vocational development which is highly dependent on enterprise-sponsored activities? Many studies, including pioneering studies by Kazuo Koike (Koike 1997 and 1981), have accumulated data on “how vocational skills have been acquired in enterprises.” International comparisons have been frequently made on this issue, highlighting features and benefits of Japanese-style employment management that puts much faith in OJT and staff reshuffling for skill formation. While one can refer to a mechanism of OJT or staff reshuffling as an infrastructure enabling the internal labor market to produce effects on vocational development in a broader sense, what we need to address now is how to develop components other than OJT and staff reshuffling.

Expenses incurred with off-the-job training, or Off-JT, have been reported for a long period of time in the Ministry of Health, Labour and Welfare’s “General Survey of Working Conditions.” The expenses have significantly decreased since the early 1990s, yet still hovering at a level similar to the 1980s. More specifically, Japanese-style Off-JT conventionally depends on stratified training programs, as is often referred to as “Off-JT

conducted at major career milestones” (Koike 1988). However, some studies point out that recent off-the-job training courses include more theme-specific courses and individual trainings, and at the same time, have been carried out more selectively. (Imano 2003) It is reasonable to think that contents of the training have undergone significant change.

The “General Survey of Working Conditions” has not clarified every expense incurred by enterprises in connection with vocational development. As K. Imano and E. Ohki point out (2000), expenses incurred with vocational development include not only expenses for equipment and instructors, but also personnel costs and opportunity costs for persons in charge of training.² Ohki (2003) analyzed the expenses incurred with Off-JT and noted that almost half of them were spent on educational training institutes outside of enterprises. Knowing whether enterprises currently procure educational training from within the enterprises or from the outside is important for policy planning concerning future infrastructure. Factors behind this include enterprise-specific vocational ability, and “whether enterprises currently procure educational training from within the enterprises or from the outside” is a determinant essential to identifying the scope of effective infrastructure development outside of enterprises designed for vocational skills upgrading. Basic information on current situation needs to be made clear, including “what kind of educational training is being offered and is being utilized at what kind of places and to what extent?”

We would like to consider the vocational development infrastructure from viewpoints of individual workers. Naturally, individual-oriented vocational development is closely intertwined with career development for each individual. A policy objective of developing an individual-oriented infrastructure that enables each person to select his or her career path and nurture his or her own vocational ability accordingly will require clarification of how far such career path and vocational ability development have been realized.

² Expenses incurred with vocational ability development include not only expenses for these Off-JT but also opportunity costs in connection with OJT incurred by both trainers and trainees.

What has been made clear so far? Odaka (1982) surveyed workers and educational training institutes-based scholars in as early as the late 1970s for learning the correlation between individual career path design and needs for training. Odaka pointed out that while workers had needs for training largely due to present or prospective needs of their workplaces, and not due to individual career path design such as job changes. We can say that, from viewpoints of individuals, up until the 1980s, enterprise-sponsored vocational development and in-house career development had played central role in human resources development. Back in those days, the most important milestone in career path selection may have been the employment of new graduates. However, studies on the employment for new high school graduates already pointed out that we can no longer say such job placement is career path selection for individual workers. (Amano et al.1988)

The number of studies concerning the correlation between job changes and vocational ability has increased since the early 1990s. “Employability,” or ability to be employed within and outside of companies and ability to facilitate labor mobility, which Japan Business Federation (Nippon Keidanren) recommended in 1999, undoubtedly constitutes the infrastructure that supports vocational skill development aiming at ensured employment stability and employment expansion through labor mobility. A number of studies examined how the vocational ability is currently formed and is influencing labor mobility. For example, Fujimura (2003) pointed out, by analyzing questions asked during job interviews for career changes, that vocational ability respected outside of enterprises is largely overlapped with the one respected within an enterprise, and indicated that what is important for upgrading your vocational ability respected outside of enterprises is to improve the quality of your current work and for that purpose, employees themselves have to identify and bring up their own strengths and use ingenuity to make their ways of working more useful for human resources development. Kurosawa (2003b), surveying companies offering mid-career employment opportunities and workers employed in mid-career, pointed out the inadequacy of vocational

ability standards as a way to “disseminate” the level of vocational ability of individuals. Inoki et al. (2001) broadly discussed job changes and human resources development, pointing out that business experience and social networks gained in previous positions influenced successful job-changing and increased satisfaction. The current situation analysis in these papers suggest many things about the infrastructure, including standards used to evaluate vocational ability, networks that suitably disseminate the evaluation, and environments that enable individuals to manage their own ability expansion.

These papers on job-changing observed individual workers for only a very short period of time, mostly, immediately before and after job changes. However, if vocational ability development from the viewpoints of individuals is to be discussed, a longer-term observation tracing back to their schooldays may be required. In one’s work history which is made up of a series of careers ranging from the past to the future, how vocational ability is being formed and for what purpose one is willing to develop one’s vocational ability? Understanding of ability formation from the present viewpoint of individuals now reaching the midway point of their career paths will be required to make individual-oriented ability formation more effective. How individuals have made or have been forced to make job selection at which stage to establish their career tracks? We believe that policies without understanding of these current situations from the viewpoint of individuals will be no use in influencing individuals.

In addition, your working life is not all of what you are. You have your family life, and you may be a parent, a child or a learner. Your working life is only a part of your whole career. We need to consider the vocational ability development in the context of the entire career.

Very few studies in Japan have analyzed individuals’ long-term careers from the above viewpoints. While recently, a number of panel surveys on young people in transition have been conducted, still there may be almost none of long-term studies on individuals. Of course, this type of studies require a lot of time and labor, yet we believe that what proposed policies on the career development assistance for

individuals lack most is studies that identify the process of vocational ability development and career development seen from the viewpoint of individuals.

2. Research Method

Based on the above discussion, in this Project Research we clarify the platform of Off-JT human resources development opportunities in relation to “the labor market infrastructure development for human resources development” and make clear how individuals make use of vocational development opportunities, including Off-JT opportunities, for formulating their careers and vocational skills. Then we examine possible directions the infrastructure development needs to take in future. More specifically, we have identified the following two sub-themes and have appointed a team to study each sub-theme.

A. Study on the current status of the vocational education and training service market (Hereinafter referred to as “the study on the vocational training service market”):

This study looks at the entire picture of the ongoing Off-JT human resources development conducted inside and outside of enterprises by surveying the current situation. In other words, the study clarifies the supply structure of vocational training services and how the demand sides, or individuals, have utilized the vocational training for their human resources development. For this purpose, first, we have grasped general features of the market based on existing statistical sources and survey findings. Then secondly, in order to make clear organizational features of educational training suppliers and contents of educational trainings, we conducted mail questionnaires twice on organizations that supply vocational education and trainings. (This survey covered only education and training providers, including teaching institutions and private-sector educational training organizations, and did not cover ordinary enterprises since their main business purposes do not include supply of educational training services.) Thirdly, we conducted another mail survey, using a research firm to transmit and

collect questionnaires to and from respondents, to learn what kind of training services have been required by what kind of individuals, including workers, for what purposes and how they have appreciated the services.

B. Study on the current status of long-term career development for individuals (Hereinafter referred to as “the study on long-term careers”):

In parallel with the above mentioned study on the current status, this study clarifies how careers and vocational skills have been formulated so far, collecting and analyzing case examples of long-term career development for individuals. This study has been structured based the idea that the creation of an effective system supporting individuals in future should take into consideration the past various career development cases. This study interviewed 68 persons who have now reached or nearly reached in their 50s from the yearend of 2003 to the beginning of 2004. These 68 persons were respondents of a past panel survey, “Career Tracking Survey,” conducted on more than 2,800 men and women, then aged 15 to 26, who were born in from 1953 to 1955.

3. Design of the Study on the Vocational Training Service Market and the Outline of Findings

A. Aim of the study on the vocational training service market

Recently employers’ and individuals’ basic ideas about the human resources development have been changing.

Enterprises are now being restructuring their own education and training strategies, by reviewing their conventional in-house “human resource development through on-the-job training” and more frequently utilizing training institutes outside of enterprises when training is required, for improving investment efficiency. In addition, they have increasingly emphasized the principle of individual responsibility in one’s vocational development and career development. While enterprises have been increasingly utilizing vocational training institutes

outside of enterprises instead of in-house training and individual workers are increasingly encouraged to value the importance of individual responsibility in vocational development, enhanced Japan's ability to develop human resources requires upgraded functions of vocational teaching institutes outside of enterprises. In other words, a social infrastructure that supports vocational training activities carried out by both enterprises and individuals should be further developed, and the government has the major role to play in this issue.

The government has to correctly grasp the current state of vocational training activities outside of enterprises in order to formulate effective policies. Information available on this issue, however, is quite limited. Accordingly, the purpose of our study on the vocational training service market is to show the current state of vocational education and training activities in the labor market from the viewpoints of the vocational training service market (which is discussed later), and we have employed the following procedures.

- i. Clarify the contents and amount of the education and training services supplied and demanded in the labor market.
- ii. Identify supply and demand for education and training services in the labor market
- iii. Based on findings from the above, evaluating the current state of the vocational training service market and identifying policy challenges.

B. Viewpoints toward the vocational training service market

In order to develop vocational ability of individuals, teaching institutes provide students vocational education, and various institutions including teaching institutes provide vocational training to workers and others. In this paper we would like to discuss the latter, "vocational training for workers and others", which is hereinafter referred to as "education and training service."

To enjoy the education and training service, workers need, first of all, "providers of the education and training service" and "those who pay the cost of the education and training service." The providers of the education and training service include public-

sector (national, municipal and joint public-private venture) bodies (excluding training institutes), training institutes (such as universities and specialized training institutes) and private-sector educational institutes (such as public-interest corporations, employers' associations and private-sector enterprises). These providers of the education and training service are referred to as "vocational training providers" in this paper. Those who pay the cost of the education and training service include ordinary enterprises (enterprises of which main business purposes do not include the supply of education and training services are referred to as "ordinary enterprises" in this paper.), public sectors and individuals.

Moreover, an agreement between "the provider of vocational training service" and "those who pay for the vocational training service" concerning the service must be concluded to enable workers and others to enjoy the service.

A place where the above agreement is made and the vocational training service is being distributed is referred to as "broadly-defined vocational training service market." A part of this market includes a territory where those who pay for vocational education also provide training services, in other words, a territory of "self-consumption or internal transaction" where one supplies education and training services at one's own cost. This "self-consumption" includes cases where those who pay for and supply the services at the same time are ordinary enterprises and another cases where they are public-sector bodies. In these cases, costs spent on the training service will not flow outside the territory (in other words, vocational training services are not transacted outside of the territory). In this paper, we will refer to "the vocational training service market" as "the narrowly-defined market for vocational training services" by excluding the "self-consumption." Unless otherwise specified, in this paper the term "the vocational training service market" refers to "the narrowly-defined market for vocational training services."

Characteristics of the vocational training service market are to be described with the aid of variables concerning the following three topics:

- i. Supply of the vocational training service seen

- from the viewpoints of the providers
- ii. Demand for the vocational training service seen from the viewpoint of workers
 - iii. Present status of the vocational training service supplied by vocational training providers and demanded by workers and others through the market.

C. Components of the study on the vocational training service market

First we analyzed the vocational training service market, utilizing existing statistics and findings from surveys.³ We developed a framework for analyzing the vocational training service market, and identified features of “broadly-defined vocational training service market.” More specifically, we made clear (1) the number of organizations of vocational training providers and the composition of the providers grouped by organizational form and organizational features, (2) concerning the current status of the training services, the quantitative structure of the service as seen from the business income of vocational education providers and the qualitative structure of the service as seen from contents of trainings (including the duration of vocational trainings), and (3) the current situation on how governments and enterprises which demand vocational education and training services share cost.

Next, two surveys on training service providers were conducted to clarify detailed features of the training service market seen from the supply side. (Hereinafter the first survey is referred to as “the first survey on vocational training providers” and the second survey is referred to as “the second survey on vocational training providers.”) The first survey made clear the quantitative supplying structure of the vocational training service market on “which providers provided what kind of services to how

much degree?” along with organizational features of providers. Findings from this survey were summarized in “the Japan Institute for Labour Policy and Training (2005a).

The second survey was to clarify “the qualitative supplying structure of the vocational training service market” and analyzed vocational training courses that these providers offer, by describing (1) what kind of study was conducted in training courses (what were being taught), (2) for what kind of workers (trainees’ ages, occupations, and attributes as seen from their career levels), and (3) by what methods (duration, frequency and fee of courses). Findings from the above survey were summarized in “the Japan Institute for Labour Policy and Training (2005b).

These surveys did not examine public sectors since they are more difficult to be surveyed and instead analyzed characteristics of public-sector providers, utilizing existing statistic sources.

The final theme is to make clear “the demand for the vocational training service market” and for this purpose, we conducted a survey of individuals including workers (Hereinafter this study is referred to as “the survey of individuals”).⁴ The purpose of this “survey of individuals” is to clarify characteristics of the demand for the vocational training service market by observing what kind of persons demand what kind of training services (training activities) for what purpose (Needs of trainings) and how they have evaluated the result (evaluation of vocational trainings).

D. Outline of the findings

What has been made clear from the analysis of existing data is (1) that the expense spent by both enterprises and governments on the vocational training service market is approximately 581.7 billion yen, (2) that enterprises largely depend on private-

3 Statistics Bureau of Ministry of Internal Affairs and Communications (2003a) (2003b); Statistics and Information Department of the Ministry of Health, Labour and Welfare (2003), Human resources Development Bureau of the Ministry of Health, Labour and Welfare(2002), The Japan Institute of Labour (2003 a),Employment and Human Resources Development Organization of Japan, Website of Lifelong Human Resources Development Center (2003), and The Japan Institute of Labour (1996) (1998)

4 In addition to “the survey on individuals,” human resources development activities of unemployed people in a certain geographic area were surveyed in January 2006. (The latter survey is hereinafter referred to as “the survey on unemployed persons.”)

sector training providers and training institutes have played a relatively little role, and (3) that at the supply side, public sectors have concentrated their services on trainings on machinery and skills concerning electricity and electronics which need extensive investment, while private-sector major providers such as industry organizations and economic organizations (including chambers of commerce) have specialized in trainings on administrative services, and business corporations have mainly focused on short-term training courses. Reflecting the above mentioned role sharing between public and private sectors, we believe it is difficult to largely depend on private-sector providers for upgrading an education and training system that nurtures advanced and specialized human resources development which needs long-term training courses. Our findings suggest instead the need for activating the training system presently conducted mainly by public-sectors, and the need for more effectively utilizing educational institutions, including vocational training schools, various training institutes and universities.

Secondly, we discussed, based on findings from the survey of individuals, “who need what kind of education and training services for what reason?”, “what kind of constraint conditions will be assigned in that case” and “how they have evaluated their effects.” Our major findings include: (1) Individuals spend around 60% of their time on individual growth and development, and around 40% on trainings, and around half of the time spent on trainings has been assigned to training courses that training institutes provide. (2) Individuals have spent only 30% of resources (time and money) they can actually invest, and we believe regular staff cannot effectively utilize their resources (time) because they have less discretion in the allocation of time. (3) While compared with regular staff, non-regular staff spends less resource and less budgets for vocational development, the ratio of their resource and budget against their annual incomes spent by non-regular staff is higher than the ratio spent by regular staff. Non-regular staff is more likely to purchase cheap training services because they cannot expect much from vocational development offered in their

workplaces. (4) The demand for education and training services supplied by public institutions including public interest corporations and employers’ associations, instead of those offered by private-sector bodies and public trainings, is large. For this reason, we should recommend that Off-JT outside of enterprises is becoming increasingly important and there are urgent needs to develop the vocational training service market. We should also recommend that policies to improve the working hour management are required for regular staff, since they cannot freely utilize their working hours for vocational development. Further we recommend that public-sector vocational training programs to be upgraded for those unable to afford expensive training and unable to expect good vocational development opportunities at workplaces, such as non-regular staff, and that public-sector agencies such as employers’ associations and public-interest organizations to be more actively utilized in the reviewing process of the public-private cost sharing in vocational training.

Thirdly, we have clarified the training service supply structures, by identifying “what kind of providers have provided vocational training services to whom by what kind of methods through what kind of training courses,” utilizing findings from mail survey questionnaires for vocational training providers. Our major findings include: (1) When we take into consideration the revenue from and the amount invested in the vocational training service, we found that around 70% of managing organizations running vocational trainings are private-sector enterprises (of which business purposes include the supply of vocational training services), public interest corporations and employers’ associations, and the largest share of trainees attend trainings offered by public interest corporations. (2) When identifying “what kind of trainees have enjoyed what kind of vocational training services,” we have found that, lecture classes and seminars mostly assume small and medium sized enterprises salaried workers, offering training seminars for new recruits, technical trainings, quality and safety training courses and training programs on personnel and labor relations affairs, all intended for each job class. Correspondence courses

are designed for a much wider audience including big company salaried workers. (3) When taking into consideration the duration and price of trainings, we have found that, in general special course training institutes offer long-term expensive courses, public interest corporations offer medium-term mid-priced courses, employers' associations and universities offer low-priced short-term courses, private-sector enterprises provide relatively expensive medium-term courses, vocational training corporations provide long-term low-priced or mid-priced courses, and graduate schools for working persons offer extremely-expensive extremely-long-term courses. From these findings we have found it important to, first, make clear the market structure for identifying key issues to be emphasized, and we have pointed out the need for clarifying relative features of vocational training providers to facilitate efficient operation of policies, including those on entrusted training, and the need for actively utilizing public interest corporations and employers' associations that are neither public nor private.

Finally, we compared public vocational training, which was not covered by the survey on vocational training providers, with other training providers and their effects as seen from the viewpoints of enterprises, based on existing data. The number of people who finished public vocational training courses fluctuated significantly from 380,000 in the fiscal 1999 to 1.05 million in the fiscal 2001 and 390,000 in the fiscal 2004, demonstrating the influence of entrusted training conducted as a part of emergency employment measures and showing how public vocational training worked as a part of employment measures. These training programs have been targeted to job leavers, workers and school graduates, and job leavers and workers represent a significant share. Ninety-seven percents and 82% of these trainings are designed for job leavers and workers, respectively, consisting of specialized training courses (to learn specialized knowledge), and most of the training courses are technical ones. On the contrary, most training courses other training institutes offer for working people are certification courses and training in foreign languages. When taking into account how enterprises have evaluated

vocational training for school graduates, we have found that especially manufacturing and information sectors have highly appreciated the training as effective specialized learning, and many enterprises are willing to employ those who have finished these courses. In addition, it has been pointed out that, without these vocational development seminars designed for workers, almost five times as much cost would have been required to retain the present level of their knowledge and skills, and that what has been learned in these trainings is worth 6.3 times as much as the cost. What enterprises expect most from vocational training is basic training, and the training has succeeded in providing much of what it is expected to provide. It is recommended to enhance the training for experienced skilled workers to refreshing their skills, the training for systematically teaching practical work and related theories, and the function that contributes to improved performance at job sites by visualizing technical levels.

4. Outline of the Study on Long-term Careers and its Findings

A. The framework for the study and the basic design of the survey

The study on long-term careers comprehensively discusses how careers and vocational ability have been developed from the viewpoints of individuals. To promote the upgrading of environments that facilitate individual-oriented vocational ability and career development as policy measures, we need to understand how actual careers and vocational skills of individual have been formed. In doing so, it is important to introduce the viewpoints of individuals by identifying in what context individual trainees have viewed these careers and skills and what kind of alternatives individuals can find in them. Vocational development is naturally difficult to be evaluated unless examined in the long view. Accordingly, the survey should be carried out in a longer term viewpoint.

For this purpose, in this study we decided to conduct a detailed hearing investigation into middle-aged people on their past career and vocational ability development. This investigation includes not only

vocational career and human resources development, but also their career path selection and how it is being affected by their parents, spouses and children, how they selected their career paths in training institutes and major factors behind the selection, including their academic performance and household budgets.

It is naturally quite difficult to find respondents who are willing to answer such an extensive hearing. Accordingly, we contacted respondents, who were born in 1953 to 1955, of the panel survey known as “Career Tracking Survey,” for asking their cooperation in our survey. The “Career Tracking Survey” was conducted when JILPT was known as National Institute of Employment and Vocational Research (1981 to 1989) and as National Institute of Vocational Research (1969 to 1981). As mentioned below, the “career tracking survey” is a 10-year-long panel survey, and we assumed that the former respondents of the survey would be more willing to understand and take part in our survey.

As a result, the total of 68 persons of those asked eventually accepted to answer our questionnaire.

B. Characteristics of our questionnaire

This study, as above mentioned, is based on findings from the 68 respondents and features by the following: (1) by referring to the past “Career Tracking Survey,” one can track down the 35-year-long career path of individuals. These studies are really valuable for a long duration of the period studied. Findings on individuals’ career paths from panel surveys have been accumulated overseas and a vast amount of data has been made public. On the contrary in Japan, only little data from panel surveys have been kept. Though this study is preliminary and only a limited number of people are studied, the duration of this study is remarkable even compared to ones conducted overseas, and one can derive from this study an incomparably enormous amount of information and new knowledge compared to a cross-cutting study conducted at a single point in time.

(2) The “Career Tracking Survey” is a panel survey, beginning when a sample of individuals were ninth graders, and then conducted when the same representative sample respondents were in high school, immediately after they got their first

employment, and when they were 26 years old. In this way, one can analyze the correlation between specific life stages experienced by each individual (for example, transition from training institutes to workplaces) and macroscopic socioeconomic situations (for example, job markets), and more accurately learn the correlation between their ways of thinking about career guidance and jobs during their days in training institutes and their career development in younger ages.

For example, those surveyed in this study spent their school days during the post-war economic development and obtained their first employment after graduation around the first oil crisis. This coincided with a sharp rise in the advancement rate to high schools where 80% of their generation proceeded to high school and a rise in the advancement rate to colleges and universities. They landed their first employment in the 1970s when business conditions and employment conditions experienced radical changes due to the oil crisis, and the labor market varied much depending on when they first entered the labor market. Junior high school graduates and senior high school graduates then landed their first employment before the economy was yet to be affected by the oil crisis, while college graduates and university graduates landed their first jobs when employment conditions had already worsened by the oil crisis. In this way, it is clear that changing social and economic conditions have been closely related to their transition from training institutes to workplaces.

(3) This study utilized the “life history calendar” method along with interviews. This method was invented in the 1980s by demographic specialists and others, and respondents were asked to report events in their history of schooling, employment history, marital history, and family history in a calendar-like format (The calendar year was used as the fundamental reporting unit) on a sheet of paper. To facilitate the recall of respondents’ lifetime experience, the life history calendar listed some key dates of public events (for example, the first oil crisis in 1973, the Great Hanshin Awaji earthquake in 1995), and asked respondents to report any changes in contents of their jobs, positions, transfers, job

satisfaction and rewarding experience. Respondents could also report events such as their independence from their parents, marriages and births of their children, and in this way this life history calendar provides a bird's eyes view of respondents' personal histories.

The use of this method enabled us to relate changes in their workplaces, jobs and positions, which serve as good indicators of individuals' career path design, to their entire life plans, by linking them to their life events (for example, independence from family members, marriages and childbirths) and to geographical transfers (for example, job transfers and husband-alone transfers), instead of considering these changes separately. (Japan Institute for Labour Policy and Training 2006a)

The "Career Tracking Survey," which serves as the basis of the above study on long-term careers, was originally conducted from the late 1960s to the 1980s.

The purpose of the "Career Tracking Survey" was, in short, to clarify a mechanism of employment and work adjustment for young people. In the 1960s when the survey was started, young people's job changing was acknowledged as a social problem, and in general their job changing was attributed to their maladjustment to jobs or workplaces. Though the survey was initially carried out to examine their attitudes toward jobs and workplaces, the purpose of the "Career Tracking Survey" was to understand the correlation between individuals and their jobs as a series of development processes.

Those surveyed in the "Career Tracking Survey" were 2,820 persons, 1,459 males and 1,361 females, who were born in the fiscal 1953 to 1955, selected from 71 training institutes in seven prefectures. In principle one class per training institute was sampled. The prefectures surveyed were selected after consideration whether each prefecture mainly supplied labor or demanded labor. The survey was launched in different years in different prefectures. More specifically, those surveyed were divided into three groups including those born in 1953 and graduated from junior high school in March 1969 who were initially surveyed in 1968, and those born in 1955 and graduated from junior high school in March

1971 who were initially surveyed in 1970. They were initially surveyed when they were in ninth grade at the age of 15.

Subsequent tracking studies following the above study examined them who had already left schools or training institutes, at the age of 17, 20, 23 and 26. In principle, these studies were conducted face-to-face interview by researchers visiting respondents under cooperation with local public job placement offices. Most of females 23 years old or older with some exceptions, however, were surveyed through mail questionnaire since female respondents tended to leave their jobs and become unemployed after marriage. The response rate for male respondents at the age of 26 was as high as 83.1% and these tracking surveys generally achieved relatively high response rates. (National Institute of Employment and Vocational Research 1988)

C. Outline of the findings

First, we discussed changes and challenges in the transition from training institutes to employment, by making clear the current situation of transition and initial career development based on findings from the "Career Tracking Survey" and the interview conducted in our study. What we have learned from this analysis is: (1) career path guidance in training institutes and respondents' own attitudes toward career path selection have influenced their subsequent career development, (2) their parents have played a significant role in information relevant to career path selection, and the information relevant to career path selection includes not only types of occupations and vocational skills but also individuals' personal interrelationship, (3) their parents' academic background has deeply affected respondents' own career path selection and occupational choices, demonstrating disparity of opportunities for job seekers then, and (4) the labor market climate at school-leaving ages has deeply affected their transition processes. These findings indicate the significance of extensive career education in training institutes and the importance of policy measures for correcting and supplementing "initial disadvantages" stemming from factors one cannot control such as their parents' socioeconomic status and the job

market climate at school-leaving ages.

Secondly, we discussed challenges found in long-term vocational career paths and the development and realization of vocational ability or skills. For male respondents, we compared those who have changed jobs and those who have never changed jobs to discuss their vocational development and career paths. We have also examined female respondents' life-career, or their integrated progression of their life and work-related activities, with emphasis placed on work-life balance. In this discussion, we mostly depended on findings from the interview, with parallel use of the "Career Tracking Survey." Findings from the analysis of male respondents' career paths include: (1) their human resources development sponsored by enterprises have been carried out mostly in their younger days, (2) Off-JT has firmly supported OJT, and (3) enterprise-sponsored vocational training has been more effective when it is conducted on workers' own initiative. Findings on female respondents' career paths indicate that they commonly have compared need for child care and their vocational lives to select what they can, according to their own value judgment or ways of living. It has been pointed out that these female respondents have reentered the job market after interrupted career paths, their new jobs are generally disconnected from their occupations in their younger days, and instead they have re-entered workplaces just because of their willingness to participating in the working world. Policy recommendation on the above findings states the need for (1) a system to support career paths development and selection including job changes in younger days, (2) a system to secure Off-JT vocational training opportunities in response to each individual's problem consciousness, (3) studies on career paths and development of policy measures with sufficient consideration given to ways of thinking of interested parties, and (4) more active local employment with emphasis placed on individual workers' and job seekers' living areas and proximity to workplaces.

5. Conclusion: Upgrading of Vocational Skills Development and Vocational Training Infrastructure in Japan

Section 1: Characteristics of this research project

A. Infrastructure development for "diversified training opportunities"

The role of this chapter is to discuss policy challenges and directions for developing the labor market infrastructure for human resources development based on findings from the research project. Then what is "the labor market infrastructure for human resources development" (Hereinafter referred to as "infrastructure for vocational development")? In this study, we have considered the infrastructure for vocational development as a socioeconomic infrastructure to support workers (or employers) in obtaining information on the labor market, reviewing their own (or their employees') vocational skills, and accordingly carrying out their own vocational development in line with their own (or their employees') vocational life designing. Based on this, the government's 7th human resources development program states that the infrastructure for vocational development is made up of four components: (1) "a system to support workers' career development," (2) "a system enabling people to obtain information on the labor market," (3) "a system enable to properly evaluate vocational ability," and (4) "a system enabling people to enjoy diversified education and training courses."

Reflecting the above points, we have found it necessary to examine all of these topics in order to discuss policy measures regarding "the labor market infrastructure development for human resources development." In this study project, we have mainly focused on "a system enabling people to enjoy diversified education and training courses." One of the factors behind this focus on "diversified vocational training" is general acknowledgement of (1) enterprises which conventionally played a major role in vocational training have now downsized their presence in vocational training, (2) the need for upgrading and integrating a mechanism for offering vocational training to workers due to changing

enterprises' roles, and (3) the need for improving and enhancing a mechanism where, in particular, bodies other than enterprises provide vocational education.

B. Career paths, vocational development activities and the vocational education and training service market

This research project then has selected two sub-themes: “study on long-term career paths” and “study on the vocational training service market.” The purpose of this project is to, through these studies, make clear the current situation and characteristics of the market (in this project, referred to as the vocational training service market), which has been generated in relation to the interaction between workers' long-term career paths and vocational development activities (Referred to as “activities workers undertake for their vocational skills”), vocational development activities currently being undertaken by workers, and vocational training services handled as commodities.

We have structured this study as just described for the purpose of clarifying the mechanism of vocational ability development in the viewpoint shown in Figure 6-1. During a long working life, a worker accumulates on-the-job experience and at each stage of his/her career path, carries out vocational development activities to develop his or

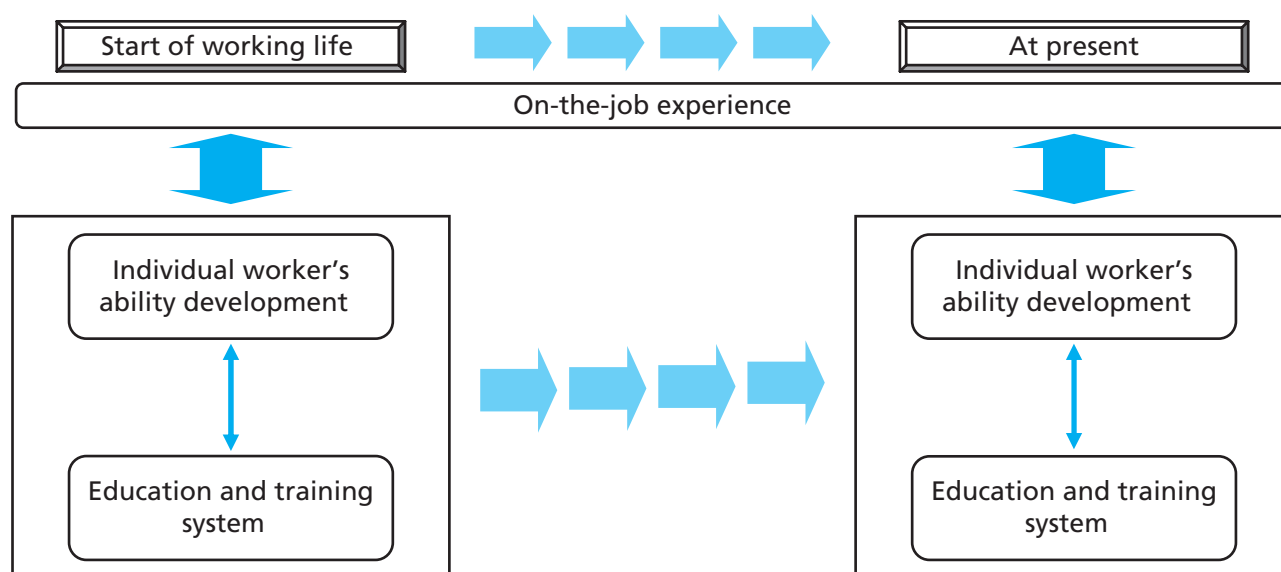
her vocational ability. This generates the demand for vocational training, and in response to this, enterprises and training institutes provide education and training services. The said mechanism which offers education and training services is referred to as “education and training system” in Figure 6-1. Accordingly, to examine “the examine a system enabling people to enjoy diversified education and training courses,” the purpose of this project, we have to look into specific realities and features of individuals' vocational development activities that have generated the demand for vocational training and based on this clarification, we should discuss the vocational training system.

Then we have to make clear first of all “what has defined workers' vocational development activities” and secondly, “in response to workers' vocational development activities, what kind of education and training services have been offered under what kind of training system” and “how far these services have succeeded in contributing to vocational development” This study project is characterized by new viewpoints that enable us to deal with the above two issues.

C. First: Characteristics found in vocational development activities of individuals

First, the realities and background surrounding vocational development activities “at present” have

Figure 6-1 Worker's Career Paths and Vocational Development Activities

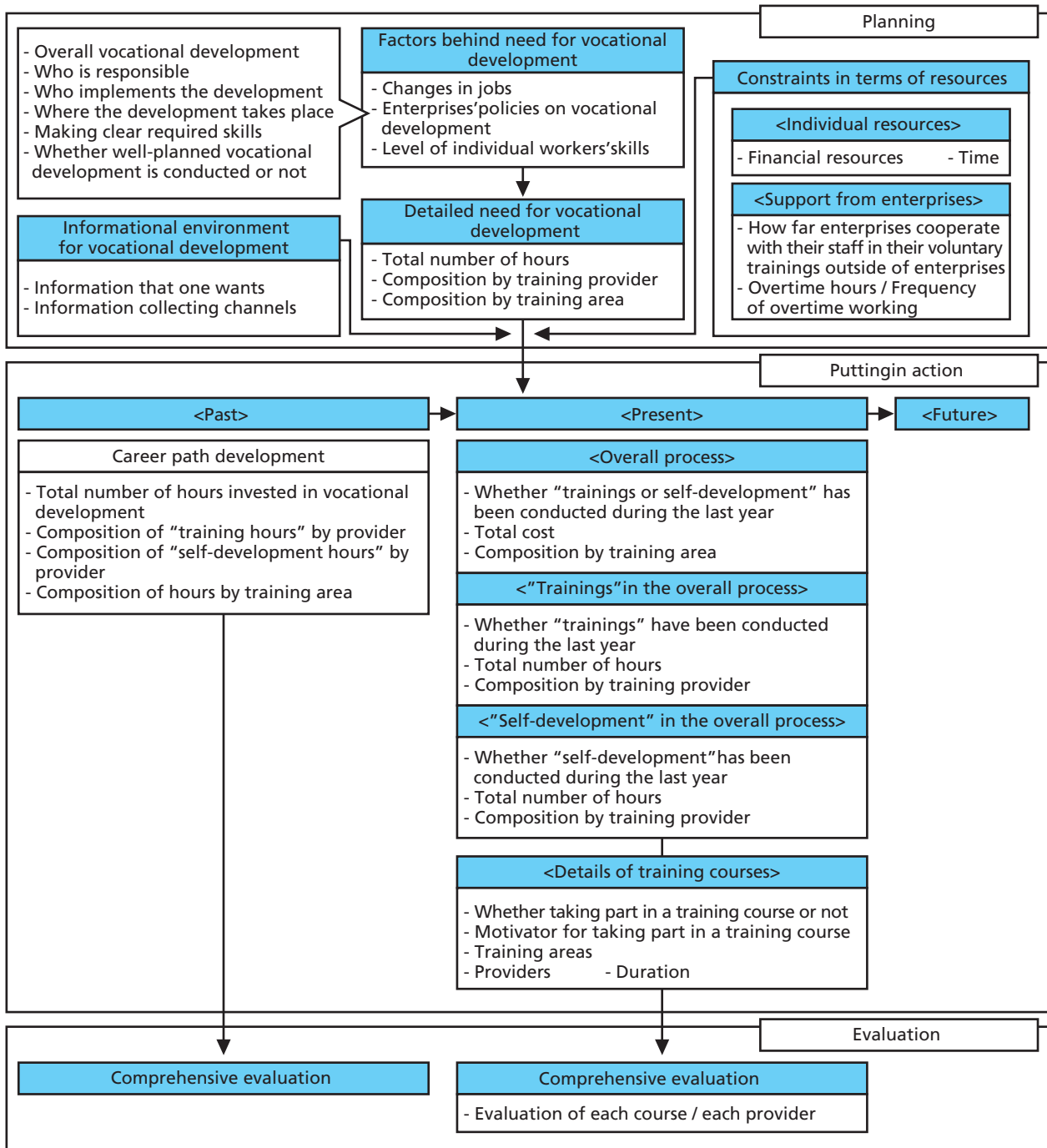


been systematically made clear. For the analytical framework, refer to Figure 6-2.

As detailed in the documentation survey, past surveys on vocational education and training have mainly focused on “what kind of trainings have been offered to workers by enterprises,” and accordingly,

even studies on individual workers have paid attention mainly to education and trainings that enterprises have provided. This is because so far conventional vocational training in Japan, such as OJT, is supposed to be led by enterprises and the government has also assumed enterprise-led

Figure 6-2 Viewpoints for Evaluating Individuals’ Vocational Development



Source: Compiled from Japan Institute for Labour Policy and Training (2006a)

vocational training to be fundamental in vocational ability development and has traditionally introduced policy measures that facilitate enterprise-sponsored human resources development.

However, undoubtedly conditions have changed. For example, enterprises have increasingly emphasized workers' individual responsibility and problem-solving in their career development and vocational development, following reorganizing their personnel management functions. The number of non-regular staff and dispatched workers who are more difficult to reach vocational development support from enterprises has increased, and labor mobility has been increasing regardless of whether voluntarily or involuntarily. By studying these structural changes in the labor market, we see the importance of how individual workers have been acting for their own vocational development, in addition to a more conventional question of what kind of training is provided by enterprises to workers, and there will be more needs for improved government policies that will support individuals in their human resources development.

Then we should correctly understand the current state and characteristics of vocational development activities individual workers have experienced. Yet there has been no study that systematically clarifies the issues. Accordingly, to answer these questions is the first step taken in this project

D. Second: Vocational development seen from a viewpoint of career paths

Another important issue in studying individuals' vocational development activities is that we need to make clear characteristics of vocational development activities in relation to career paths, since workers' vocational skills "at present" are results of vocational development activities accumulated in long-term career paths.

Workers have achieved their current positions in their long vocational lives after studying in and leaving training institutes, utilizing various training opportunities to polish their skills. In these processes, how workers have polished their skills largely depend on environments where they experience working life as well as on workers' own intention and willingness.

In particular, it depends largely on in what kind of corporation or workplace you have worked for what kind of job.

For example, employees can expect support from their employers in skills development, while self-employed individuals cannot. In addition, all employees are not guaranteed the same level of support. Their vocational development opportunities may largely depend on the degree of how far their employers or workplaces are willing to educate and train their employees. Furthermore, types of jobs where training programs have already been developed and standardized according to each worker's level of vocational development and those with poorly developed programs could result in wide disparities in workers' vocational development activities. While the types of jobs with standardized training programs clearly indicate what kind of training programs are necessary for workers' career improvement, workers in the types of jobs without standardized programs are required to plan and take part in training programs by themselves. The differences between types of jobs will significantly affect what kind of vocational development activities workers can utilize.

By discussing the issues above mentioned, it seems to us that in their long working lives, what kind of working patterns workers select will determine what kind of vocational development activities they tend to experience, and we have to observe the correlation between workers' career paths and vocational development in a long run. Accordingly, this research project has collected and analyzed case examples of individual workers' long-term career development and human resources development activities. This is the second feature of this project.

E. Thirdly: Characteristics of the vocational training service market

The final feature of this project is its approach to vocational education and training system. As it has been already well known, Japan's vocational education and training system has been mostly developed by in-house education. However, if one attaches too much importance to the central role in-house vocational education has played in

vocational education, one may fail to correctly understand realities of the vocational training system. This is because educational training institutes outside of enterprises (These providers of the education and training service are referred to as “vocational training providers” in this paper) have also played important roles for supporting individuals’ vocational development.

For example, by examining enterprise-sponsored educational training, we have found that a large part of its Off-JT depends on services offered by vocational training providers. Around 70% of enterprise-sponsored total expenditure for vocational training goes to the procurement of outside resources such as sending employees to training courses outside of enterprises, utilizing instructors outside of enterprises, and utilizing facilities outside of enterprises.⁵ In addition, as this research finds out, individual workers believe that around 40% of what they have learned at training institutes outside of enterprises or what they have achieved in individual growth and development by mainly utilizing outside resources such as correspondence courses have contributed to skills development.

We see from changing conditions concerning vocational development activities for individual persons that the importance of the roles played by training institutes outside of enterprises will further increase. Many studies have already revealed that enterprises support policies that focus on actively utilizing vocational training outside of enterprises for making their vocational education more efficient. In addition, as mentioned above, enterprises in general have changed their traditional recruitment process and an increasing number of enterprises now offer less regular employment opportunities. Accordingly, the number of non-regular staff and dispatched workers who are more difficult to reach vocational development support from enterprises has been increasing. Furthermore, enterprises have

increasingly emphasized regular workers’ own individual responsibility and problem-solving in their career development and vocational development, following reorganizing personnel management functions, and at the same time, their strategies have shifted from budgets broadly allocated for education and training investment to “selection and concentration,” or more concentrated investment in trainee executives.⁶ Today, an individual worker is more difficult to be employed at a single company after leaving school to retirement, and more are calling for vocational education that enables them to learn skills valid for other workplaces.

Considering these changing conditions, we understand the necessity of developing and upgrading training institutes that offer high-quality education and training opportunities to enterprises and workers, and accordingly, to formulate policy measures for the institutional development, it is essential to adequately understand “what kind of vocational training providers have offered what kind of training services in the labor market” or in short, we need to correctly understand the current state of the vocational training service market.” Our focus on the vocational training service market, which has seldom been studied so far, and our systematic examination of the market are the third features of this research project.

Section 2: Findings from this research project

A. Characteristics of vocational development activities for individual persons

Then what has been found in this research project? First, “the study on the vocational training service market” has systematically clarified vocational development activities for individual persons, and based on the findings, has pointed out the following important issues necessary in developing and improving “the vocational development infrastructure”:

(1) We have found that workers have depended

5 While some surveys indicate how outside resources have been utilized, the above mentioned “around 70%” was quoted from the Ministry of Health, Labour and Welfare’s “ Report on Skill Development Survey, 2001” (2002) , one of major studies on this issue.

6 For trends of enterprises’ vocational training strategies, such as more dependence on vocational training outside of enterprises and “selection and concentration” in vocational development opportunities, refer to Ko to soshiki no Seikashugi, ed. Koichiro Imano (Chuo Keizaisha, 2003)

largely on training services provided by vocational training providers outside of enterprises for developing their own vocational skills, by examining how far and what kind of vocational training services have contributed to human resources development, or how much resources (time and money) have been allocated for what kind of training methods by individual persons. This indicates that training services offered through the vocational training service market has played an important role for workers' vocational development along with enterprise-sponsored in-house education and training, such as OJT, which has been traditionally regarded as a main player in vocational development. In addition, for non-regular staff, free-lancers and self-employed individuals who cannot reach vocational development support from enterprises, the above vocational training service market has played more significant roles.

(2) Then, we have to ask whether workers are able to procure appropriate education and training services through this market, and the answer or answers to this question depend on how much resource (time and money) they have for procuring the services, and whether they are able to approach the services even if they have adequate resources. The answer to the former question: workers earmark 2 to 3% of their total working hours and 3% of their annual income, respectively, as time resources and budgets. The question we have to ask here is disparity among workers. In other words, compared with regular employees, non-regular staff, free-lancers and self-employed individuals who cannot reach vocational development support from their employers (or benefit of in-house vocational training) are, unlike regular staff, more likely to depend on employers' associations or other public institutions and public-sector vocational training institutes for reaching less expensive vocational development at their own expense.

(3) When considering accessibility to vocational training services, it seems to us that the accessibility has been somewhat restricted in the light of the fact that the amount of resources actually consumed for procuring vocational training services remains as little as around 30% of the above budgets. What we

have to focus on is workers' discretion on their working hours. If workers cannot predetermine their own personal schedules due to frequent unexpected overtime work demands, it is difficult for them to allocate their time resources to vocational training even when the resources have been sufficiently earmarked. This kind of disruption of personal schedules is more frequent for employees than for freelancers and self-employed employees, and among employees, more frequent for regular employees than for non-regular employees.

(4) Finally, another issue to be discussed is what kind of supply systems are developed for workers who are willing to purchase vocational education and training services from the market. Various vocational training providers have been participating in the market, and two types of major providers are private-sector vocational training corporations (such as vocational training institutes including joint-stock corporations and other types of organizations) and formal organizations such as public interest corporations and employers' associations. While private-sector training businesses have been well known and attracted much attention as "vocational training providers," we should note the important role the formal organizations have been playing.

Based on the above discussion on major findings, future policy challenges will be the following: (1) When taking into consideration the significance of the role played by vocational training providers, to upgrade "the infrastructure for vocational development," we have to further upgrade the vocational training service market. (2) In doing so, we have to pay more attention to the roles of formal organizations such as public-interest organizations and employers' associations, which have remained unnoticed so far. (3) We have to put in place environments supportive of workers' voluntary and effective resource utilization for vocational development, and more flexibility should be introduced to working hours, in particular for regular staff. ,

B. Correlation between long-term career paths and vocational skills development

Then, in what contexts vocational development activities have been developed in relation to long term career development? " The study on long-term

career paths,” which addressed the above topic, has made clear many-sided characteristics of long-term career paths and vocational skills formation processes. Main findings on the relationship between career paths and vocational development activities from this study are the following:

In the 1970s, vocational career and ability formation for workers, in particular for male workers, were mainly led by enterprises. In other words, once a new graduate entered a company, he or she would be provided with in-house adequate OJT and Off-JT opportunities, and an in-house labor market where new recruits were expected to develop their own ability through in-house training for promotion in rank had been then firmly established. Under this kind of enterprise-sponsored vocational development system, accordingly, the first place of employment for new graduates, or the transition from training institutes to work, would play a crucial role in vocational development and career development, and this transition process had been then formulated and intended for new graduates, especially for high school graduates — then key players among new graduates—, based on the then prevailing recruitment of candidates recommended and selected by training institutes. For this reason, the way transition processes are carried out, or the way subsequent career paths have been developed, is primarily affected by workers’ attitudes toward jobs while they are in training institutes, and appropriate career guidance in their school days has positive effects on, at least, earlier stages of occupational career development in many sides of one’s vocational life, including occupational satisfaction and self-awareness of one’s vocational skills.

In addition, one’s vocational life has been also influenced by factors one cannot control, such as economic conditions at one’s school-leaving ages and one’s family background (such as one’s parents’ academic background and occupations). Accordingly, some have been “initially disadvantaged workers,” since they faced the very tight labor market when leaving schools or they had less vocational life opportunities and good career options because of some personal reasons. For these disadvantaged workers who have been often out of the conventional

employment practices which train and promote new graduates—“then prevailing recruitment system mainly for candidates recommended and selected by training institutes”— has been no use, even if they are to give another try in “second opportunities.”

Based on the above findings from “the study on long-term career paths,” first, we can see the importance of enriching career education that supports occupational selection while job-seekers are in training institutes. Secondly, at the same time, equally important is the development of policy measures that can supplement and correct the “initial disadvantages.” The “initial disadvantages” do not leave disadvantaged persons no other choices, but disadvantageous individual persons can still respond to their difficulties on their own. For example, they are able to learn good manners as professionals at their own workplaces, to discover their own skills and qualification, and accordingly to seek new employment that requires these skills and qualification. Based on this discussion, to support these initially disadvantaged persons, establishment of a mechanism that enables individual persons, regardless of their employers or working styles, to easily reach vocational training opportunities is required, instead of traditional dependence on enterprise-sponsored vocational development. Now that less and less young people are hired into regular employment positions after leaving school, we can say that the necessity of vocational training systems outside of enterprises that enable “initially disadvantaged “ young people and others to give another try and overcome their difficulties in “second opportunities” is all the more significant.

Furthermore, the study has revealed some issues on workers who have already developed their skills through in-house enterprise-sponsored ability development systems. For them, OJT and Off-JT are being combined. More specifically, training systems which emphasize OJT with Off-JT courses supplementing OJT have worked well. Anyway, vocational training systems may be different depending on types of jobs: while for workers doing jobs which require skills, in-house somewhat systematized training courses and qualifying attempts have worked well to form workers’ vocational ability,

only a limited systematized courses and qualifying attempts are available for white-collar workers', and white-collar individual workers tend to voluntarily make use of in-house resources for their own skills development. Based on the above discussion, enterprise-sponsored training will still function for types of jobs that require special skills, while in the case of white-collar workers; individual responsibility in vocational development is likely to be emphasized all the more. In carrying out this type of vocational trainings, vocational development with clear career-related objectives and careful attention given to white-collar workers' wishes is more likely to work effectively.

C. Characteristics of the education and training service market

Then, in response to the demand resulting from individual persons' vocational development activities, what kind of training providers have provided what kind of services and have formed what kind of vocational training service market? "The study on the vocational training service market" has mainly focused on this issue. The estimated size of the market is 581.7 billion yen. Since this amount is estimated based on expenditures paid by enterprises and governments, it does not include expenditures paid by individual persons, who are other key players. Therefore, this research project has utilized data found in "the second survey on vocational training providers" to make a new estimate, taking into consideration the expenditure paid by individual persons as well.⁷ According to this estimate, the size of the market is approximately 1.3 trillion yen, and the difference between the estimate this time and the initial estimate seems to be equal to the expense paid by individual persons.

Furthermore, "the study on the vocational training service market" has made clear "what kind of vocational training providers have provided how much amount of training services and 'what kind of training services' for 'whom' 'by what methods' at 'how much price'." Major findings from the survey

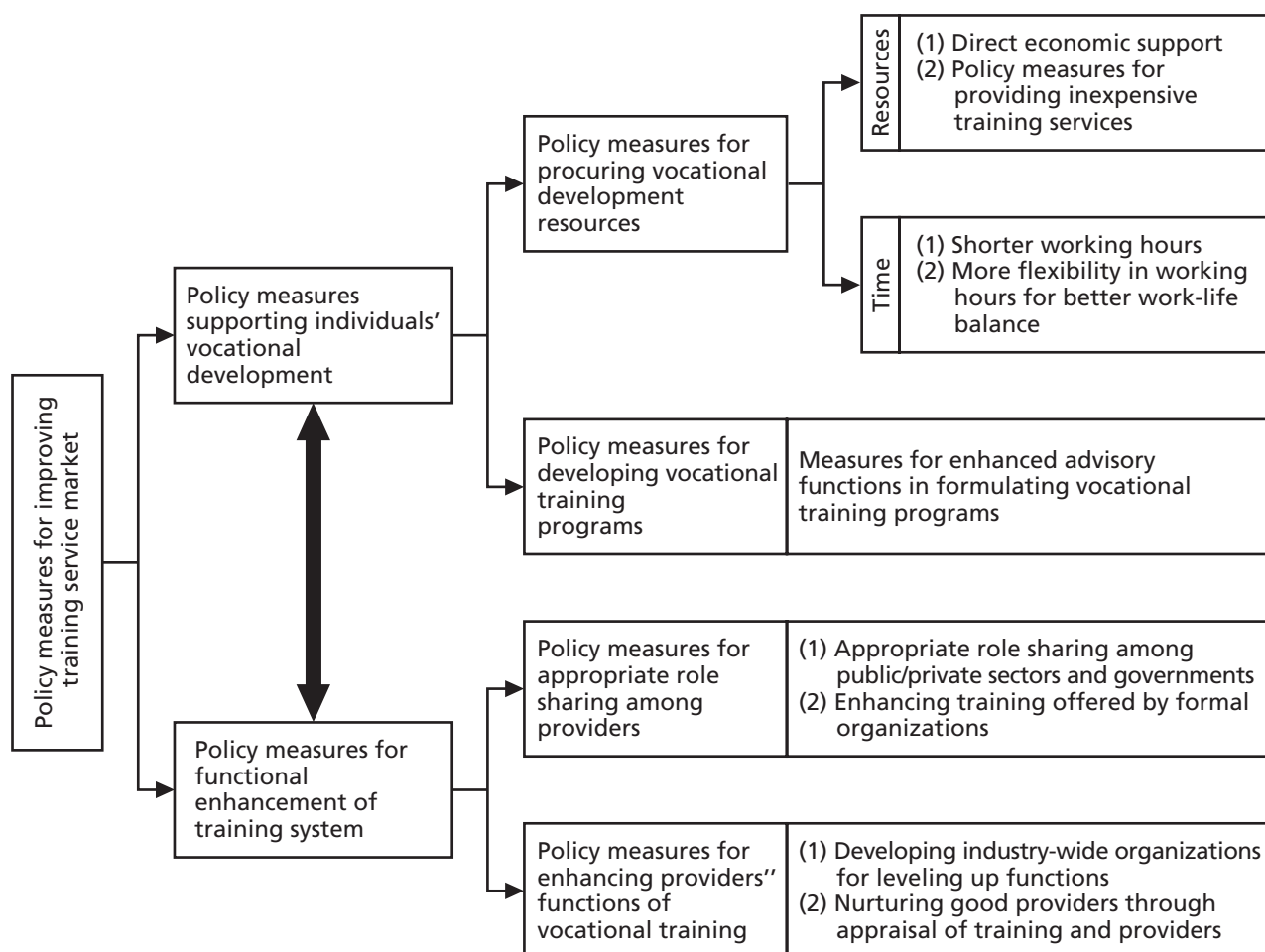
are shown below.

First, by examining the supply structure in the market from the viewpoint of "how much amount," we have found that three key players in the market are private-sector education and training businesses, public interest corporations and employers' associations, and particularly, private-sector education and training businesses and public interest corporations have played relatively larger roles. Then when we have paid attention to "for whom," we have found that private-sector vocational training businesses and employers' associations mainly provide workers in charge of administrative jobs with stratified training courses, while public interest corporations focus mainly on specialized training courses for specialist workers (those in charge of research studies, industrial civil services, and medicine and healthcare, and technical personnel), and training courses that training institutes provide are not for any specified trainees. In addition, when considering attributes of trainees, we have found that vocational training providers offer their services mainly for those in their 30s or 40s, working for small or medium businesses — who are mostly in mid-level positions, or are section heads or newcomers — or working as free-lancers or self-employed. Thirdly, when paying attention to 'how much price' it cost, private-sector educational training businesses and specialized course training institutes offer relatively expensive courses, while public interest corporations and employers' associations offer less expensive ones.

These findings indicate how these providers share roles in the training service market, showing which kind of training services each type of providers are good at. Accordingly, we have to pay more attention to formal organizations such as public interest corporations and employers' associations as well as to private-sector education and training businesses, in order to further develop and improve the vocational training service market. Secondly, when developing and upgrading the market, we have to carefully consider characteristics of each type of providers. For example, when paying attention to the above three

⁷ Since this size of the market has been estimated from the amount of business incomes of vocational training service providers (Please refer to appendices at the end of the chapter), the amount includes the expenditure paid by individual persons as well as by enterprises and governments.

Figure 6-3 Policy Challenges Concerning Developing and Upgrading “the Infrastructure for Vocational Development”



types of providers, we have found that private-sector education and training services spend less on facilities and offer relatively expensive training courses for a wide range of workers. On the contrary, while both public interest corporations and employers' associations provide services at low cost, public interest corporations mainly offer specialized training for specialist workers, and employers' associations provide stratified training courses for workers in charge of clerical and administrative jobs.

Section 3: Policy issues concerning development and upgrading of “the infrastructure for vocational development”

A. Required functional enhancement of “the vocational training service market”

Based on findings from this research project, what kind of policy measures will be needed for further improving the “infrastructure for vocational development,” in particular for establishing “a system that enables people to study in diversified training courses.” Please refer to Figure 6-2 for how policy measures will support the improvement of the infrastructure.

First of all, we have repeatedly emphasized the

importance of improving the vocational training service market. The survey this time has made clear that workers' human resources development has been largely dependent on education and training services provided through the market as well as on traditional OJT and other in-house training. Especially for non-regular staff and non-employed workers such as freelancers and self-employed individuals who find it difficult to reach enterprise-sponsored vocational development training, the vocational education and training service market has played a significant role.

In addition, "the study on long-term career paths" has revealed that "initially disadvantaged workers," who faced the very tight labor market or had less career options in their younger days because of some personal reasons or economic conditions; are often out of the conventional in-house vocational development system. Given an increasing number of non-regular workers and of young people not hired fresh out of school, the ratio of "initially disadvantaged" people in younger generations is estimated to be much higher than the one in generations our study has surveyed.

Accordingly, the political importance of vocational training systems outside of enterprises that enable "initially disadvantaged" people to give another try and overcome their difficulties in "second opportunities" is all the more significant.

B. Policy measures supporting vocational development activities of individual persons

i. Policy measures supporting vocational development resources allocation

Then what kind of policy measures will be needed for functional enhancement of the vocational training service market? To answer this question, we have to examine both vocational development conducted by individual persons and training services provided by vocational training providers through the market.

Given current trends that individual workers are required to willingly develop their own career paths and vocational skills on their own, policy measures creating an environment for individual persons to autonomously carry out vocational development will be necessary. These policy measures are made up of a

set of policy measures that support the procurement of resources for individual persons' vocational training, and those that support resources utilization for obtaining appropriate education and training services. As parts of the former policy measures, measures that offer direct economic support, such as educational benefit payment and tax break for education, have been implemented (or envisaged). At the same time, what is equally important is creation of a mechanism which gives individuals easy access to inexpensive, high-quality training services for practically enhancing their economic power in order to procure vocational training services. Those, who are willing to give another try in "second opportunities" for improving their own career paths, have often found it difficult to pay for training services that offer highly specified courses, because they will have to learn in expensive (in other words, costly) training courses for a prolonged period of time. To address these problems, vocational training providers, especially public-sector vocational training institutes and formal organizations, which need to enhance its functions further as mentioned below, should be financially supported to a much greater degree.

In addition, in regard to procurement and utilization of another resource--temporal resources, workers themselves should be able to voluntarily train themselves in vocational education services, or in other words, environments which enable them to autonomously make use of their own temporal resources are required. Accordingly, in order to enable individual persons to exercise more discretionary power in managing their training hours, first, it is necessary to reduce working hours and increase the time that can be spent on vocational development, and for this reason, policy measures to cut down long working hours should be further intensified. At the same time, secondly, working hour systems that support vocational training in terms of temporal resources, and policy measures promoting more flexibility in working hours such as short-time employees, are required for vocational development in order to promote better work-life balance. Flexibility in working systems should be enhanced to the extent that attending nighttime vocational training

courses after regular working hours, or interrupting one's regular employment to temporarily learn in long-time training courses at universities and returning to workplace is no longer uncommon.

ii. Policy measures supporting vocational training programs

Even when resources have been secured for vocational development by the above mentioned ways, it will be no use if they are not effectively utilized. What is most important for effective vocational training programs is to formulate appropriate programs, and for that purpose, sufficient and correct information on workers' or job seekers' qualifications and vocational skills, the labor market conditions and vocational training is required. When formulating in-house programs, your bosses or those in charge of personnel affairs or in-house human resources development will help the formulation of training programs. However, many workers cannot expect much help.

For those who cannot expect help, organizations outside of enterprises that will help them to develop their training programs are essential, and for that purpose, and relevant policy measures are required to be enhanced. So far, though at least partially, many of public institutions have played roles in helping the training program formulation. Yet, given an increasing number of workers having to develop their own career paths and vocational skills by their own, the above mentioned measures for assisting vocational training have to be further developed and enhanced all the more.

C. Policy measures for enhancing training offered by vocational training providers

i. Policy measures for upgrading vocational training providers

Policy measures for upgrading providers can be made up of two types of measures: those upgrading training services offered by individual vocational training providers, and those developing a macroscopic vocational training system, or in other words, an effective role sharing system between governments, formal organizations and private-sector training businesses.

Important policy challenges in carrying out the former type of measures are fostering of good vocational training providers, and for that purpose, first, vocational training providers as an industry need to make efforts for improving the level of their services, and a vocational training industry organization has to be established as a starting point for improving the industry as a whole. The vocational training industry is required to be well aware of their roles in human resources development in Japan, which is equally as important as academic and educational circles. At the same time, a mechanism for evaluating the quality of vocational training providers and their services will be also needed. This is because, while in-house training services can be evaluated by those in charge of personnel affairs and human resource development, independent workers have found it extremely difficult to carry out such evaluation. It may be possible to provide information on the evaluation as a part of the above-mentioned assistance to development of training programs by public-sector bodies. At the same time, a social mechanism to disclose information on the evaluation is essential.

ii. Role sharing system in vocational training services, and functional enhancement of formal organizations

Then we would like to look at the need for developing socially shared roles in vocational training services. Before establishing a role sharing system, first of all, we have to consider characteristics of each type of providers found in this research project. Each type of vocational training provider has different types of vocational training, trainees and price setting.

Among a number of training providers, in particular, formal organizations need to be enhanced in their functions, and we would like to emphasize the importance of formulating policy measures focusing on the functional enhancement. Traditionally, vocational training has been only examined in terms of whether private-sector vocational training businesses are better than public-sector training organizations or vice versa. However, public institutions positioned between public and

private sectors have been playing an important role in the vocational development service market. Their important role has been repeatedly clarified in the survey this time. The category of “public institutions” includes a variety of organizations such as vocational training institutes, and among them, of special importance are public-interest organizations and employers’ associations. Since they take on a public nature, they are able to provide inexpensive

vocational education and training services and are also advantageous as education service providers for the following reasons:

For providing vocational training in response to enterprise-specific needs, in-house education and training are most efficient. On the contrary, for nurturing knowledge or skills required beyond borders of enterprises or industries, private-sector training businesses, training institutes and public-

Appendix Table 6-4 Estimated Numbers of Facilities Conducting Vocational Training and the Total Numbers of Vocational Training Providers

Unit: Number of organizations

	Organization estimated to conduct vocational training	Organization surveyed	Responding organizations in the first survey on providers				Organizations not responding in the first survey = Organizations surveyed in the additional questionnaire				Total number of vocational training providers
			Respondents	Response rate (%)	Organizations that provide vocational training	Percentage of organizations providing training %	Non-respondents in 1st survey, and surveyed in 2nd survey	Number of organizations		Organizations providing training	
								Respondents	% of organizations providing training		
A	B	C	D	E	F	G	H	I	J	K	
			C / B			E / C		B - C		G* I	((E+J) / B) *A
Private-sector business	6,688	3,033	660	21.8	313	47.4	2,373	119	70.0	1,660	4,351
Employers' association	11,227	1,919	686	35.7	478	69.7	1,233	68	-	548	5,196
Chamber of commerce	598	584	205	35.1	191	93.2	379	20	60.0	227	428
Society of commerce and Private-sector business	2,776	502	214	42.6	146	68.2	288	20	35.0	101	1,365
Commercial or cooperative association	7,853	833	267	32.1	141	52.8	566	28	38.9	220	3,403
Public interest corporation	4,237	1,614	682	42.3	497	72.9	932	47	38.6	360	2,250
Job training corporation development association	1,077	434	290	66.8	161	55.5	144	0	0.0	0	400
Special institute	3,476	2,004	684	34.1	215	31.4	1,320	66	77.3	1,020	2,142
University	1,280	996	481	48.3	271	56.3	515	40	-	306	766
National	87	80	50	62.5	37	74.0	30	0	0.0	0	40
Public	80	73	47	64.4	32	68.1	26	0	0.0	0	35
Private	542	347	146	42.1	89	61.0	201	20	85.0	171	406
Jr college	508	433	188	43.4	80	42.6	245	20	55.0	135	252
Tech college	63	63	50	79.4	33	66.0	13	0	0.0	0	33
Total	27,985	10,000	3,483	34.8	1,935	55.6	6,517	340	61.8	3,894	15,105

Notes: 1. The percentages of organizations that offer vocational training among “employers’ associations” and “universities” have been computed based on the numbers of organizations that offer vocational training calculated by using the procedure described in Note 2.

2. The number of organizations not responding in the first survey among “employers’ associations” that actually provide vocational training (Please refer to the column titled J in the table.) has been calculated from the number of organizations providing training among subcategories, “Chamber of commerce,” “Society of commerce,” and “Commercial or cooperative association,” that was calculated and totaled based on the “the number of responding organizations” (Refer to the column titled H.) and “the percentage of organizations providing training” (Refer to the column titled I.). The number of non-responding organizations among “University” that actually provide vocational training has been also calculated in the same way.

3. Since the numbers of “Employers’ association” and “University” are made up of a number of subcategories, as mentioned in Note 2, we have not computed the percentages of organizations that offer vocational training for these two categories. Accordingly, they are represented by “dashes (-)” in the table.

sector vocational training organs can offer more effective services. For needs positioned midway between the above two, or needs common to a certain industry or types of jobs (needs moderately common), public institutions such as public interest corporations and employers' associations, which have organized in response to certain types of jobs or industries, are more advantaged as vocational training providers.

Based on the above, it is necessary to make more active use of these public institutions when reviewing the vocational training roles shared between public and private sectors. Public institutions will have to be aware of the importance of strengthening its roles in serving as vocational training specialized institutions all the more, and for that purpose, a relevant system is required to be enhanced. Governments have to support the enhancement, developing appropriate

Appendix Table 6-5 Market Size Estimated Based on the Business Revenue

	Total number of vocational training providers (Number of organizations)	Revenue earned from vocational training					Market share (%)
		Annual revenue per organization (in ten thousand yen)	Annual revenue per organization (in ten thousand yen)	Revenue earned from vocational training per organization (in ten thousand yen)	Market size estimated based on revenue from vocational training (in ten thousand yen)		
		K	c	d	L	M	
					K*L		
Private-sector business	4,351	50,006.3	43.4	21693.0	94,377,749	72.6	
Employers' association	5,196	-	-	-	7,041,515	5.4	
Chamber of commerce	428	41,307.9	2.3	935.3	400,715	0.3	
Society of commerce	1,365	12,446.5	1.5	189.6	258,703	0.2	
Commercial / cooperative association commerce	3,403	22,250.8	8.4	1875.3	6,382,098	4.9	
Public-interest corporation	2,250	43,307.1	14.4	6218.7	13,990,562	10.8	
Job training corporation including development association	400	7,791.5	27.2	2116.9	845,756	0.7	
Special institute	2,142	33,645.6	9.6	3235.4	6,930,722	5.3	
University	766	-	-	-	6,898,074	5.3	
National university	40	1,472,993.4	0.3	3782.4	152,193	0.1	
Public university	35	384,059.1	0.1	429.5	15,063	0.0	
Private university	406	994,378.4	1.6	16179.8	6,566,967	5.0	
Junior college	252	81,425.3	0.8	628.6	158,373	0.1	
Tech. College	33	56,128.0	0.3	166.0	5,478	0.0	
Total	15,105	116,815.9	5.7	6670.7	130,084,378	100.0	

Note: Some columns are represented by "dashes (-)" in the table because findings from the first survey will make no sense in the above estimation since, for example, a category such as "University" or "Employers' association" is made up of a number of subcategories such as "National university" or "Chamber of commerce" and has been reconstructed based on these subcategories.

policy measures for encouraging and supporting efforts of public institutions, by nurturing vocational training specialists, developing and upgrading vocational training facilities, and developing vocational training programs.

D. Policy measures for enhancing surveys on the vocational training service market

Finally, we would like to emphasize the importance of continuous studies to systematically grasp trends in the vocational training service market. This research project has made a significant contribution by systematically clarifying the current situation in the vocational training service market for the first time, we believe. However, this kind of data concerning the market often becomes more meaningful when compared to other data. One of such comparison is a chronological comparison, or comparison with different time points. And for this purpose, the survey on the vocational training service market that this research project has carried out has to be continuously conducted.

Another comparison needed is a country-by-country comparison indicating where this country is ranked in terms of the ability for human resources development and what kind of features its ability for human resources development has. The more competitiveness in economy or in businesses comes to depend on human resources, the more important it becomes to know where this country is ranked internationally in terms of the ability for human resources development when developing policy measures for enhancing its human resources development ability. For that purpose, we believe, international comparison surveys on the market will become increasingly important.

This kind of continuous researches and international comparison surveys on the vocational training service market are to provide basic information necessary for formulating human resources development policy measures, and have to be conducted as national policy measures. This is the final policy measure we have recommended in this paper.

Appendix: Estimated market size

Among responding organizations in the first survey on vocational training providers, 1,935 providers “have conducted vocational training.” In addition, based on findings from a telephone questionnaire of organizations not responding in the first survey, an estimated number of providers that “have conducted vocational training” is 3,894 organizations. Based on the above, we estimated the number of organization participating in the vocational training service market to be 15,105 in total. (Refer to Appendix Table 1.)

In addition, we have computed their business revenue earned from vocational training services and grouped the revenue by organizational form, based on findings from the first survey, and multiplying the revenue by the estimated numbers of organizations above mentioned to obtain the estimated size of the market.

References

- Amano, Ikuo. 1988. Ko to gakko no shinro bunka kino ni kansuru kenkyu [Survey concerning functions of specializing future course at high schools]. *Toyota Foundation Supported Final Project Report, Koko Kyoiku Sogo Kenkyukai*.
- Ishida, Hiroshi. 2005. Koki seinenki to kaisoh rodo shijo [Stratification and labor market in the stage of extended adolescence]. *Kyoiku Shakaigaku Kenkyu* (The Journal of Educational Sociology), vol.76:41-57.
- Izumi, Terutaka. 1985. Nihon ni okeru ginsha yosei to kunrenseisaku [Training of skilled workers and training policy]. Odaka, Konosuke. *Skills in Asia*. Tokyo: Institute of Developing Economies, Japan External Trade Organization.
- Inoki, Takenori. 1996. Gakko to kojo-Nihon no jinteki shigen. [Schools and factories-human resources in Japan]. Tokyo:Yomiuri Shimbun.
- Inoki, Takenori. RENO-RIALS. 2001. Tenshoku no keizaigaku-tekishokusentaku to jinzai ikusei [Economics of job changing - decision to change jobs and human resources development]. RENO-RIALS.
- Inagawa, Fumio. 2005. Shakaijin no shokugyo kyoiku kunren wo ninau kyoiku kunren provaidazu no soshiki to kino [Vocational training service providers in charge of vocational education and training for working people]. *Shokugyo Noryoku Kaihatu Journal* (Human Resources Development Journal), vol.47. no.6:14-20.
- Imano, Koichiro. 2003. *Ko to soshiki no seikashugi* [Pay-per-performance system for individuals and organizations]. Tokyo: Chuokeizaisha.
- Imano, Koichiro and Eiichi Ohki. 2000. Nihon kigyō no

- koyoiku kunren toshi senryaku [Japanese companies' investment strategies in vocational training]. *Enterprises and Human Resources*, June 5:26-34.
- Endo, Isao. 2005. *Mieruka* [Visualization]. Tokyo: Toyokeizai Shinposha.
- Ohki, Eiichi. 2003b. Kigyo no koyoiku kunren toshi kodo no tokushitsu to kitei yoin [Characteristics and factors governing firms' investment behavior in education and training]. *Nihon Rodo Kenkyu Zasshi* (The Japanese Journal of Labour Studies), no.514: 4-14.
- Odaka, Konosuke. 1982. Shokugyo koyoiku wo kangaerujukusha no tachiba kara mita gendai shokugyo kunren no mondaiten, first and second volumes [Vocational education and training-problems found in current vocational training from the viewpoint of trainees, first and second volumes]. *Nihon Rodo Kyokai Zasshi* (The Monthly Journal of the Japan Institute of Labour), no.275, 2-11 and no.276:26-37 (276).
- Kariya, Takehiko. 1995. *Taishu koyoiku shakai no yukue* [Whereabouts of mass educational society]. Tokyo: Chuokouronshinsha.
- Editorial staff of Kawade Shobo Shinsha. 1981. *Waga sedai showa 26 Nen Umare* [Our generations who were born in 1951]. Tokyo: Kawade Shobo Shinsha.
- Editorial staff of Kawade Shobo Shinsha. 1987. *Waga sedai showa 29 nen umare* [Our generations who were born in 1954]. Tokyo: Kawade Shobo Shinsha.
- Kurosawa, Masako. 2003a. Kokyo shokugyo kunren no shunyu heno Koka [Effect of Public Training Programs on Participants' Earnings in Japan]. *Nihon Rodo Kenkyu Zasshi* (The Japanese Journal of Labour Studies), no.514:38-49.
- Kurosawa, Masako. 2003b. *Enkatsuna tenshoku notameno kankyo seibi* [Developing environment that allows a smooth job changes]. *Satoh, Hiroki and Yuji Genda. Seicho to jinzai-nobiru kigyo no jinzai senryaku* [Growth and human resources-human resources strategies for promising enterprises]. Tokyo: Keisoshobo.
- Kurosawa, Masako and Yuji Genda. 2001. *Gakko kara shokuba he-7,5,3 tenshoku no haikai* [Transition from school to work in Japan-factors behind job leaving of young people hired fresh out of school]. *Nihon Rodo Kenkyu Zasshi* (The Japanese Journal of Labour Studies), vol.490. 4-18.
- Genda, Yuji and Mie Maganuma. 2004. *Nito* [Neet]. Tokyo: Gentosha.
- Koike, Kazuo.1977. *Shokuba no rodokumiai to sankaroshi kankei no nichibei hikaku* [Labor unions in workplace and participation - Japan-US comparison of industrial relations]. Tokyo: Toyo Keizai Inc.
- Koike, Kazuo. 1981. *Nihon no jukuren* [Experts in Japan]. Tokyo: Yuhikaku Publishing Co., Ltd.
- Koike, Kazuo. 1986. *Gendai no jinzai keisei-noryoku kaihatsu no shikumi wo saguru* [Today's human resources development-exploring a mechanism of skills development]. Tokyo: Minerva Publishing Company Ltd.
- Koike, Kazuo. 1988. *Jukuren keisei* [Formation of experts]. Harada, Makoto. *Nihon Romu Kanrishi 2* [History of labor management in Japan 2]. Tokyo: Chuokeizai-sha.
- Koike, Kazuo. 1997. *Nihon kigyo no jinzai keisei fukakujitsusei ni taisho surutameno nouhau* [Human resources development in Japanese companies: knowhow to deal with uncertainty]. Tokyo: Chuokouronsha.
- Koike, Kazuo. 2001. Jinzai kaihatsu no shomondai [Problems in human resources development]. *Rodo Kenkyujoho* (Labor Institute Journal), no.22:42-48.
- Koike, Kazuo, Kuramitsu Muramatsu, and Norio Hisamoto. 1987. *Chiteki jukuren no keisei* [Formation of intellectual mastership]. Rodobu of Aichi Ken.
- Ministry of Health, Labour and Welfare. 2002. Heisei 13 nendo noryoku kaihatsu kihon chosa [Skill development survey, 2001].
- Ministry of Health, Labour and Welfare. 2006a. Dai 8 ji syokugyo noryoku kaihatsu kihon keikaku [The 8th Basic Plan for Human Resource Development].
- Ministry of Health, Labour and Welfare. 2006b Heisei 17 nendo noryoku kaihatsu kihon chosa [Skill development survey, 2005].
- Statistics and Information Department of Ministry of Health, Labour and Welfare. 2003. Shuro joken sogo chosa [General survey on working conditions, 2002].
- Kosugi, Reiko. 2002. *Jiyu no daisho, Furita* [The price of freedom — Freeters]. Tokyo: Japan Institute of Labour.
- Kosugi, Reiko. 2003. *Frita toiu Ikikata* [The way of life of the Freeters]. Tokyo: Keisoshobo.
- Kosugi, Reiko. 2006. *Naze wakamono seisaku wo kokusaihikaku surunoka* [Why we have internationally compared policy measures on young people]. Kosugi, Reiko and Yukie Hori. *Kyaria koyoiku to shugyo shien* [Career education and employment assistance]. Tokyo: Keisoshobo.
- National Institute of Employment and Vocational Research. 1998. *Seinenki no shokugyo keireki to shokugyo ishiki-jakunen rodosha no shokugyo tekio ni kansuru tsuiseki kenkyu sogo hokokusho* [Employment history and job consciousness of young people - comprehensive report on a tracking survey on young workers' adaptation to their jobs]. *Shokken Chosa Kenkyu Hokokusho* (Research Report), no.7.
- Gouda, Yoshihiro.1992. *Jissen OJT manual* [Practical OJT manual]. Tokyo: Japan Vocational Ability Development Association.
- Shimizu, Tsutomu. 1995. *Wakuwaku shokuba no tsukurikata* [How to create happy workplaces]. Tokyo: Nihon Keieisha Dantai Renmei Kohobu.
- The Institute of Research and Development of Polytechnic University. 2004a. *Kunren koka · Noryoku Kaihatsu Nidu ni kansuru chosa-Zaishokusha kunren*-[Effects of training · survey on human resources development needs - training for workers]. *Chosa Kenkyu Hokokusho* (Research

Report no.123).

The Institute of Research and Development of Polytechnic University. 2004b. Kunren koka · noryoku kaihatsu nidu ni kansuru chosa-Kodo shokugyo Kunren-[Effects of training · survey on human resources development needs - Advanced training for workers]. *Chosa Kenkyu Hokokusho* (Research Report), no.124.

Jinji Romu Kanri Kenkyukai (Japan Institute of Labour). 2000. Kunren koka · noryoku kaihatsu nidu ni kansuru chosa-Koudo Shokugyoyou Kunren-[Survey on Personnel Management and Vocational Training in the Performance-Oriented Age]. *Chosa Kenkyu Hokokusho* (Research Report) No.124.

Sugayama, Shinji. 2000. *Chusotsusha kara kousotsusha he -Danshi gakusotsu rodo shijo no seidoka to sono kiketsu* [From junior high school graduates to high school graduates-institutionalization of the labor market for male graduates and its consequence]. Kyaria, Takehiko, Shinji Sugayama, and Hiroshi Ishida. *Gakko Shokuan to rodo shijo* [Schools, public employment security offices, and the labor market]. Tokyo: University of Tokyo Press.

Soma Kenichi. 2003. *Insatsu nyumon* [Introduction to printing]. Tokyo: Japan Association of Graphic Arts Technology.

Statistics Bureau of Ministry of Internal Affairs and Communications. 2003a. Heisei 13 nen jigyosho kigyō tokei chosa (Establishments and enterprises census, 2001).

Statistics Bureau of Ministry of Internal Affairs and Communications. Rodoryoku chosa [Labour force survey].

Takanashi, Akira. 1994. *Kawaru nihongata koyo* [Changing Japanese-style employment]. Tokyo: Nikkei Inc.

Tanaka, Kazutoshi. 2005a. *Shinki gakusotsusha no shokugyo noryoku kaihatsu* [Human resources development for new employees fresh out of school], Tanaka, Kazutoshi and Eiichi Ohki. *Hataraku hito no gakushuron-Shogai shokugyo noryoku kaihatsuron* [Learning for working people-Life-long skills development]. Tokyo: Gakubunsha.

Tanaka, Kazutoshi. 2005b. *Zaishokusha no shokugyo noryoku kaihatsu* [Human Resources Development for Workers]. Tanaka, Kazutoshi and Eiichi Ohki. *Hataraku hito no gakushuron -Shogai shokugyo noryoku kaihatsuron* [Learning for Working People-Life-long Skills Development]. Tokyo: Gakubunsha.

Taniguchi, Yuji. 1998. *Shokugyo noryoku kaihatsu to kokyo shokugyo kunren-Kaidai* [Human resources development and public vocational training-outline], Japan Institute of Labour Policy and Training. *Kyoiku to noryoku kaihatsu* [Education and skills development]. Readings: Nihon no Rodo 7. [Series "Labor in Japan", no.7]. Japan Institute of Labour.

Taniguchi, Yuji. 2005. *Shitsugyosha no tameno shokugyo noryoku kaihatsu* [Human resources development for job seekers].

Tanaka, Kazutoshi and Eiichi Ohki. *Hataraku hito no gakushuron-shogai shokugyo noryoku kaihatsuron*

[Learning for working people-Life-long skills development]. Tokyo: Gakubunsha.

Dai Nippon Printing Co., Ltd. 2001. *Insatsu no ohanashi* [The story of printing]. Tokyo: Japanese Standards Association.

Medium and Small Business Research Institute. 2004. *Kyodaitoshi insatsugyo no shintenkaikai* [New development in huge urban printing industry]. Tokyo: Doyukan.

Toda, Katsuya. 2001. *Zaishokusha kunren no riron to jissai* [Theory and practical application of vocational training for workers]. Tokyo: Employment Research Corporation.

Nakagawa, Junichiro. 2004. *OJT de iko* [Let's try OJT]. Tokyo: Shoeisha.

Nakanishi, Hidehiko. 1994. *Katsuji ga kieta hi* [The day printed words disappeared]. Tokyo: Shobunsha.

Education Special Committee of Japan Federation of Employers' Association. 1999. *Emupuloiyabiliti no kakuritsu wo mezashite-Jugyoin jiritsu · kigyō shiengata no jinzai ikusei wo* [Aiming to establish employability-Human resources development aimed at employees' independence with corporate assistance].

The Japan Institute of Labour. 1996a. *Kigyōnai kyoiku no genjo to kadai-howaito-kara- shain no kyoiku kunren wo daizai toshite*. [Current situation of in-house vocational education and its challenges-On education and training for white-collar employees]. *Shiryō Series (Material Series)*, no.59.

The Japan Institute of Labour. 1996b. *Minkan kyoiku kikan no soshiki to jigyou* [Organization and business of private-sector vocational training institutes]. *Chosa Kenkyu Hokokusho* (JIL Research Report) No.87.

The Japan Institute of Labour. 1997. *Kyoiku to noryoku kaihatsu*, [Education and Skills Development]. *Ridingusu Nihon no Rodo 7* (Series "Labor in Japan" no.7).

The Japan Institute of Labour. 1998. *Kigyōnai ni okeru kyoiku kunren keireki to kenshu nidu, daikigyō no jimū/gijutsukei shain wo chushin nishite* [History of in-house education and training and needs for vocational training, mainly for employees in charge of clerical works and engineering at large corporations]. *Chosa Kenkyu Hokokusho* (JIL Research Report), no.108.

The Japan Institute of Labour. 2003b. Heisei 14 nendo kosei rodosho itaku noryoku kaihatsu kihon chosa [Skills development survey, 2002, commissioned by MHLW].

Harada, Minoru. 1988. *Nihon romu kanrishi 2* [History of Japanese labour management 2]. Tokyo: Chuokeizaisha.

Fujimura, Hiroyuki. 2003. *Noryoku kaihatsu no jiko kanri-Koyo fuan no motodeno shokugyo noryoku ikusei wo kangaeru* [Self-management of human resources development-Discussion on human resources development in the era of employment insecurity]. *Nihon Rodo Kenkyu Zasshi* (The Japanese Journal of Labor Studies), no.514:15-26.

Hori, Yukie. 2005. *Shienkikan toshiten no gakko* [Schools as assistance organizations]. Kosugi, Reiko. Frita to nito [Freeters and NEET]. Tokyo: Keisoshobo.

Honda, Yuki. 2005. *Wakamono to shigoto* [Young people and employment in Japan: Beyond the 'school-mediated job search']. Tokyo: University of Tokyo Press.

Honda, Yuki, Asao Naitoh and Kazutomo Goto. 2006. *Nito te iuna!* [Don't say NEET!]. Tokyo: Koubunsha.

Matsuda, Tetsuo. 2002. *Insatsu ni koishite* [In love with printing]. Tokyo: Shobunsha.

Yamamoto, Ryutaro. 1981. *Shuppan insatsu gijutsusha ni naruniha* [How to become technical workers in publishing and printing businesses]. Tokyo: Perikansha Publishing Inc.

Yoshida, Keiko. 2004. Jikokeihatsu ga chingin ni oyobosu koka no jisho bunseki, [Analysis of effects of self-development on wages] *Nihon Rodo Kenkyu Zasshi* (The Japanese Journal of Labor Studies), no.532:40-53.

Ministry of Labour. 1996. Dai 6 ji shokugyo noryoku kaihatsu kihon keikaku [The 6th Basic Plan for Human Resources Development].

Ministry of Labour. 2001. Dai 7 ji Shokugyo Noryoku Kaihatsu Kihon Keikaku [The 7th Basic Plan for Human Resources Development].

The Japan Institute for Labour Policy and Training. 2004a. Juko shiji go no kyushokusha-Shokugyo kunren to kyushoku katsudo, No.4 [Job Seekers Referred to Vocational Training], *Rodo Seisaku Kenkyu Hokokusho* (JILPT Research Report), no.4.

The Japan Institute for Labour Policy and Training. 2004b. Noryoku Kaihatsu ni kansuru rodo shijo no kiban seibi no arikata ni kansuru kenkyu-Shokugyo noryoku kaihatsu no tameno kyoiku kunren no seibi jokyō [Study on infrastructure development in the labor market for human resources development-How far education and training have been established for human resources development]. *JILPT Discussion Paper Series DPS-04-006*.

The Japan Institute for Labour Policy and Training. 2005a. Kojin no kyaria to shokugyo noryoku keisei-“Shinro tsuiseki chosa” 35 nenkan no kiseki [Individual career and vocational ability development: findings from a 35 year-long “career tracking survey”], *Rodo Seisaku Kenkyu Hokokusho* (JILPT Research Report), no.27.

The Japan Institute for Labour Policy and Training. 2005b. Kyoiku kunren probaida no soshiki to kino ni kansuru chosa-Kyoiku kunren sabisu shijo no dai ichiji chosa [Survey on organizations and functions of education and training service providers: The first survey on the education training service market], *Rodo Seisaku Kenkyu Hokokusho* (JILPT Research Report), no.24.

The Japan Institute for Labour Policy and Training. 2005c. Kyoiku kunren purobaida no soshiki to kino ni kansuru chosa-Kyoiku kunren sabisu shijo no dai niji chosa [Survey on organizations and functions of education and training providers: the second survey on the education and training service market], *Rodo Seisaku Kenkyu Hokokusho* (JILPT

Research Report), no.43.

The Japan Institute for Labour Policy and Training. 2006a. Kyoiku kunren service shiju no juyo kozo ni kansuru chosa-Kojin no shokugyo noryoku kaihatsu kodo karamiru- [Research survey on the demand structure of the education and training service market - From the viewpoint of vocational capability development behavior of individuals-], *Rodo Seisaku Kenkyu Hokokusho* (JILPT Research Report), no. 54.

The Japan Institute for Labour Policy and Training. 2006b. Gendai nihonjin no shiten betsu kyaria bunseki-Nihon shakai no gekitekina henka to rodosha no ikikata-[Career analysis of today's Japanese people from different angles: dramatic changes in the Japanese society and workers' lives], *Rodo Seisaku Kenkyu Hokokusho* (JILPT Research Report), no. 51.

The Japan Institute for Labour Policy and Training. 2006c. Wagakuni no shokugyo noryoku kaihatsu no genjo to kongo no hoko, (Project research, shokugyo noryoku kaihatsu ni kansuru rodo shijo no kiban seibi no arikata ni kansuru kenkyu, chukan hokoku) [Current state and future direction of vocational skills development in Japan: Interim report of the project research “research on the Improvement of labor market infrastructure in relation to vocational skills development] *Rodo Seisaku Kenkyu Hokokusho* (JILPT Research Report), no.53.

Wakamatsu, Yoshihito and Tetsuo Kondo. 2001. *Toyota shiki hitodukuri monodukuri* [Toyota-style human resources development and product development]. Tokyo: Diamond Inc.

The report in Japanese is written by authors below:
(as of March, 2007)

Reiko Kosugi, Research Director, JILPT
Hiroshi Ishida, Senior Research Fellow, JILPT
Professor, The University of Tokyo
Yukie Hori, Researcher, JILPT
Hiroshi Nishizawa, Senior Researcher, JILPT
Miho Fujinami, Assistant Fellow, JILPT
Chikako Yokoyama, Vice Senior Researcher, JILPT
Fumio Inagawa, Director, Department of Program Management and Coordination, The Institute of Research and Development, Polytechnic University (Former Senior Researcher of JILPT)
Yoichi Kimura, Senior Researcher, JILPT
Koichiro Imano, Senior Research Fellow, JILPT
Professor, Gakushuin University

Persons who participate in Project “Desirable infrastructure development for the labor market regarding vocational ability development” based on this report (Repeated authors above are eliminated).

Project member
Eiichi Ohki, Associate Professor, Department of Specialized Human Resources Development, Polytechnic University
Mari Okutsu, Research Director, JILPT
Kazuo Taguchi, Assistant Professor, Faculty of Economics, Takachiho University
Masami Hirayama, Vice Senior Researcher, JILPT (from 2004 to 2005)