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Revitalization of Middle-aged and Elderly Workers in Japan's Labor Markets: Requiring the Expansion of the Vocational Training Functions

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Contents

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Summary

1. Japan reached the stage where "7% of the total population is elderly age 65 or older", the standard set by the United Nations to define an aging society, in 1970. The percentage increased to more than double (14%) only in the following 24 years. Even when viewed internationally, the aging of Japan's population is proceeding with remarkable swiftness. As Japan's demographics change, the growth in the social security burden for the elderly has become more evident, the problem of a future labor shortage is predicted, and in addition the awareness of the need to create employment opportunities for the elderly who retire as a matter of course based on the retirement age limit system and the elderly-to-be, middle-aged workers (age 45 or older), is growing. A change can also be seen in attitudes towards individuals' life plans.

2. When one examines the characteristics of unemployment in recent years, the high rate of unemployment for young workers is striking. It is the size of the rate of increase in unemployment from 1996 through 1999, however, or the percentage of unemployment from involuntary and sudden causes such as "dismissals and personnel adjustments", where the unemployment for middle-aged individuals can be said to be more serious. Moreover, the fact that opportunities for reemployment are extremely limited once a worker loses his or her job because of employers' age requirements is a principal reason for the increase in the degree of seriousness.

As companies proceed with rationalization of business operations, it has been conjectured based on the premise of seniority-based wages that a strong recognition that ability and wage levels are misaligned lies behind trends such as the dismissals of middle-aged workers in particular. In recent years, however, many firms have started to review their wage system. With the change in a direction of emphasis on ability, the needs for vocational training are predicted to expand even further.

3. Given present conditions in Japan, however, highlighting the inadequacy of the vocational training functions that can meet these needs is inescapable. The division of vocational training into two types must be considered. One is what might be called emergency, stop-gap measures of a short-term supplementary nature, including responses to the current problem of unemployment of middle-aged workers. The other is medium to long-term development-type programs that aim at broader, more value-added improvement in the future, even though this training will require a longer amount of time. In Japan, improving functions corresponding to both of these needs is required.

Vocational training will be accomplished from an increase in practical capabilities and a change in awareness. The former, moreover, entails a process concerning abilities that goes from

"taking stock" (discovering) → "reorganizing" (arranging) → "supplementing" (applying). For short-term supplementary-type vocational training, a change in awareness and subjecting capabilities to a process of "taking stock" → "reorganizing" is particularly needed. Outplacement is now attracting attention as a business that emphasizes this process given scant attention in the past. The healthy development of human resources businesses like this, and the strengthening of the functions of public employment skills development facilities in a complementary role, have become short-term supplementary-type vocational training issues.

4. In addition, in order to meet this surge of heightened awareness and the need for employees to strive to improve their abilities from an early stage prior to entering their middle years, medium to long-term development-type vocational training that can cope with these needs will grow in importance in the future.

In Japan, universities focus on theories and research and maintain an academically high level but overall do not concern themselves deeply with education for pragmatic skills or knowledge. Various types of schools intended to close this deficiency have evolved mainly to fulfill roles in providing an education that is general-purpose and fundamental or focused on single skills. Therefore, the function in teaching applicable, practical abilities in some specialized areas is unsatisfactory.

In contrast to this, in the United States various vocational training systems have been put into place on the premise that individuals must take personal responsibility for developing their skills or adaptable competitive potential. Professional schools, such as business schools or community colleges, fulfill this function by shaping themselves to respond to the various types of needs from the standpoint of educational content or expenses.

5. "Management-related sector human resources training" can be visualized as one of the future directions of vocational training. Changes such as the explosion of new company start-ups or rationalization of business operations at existing firms are expected to stimulate demand as one field of emphasis. Already some universities are addressing pragmatic education such as management in a forward-looking manner, mostly at the graduate school level. In addition to turning these efforts into tangible results in the future, however, universities can provide even broader vocational training opportunities by changes such as inexpensive tuition or fewer time restrictions. Adding a role such as that played by community colleges in the U.S. will probably also prove indispensable for Japan.

Following the realization of this function, the preferable vocational training system in Japan will be centered on universities as a "place" for vocational training. Such a system would be effective in compensating for weak human resources while continuing to use the practical know-how accumulated there through collaboration among industry, private human resources services professionals and local citizens (what might be called "collaboration between industry and academia also including arts and sciences"). Organizations such as local government bodies will preferably occupy the role of coordinator aimed at building such alliances. In addition, broad support such as measures by the government to lighten the expense burden on individuals seeking self-development, or efforts by companies to provide appropriate recognition or evaluation of employee self-development, are also required.

The efforts or support of various individuals such as those indicated above can be expected to trigger a desire for broadening of vocational training functions or improvement of individual skills in Japan. This in turn can also be expected to be connected to the revitalization of middle-aged workers in future labor markets.

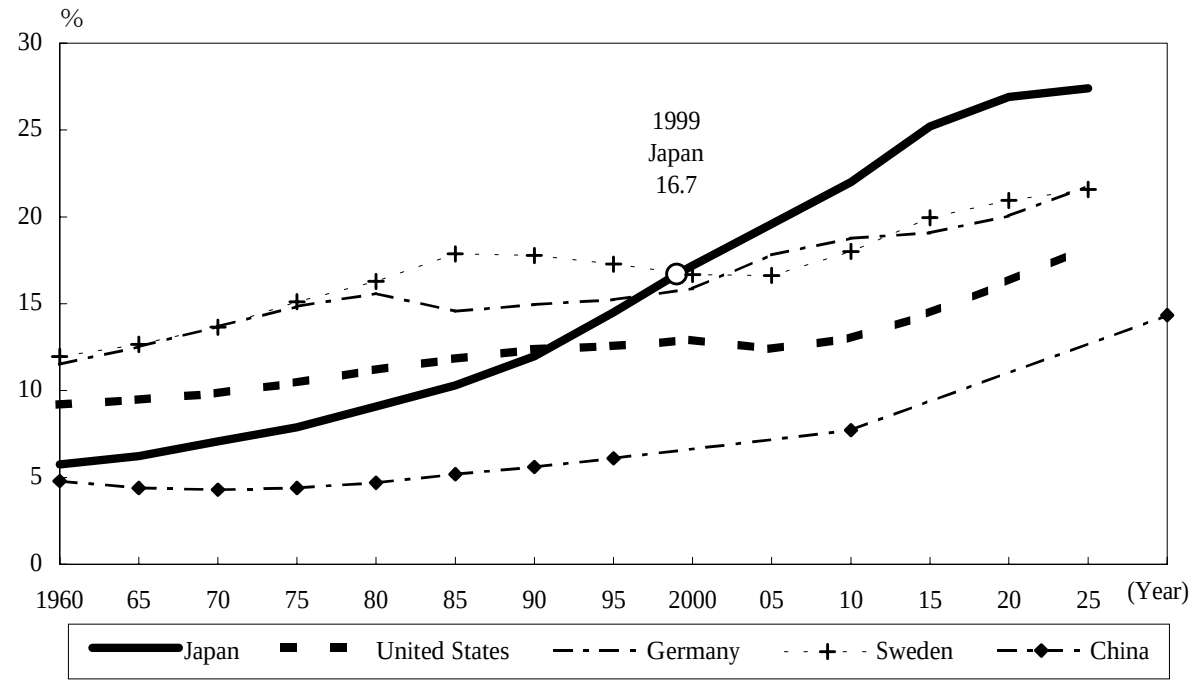
I. The aging of Japan's Population and Unemployment Conditions among Middle-aged Workers

1. Japan's Rapidly Aging Population and its Effects

Compared to leading countries in Europe and the U.S., Japan was late in being recognized as a country with an aging population. Japan reached the stage where "7% of the total population is elderly (age 65 or older)", the standard set by the United Nations to define an aging society, in 1970. As can be seen from Figure 1-1, the comparable percentage in the U.S. at that time was 9.8%, and Germany and Sweden had already reached a level of 13.7%.

When examined by comparing the number of years required for this percentage to double, however, Japan reached 14.1% in 1994, requiring only a brief 24 years in contrast to Sweden, which required 85 years, or even to Germany, which took approximately 40 years. Furthermore, in 1999 the same percentage reached 16.7%. Even when viewed internationally, the aging of Japan's population is proceeding with remarkable swiftness.

Figure 1-1 Change in Percentage of Population Age 65 or Older (International Comparison)

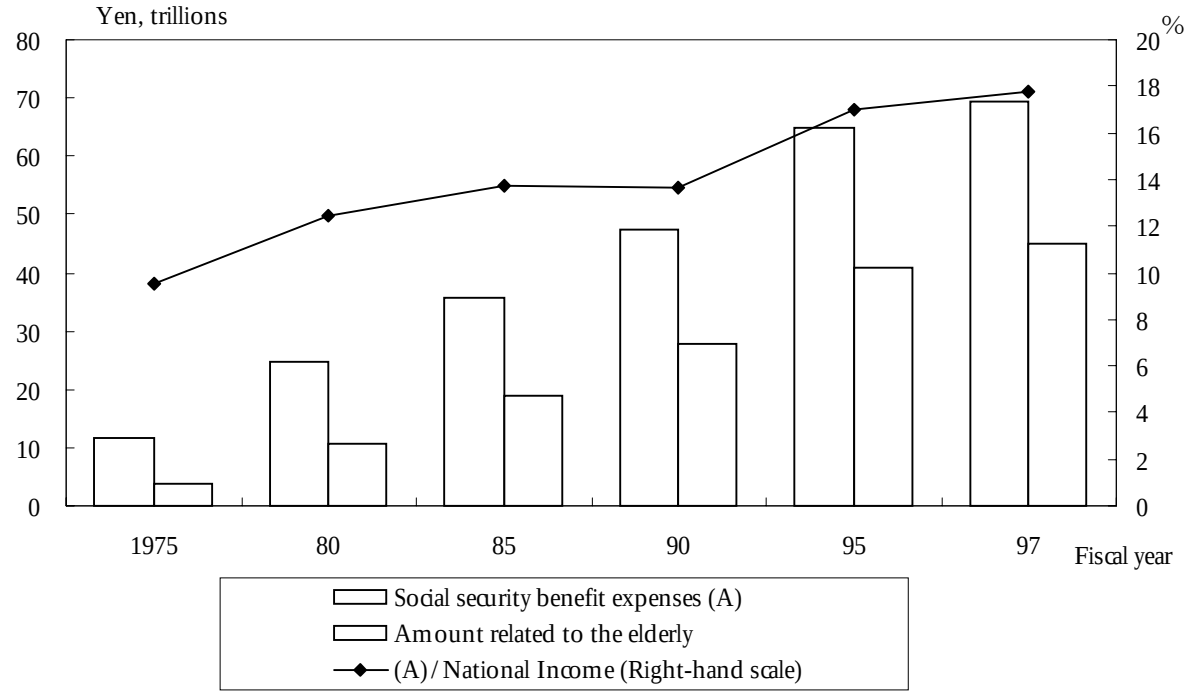


Sources: Japan: National Institute of Population, *National Census data* until 1995, *Projected Population* for 1996-1999, and *Japan's Future Projected Population - January 1997 Projection*, and Social Security Research for 2000 and after (Median projection)
Other: United Nations data

Aging has various influences on social or company mechanisms. For example, look at the social security burden ratio in Figure 1-2. The ratio has maintained an upward trend since Fiscal 1975 (9.5%), rising to 17.0% in Fiscal 1995 and 17.8% in Fiscal 1997. During this period social security benefit expenses consistently increased, and the increase in payments to the elderly in particular rose. Payments to elderly individuals in Fiscal 1997 were ¥45,140.1 billion, accounting for 65% of total social security benefit expenses (the same benefits in Fiscal 1975 were 32.9% of

total payments). The increase in the social security burden for Japan's elderly citizens is becoming increasingly obvious.

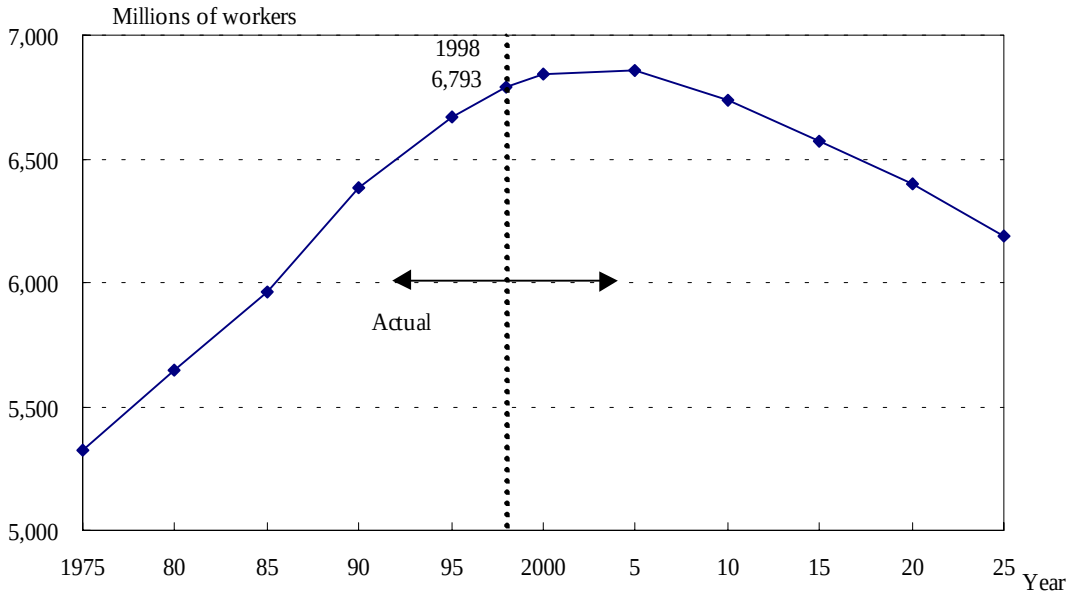
Figure 1-2 Change in the Social Security Burden Ratio



Source: National Institute of Population and Social Security Research, *Fiscal 1997 Social Security Benefit Expenses*

Let us next look at Japan's labor force population (the total of employed individuals and persons wholly unemployed among the population age 15 and older). As shown in Figure 1-3, despite the fact that the labor force continued to grow after 1975 and reached 67,930,000 workers in 1998, the labor force is projected to reach a peak in 2005 (68,560,000 individuals) and then decline. In addition to this change, when examined by age bracket Japan's labor force is characterized by a declining percentage of young workers and an increase in workers in the middle-age bracket. This demonstrates that while firms are moving ahead with the rationalization of business operations, the fact of the matter is that Japan is faced with a future labor shortage problem.

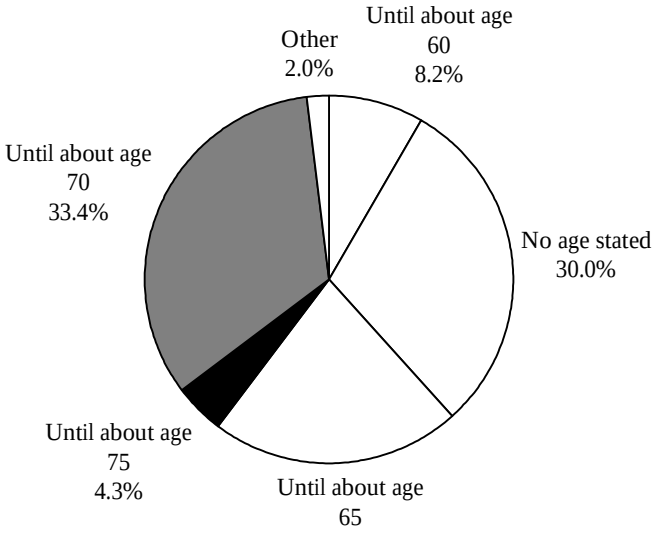
Figure 1-3 Changes in Japan's Labor Force Population and Projected Trend



Sources: For data until 1998: Management and Coordination Agency, *Labour Force Survey*
For data after 2000: Ministry of Labor, *Employment Stability Office Estimates* (October 1998)

In addition, if we focus on the desire of (individual) workers to work, as of 1998 the average life expectancy of Japanese males was 77.16 years, and the average life expectancy of females was 84.01 years. Both men and women are living longer, and the past manner of thinking of "mandatory retirement at age 60 and a life of leisure thereafter" also is continuing to change. Figure 1-4 shows the results of an attitude survey in which nearly 90% of individuals aged 60 or older expressed the desire to continue working.

Figure 1－4 Age to which Individuals Wish to Continue Working (Desired retirement age: asked of workers age 60 or older)



Source: Management and Coordination Agency, attitude survey data (1998)

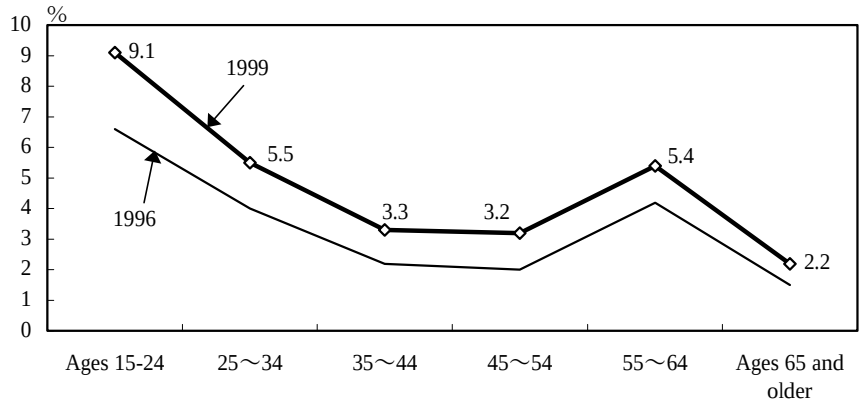
These results show that for society as a whole, as well as from the standpoint of firms or individuals, ensuring and expanding employment opportunities for elderly individuals who retired as a matter of course based on the past mandatory retirement age system and the elderly-to-be, middle-aged individuals (age 45 or older used as a yardstick, based on referral to sources such as the employment insurance system) is very significant.

2. Acute Unemployment among Middle-aged Japanese Workers

2.1. Characteristics

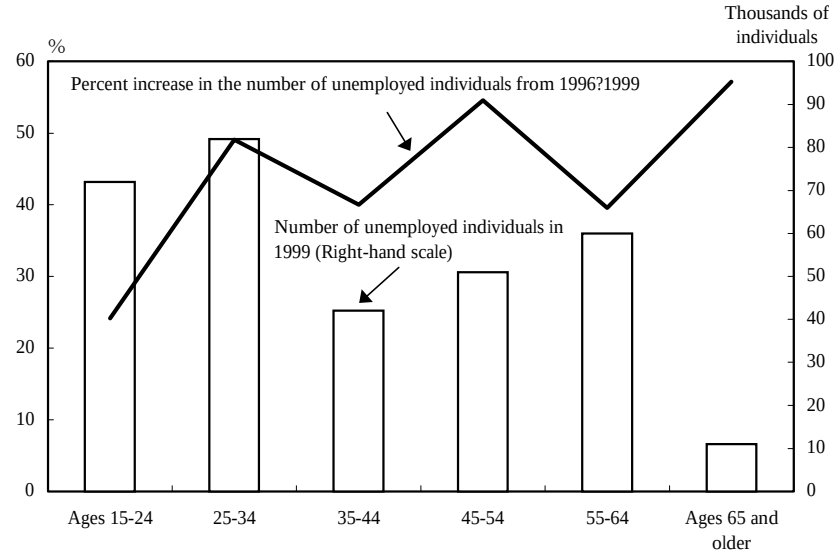
Turning to the characteristics of unemployment by age as shown in Figure 1-5, the level of the unemployment rate for young workers ages 15-24 is very conspicuous. In Figure 1-6, however, when we look at the number of unemployed individuals in 1999 or the percentage increase in unemployed individuals from 1996 through 1999, the amount of unemployment among middle-aged workers as well is impossible to ignore.

Figure 1-5 Unemployment Rate by Age Bracket



Source: Management and Coordination Agency Statistics Bureau, *Labour Force Survey*

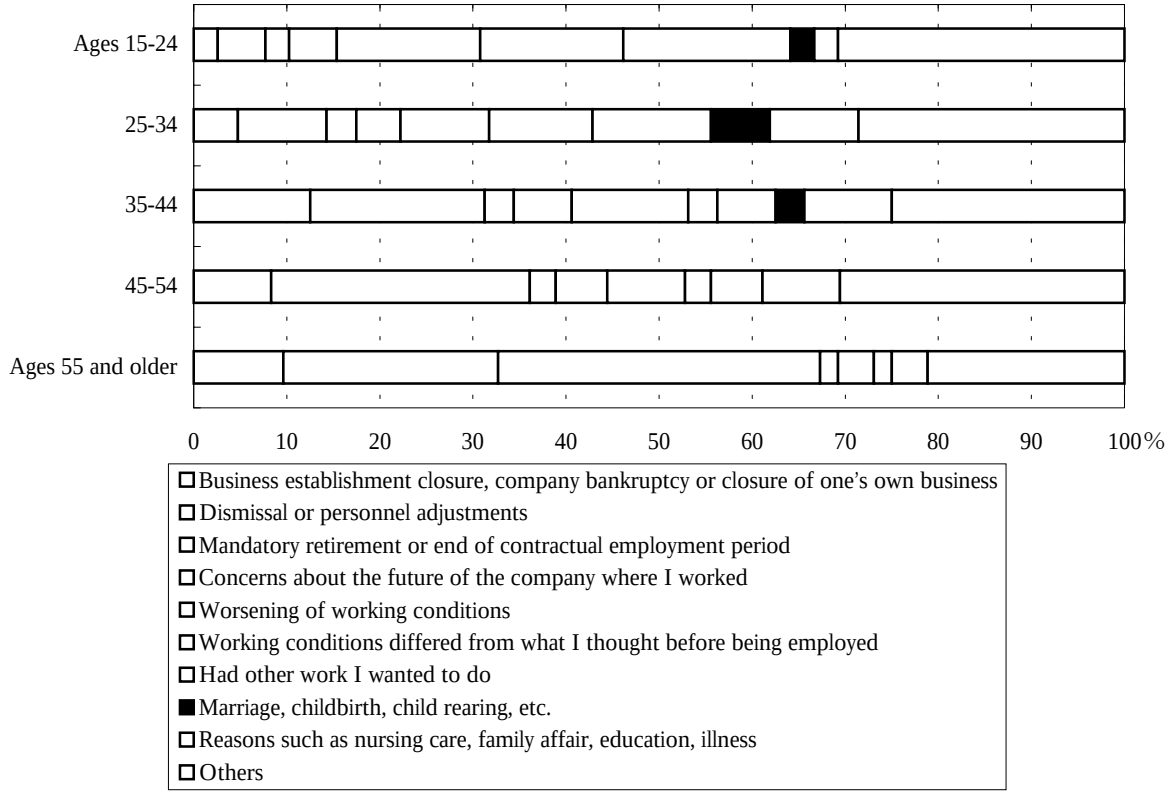
Figure 1-6 Number of Unemployed Individuals by Age Bracket



Source: Management and Coordination Agency Statistics Bureau, *Labour Force Survey*

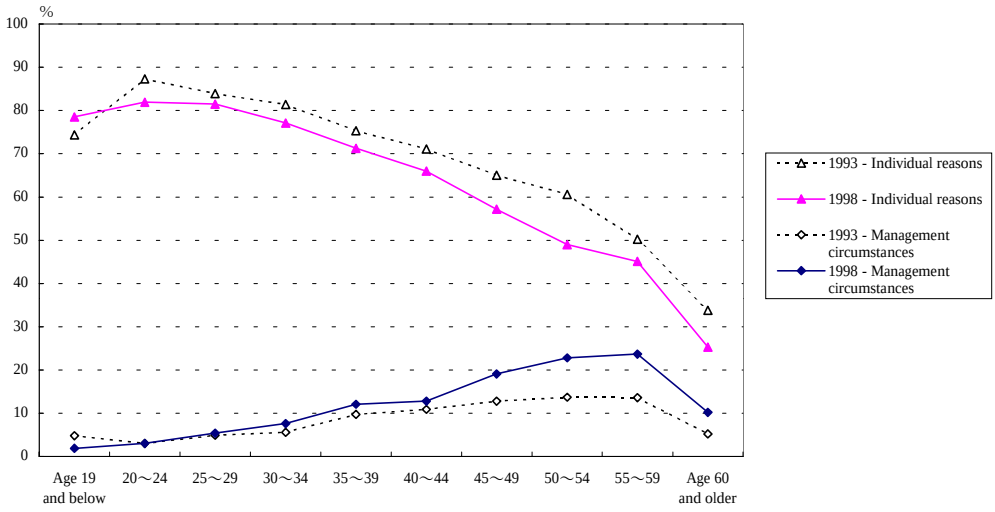
Moreover, the severity of unemployment among middle-aged workers is also strikingly demonstrated in the reason that the unemployed individual lost his or her job. As shown in Figure 1-7, the percentage of individuals who cited “business establishment closure, company bankruptcy or closure of one’s own business” or “dismissal or personnel adjustments” as the reason they lost their job was only about 10% for the young age bracket, but exceeded 30% for middle-aged workers. In other words, in contrast to the case of unemployment among young workers - where personal reasons for unemployment such “working conditions differed from what I thought before being employed” or “I had other work I wanted to do” are relatively plentiful - the large number of unemployed middle-aged workers who cited non-personal, sudden and unexpected reasons is serious. Furthermore, Figure 1-8 shows that until recently the trend for this situation was slowly worsening.

Figure 1-7. Percentage by Reason for Leaving Last Job, by Age of Persons Wholly Unemployed



Source: Management and Coordination Agency Statistics Bureau, *Special Survey of Labor Force Survey (August 1999)*

Figure 1-8 Percentage of Management / Personal Reasons, by Age Bracket Comparison of between two time periods



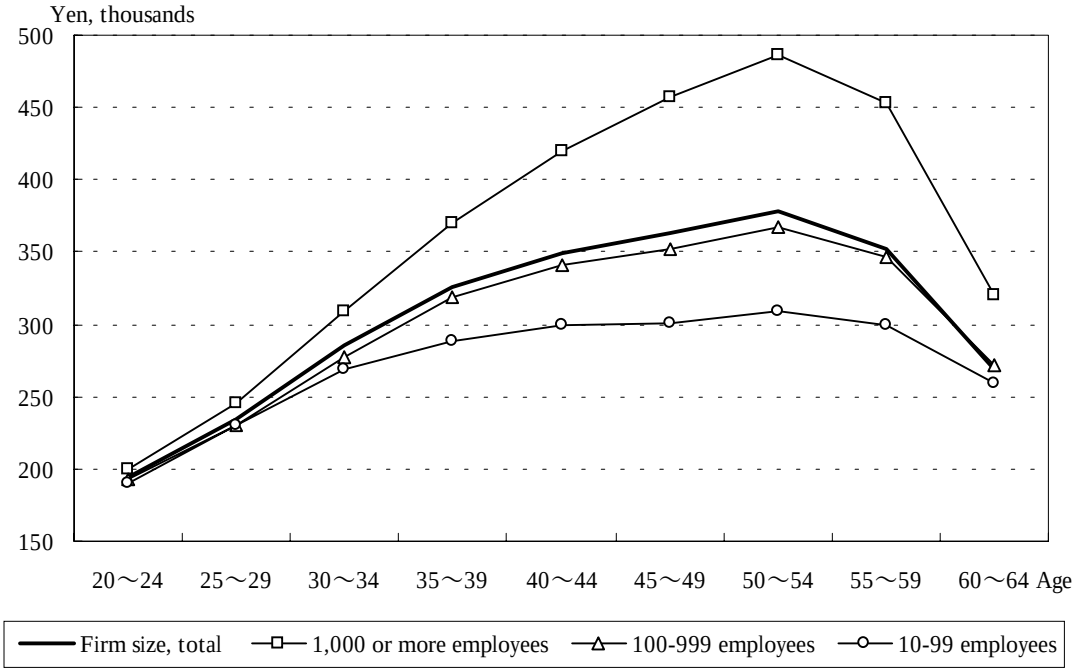
Source: Ministry of Labor, *Survey on Employment Trends*

In addition to these circumstances, the fact that many middle-aged workers face substantial burdens from home loans or children's educational expenses, and find fewer potential employers and extremely limited reemployment opportunities once they lose their jobs, adds to the severity of the problem.

2.2. Background

As firms proceed with rationalization of business operations, in addition to concerns about the ability of middle-age and elderly workers to adapt to change, or changes in the business environment effecting firms such as replacement of management activities by the spread of IT technology, in Japan companies' own wage systems (based on the premise of lifetime employment) also exert a large influence. This is particularly true of the background that pertains to dismissals or personnel adjustments effecting middle-aged workers. As seen in Figure 1-9, presupposing the seniority-based wages that formed the standard in the past, the mere fact that companies have middle-age and elderly workers is tied to large increases in personnel expense regardless of workers' abilities. This is the reason that firms are addressing cost reductions by first focusing on changes such as dismissal of middle-aged workers.

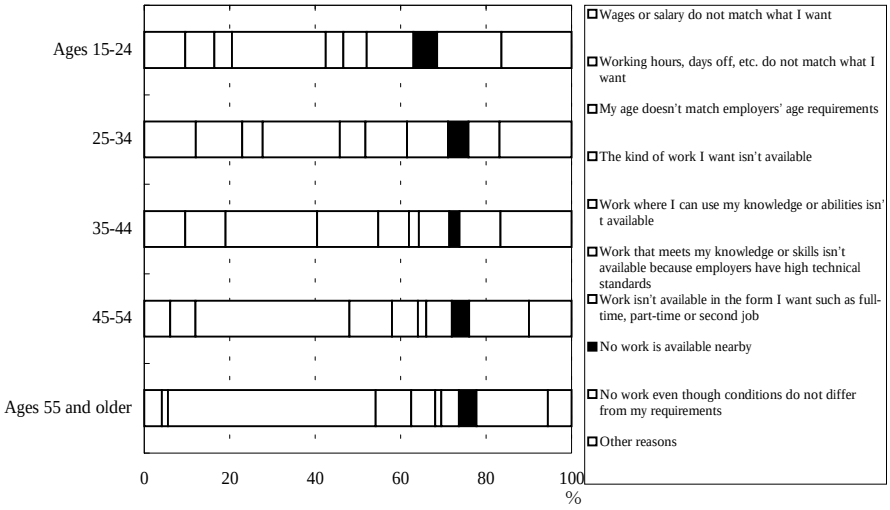
Figure 1-9 Predetermined Wages by Firm Size and Worker Age



Source: Ministry of Labor, Bulletin of the Results of the 1998 Basic Survey on Wage Structure

Moreover, the difficulty for middle-aged workers to find reemployment after being unemployed has also been noted. As shown in Figure 1-10, approximately 40% of middle-aged unemployed workers cite the fact that "my age doesn't meet employers' age requirements" as the reason for being unable to find a job. This too is believed to reflect the fact that, because of the recognition of a mismatch with the so-called "firm specific" capabilities and level of expected wages of middle-aged workers, employer firms have become cautious about hiring middle-aged workers.

Figure 1-10 Percentage, by Reason, for Being "Unable to Find Work", by Age Bracket of Wholly Unemployed Individuals



Source: Management and Coordination Agency Statistics Bureau, *Special Survey of Labor Force Survey (August 1999)*

2.3. Actions by Firms to Review their Existing Wage System

Firms that have acknowledged the inefficiency of the uniform seniority-based wage mechanism used in the past and begun to review the system have also already begun to appear. Table 1-1 illustrates the response of large electric machinery manufacturers, using materials cited in sources such as newspapers.

Table 1-1. Summary of New Wage Systems at Large Electric Machinery Manufacturers

NEC	・ Will expand its performance-based wage system from management to all regular employees (primarily white collar) in the fall of 2000. After setting a standard amount for raises by type of work or qualifications, will add a differential by including a portion determined by performance (From increases up to 2.5 times the standard raise to amounts less than the standard raise).
Toshiba	・ In addition to the traditional wage system focused on time management, beginning in Fiscal 2000 will introduce a performance-oriented system (for non-management white collar workers) by which employees can earn up to 1.6 times the standard annual salary based on performance. The new system will not include overtime allowances, but will increase base salary by 20% over the past amount and will also increase bonuses twice annually according to the level of work performance. Attendance for a minimum of 30 minutes every day will be a required condition, but all other evaluations will be based entirely on performance.
Fujitsu	・ Has completed introduction of a performance-based wage system.
Hitachi	・ Will introduce a new personnel system (for managers at the section chief level or higher) that eliminates seniority factors in Fiscal 2000. The system uses reviews of personality or results as a leader based on new “Hitachi values” as the basis for raises and promotions. Activity managers for individuals in their 30 years old, and jumps in rank or demotions are also possible under the system.
Sanyo	・ Will introduce a total performance-based wage system (for all employees) in Fiscal 2000.
Matsushita	・ Plans to introduce a system to establish differentials in salary based on employment location.
Yokogawa Electric	・ Introduced a “Total Personnel System” centered on performance results for section chiefs and division managers in 1995 and for all regular employees in 1997, with the goal of changing personnel expenses into variable costs. Has functions centered on a performance evaluation system or objectives management system.
Japan IBM	・ Studying the introduction of a system that evaluates employees who have management consultant or other high-level specialized knowledge or skills with an expert rank salary level (annual salary ¥30-40 million level). System would initially be applied to 7-8 individuals and eventually be expanded to about 150 individuals.

Source: newspaper information

It is expected that together with the increase in these kinds of approaches, the evaluation standards used in the future for company employees also will shift away from seniority in a direction that focuses on ability or natural talent. Under such systems, middle-aged workers will be able to secure appropriate employment opportunities or wages if they are able to demonstrate their superiority compared to younger workers, by taking advantage of their experience or personal relationships. We may assert, that faced with this kind of environment, the need to improve one’s own capabilities will increase, and this in turn will mean that needs for vocational training will also expand further.

II. The Current State of Vocational Training in Japan

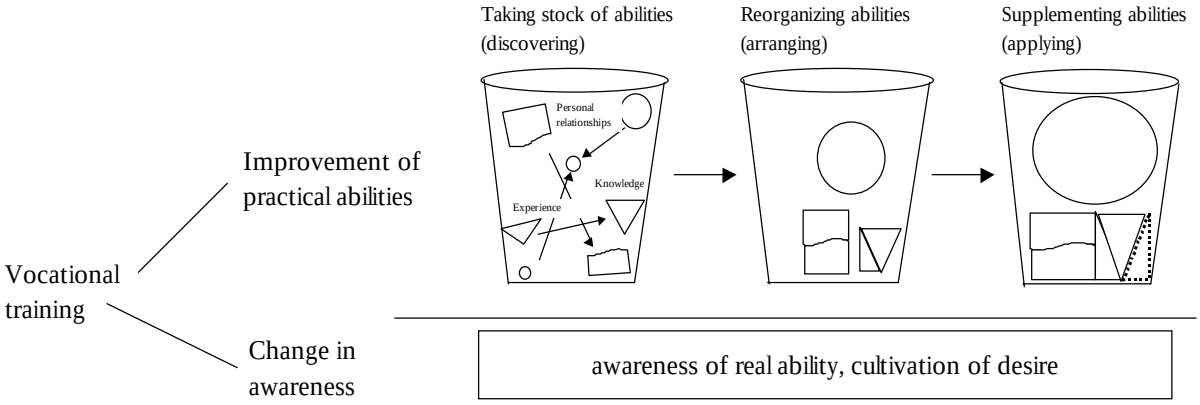
1. Attitudes and Thinking Regarding Vocational Training

In the previous chapter we discussed the need for improving the job skills of middle-aged workers and for vocational training needs. Given present conditions in Japan, however, highlighting the inadequacy of the vocational training functions that can meet these needs is inescapable.

The vocational training concept is illustrated in Figure 2-1.

Broadly classified, vocational training consists of both improvement of practical abilities and a change in awareness that underlies and supports this activity. The former, moreover, entails a process that involves "taking stock" → "reorganizing" → "supplementing" with regard to abilities.

Figure 2-1. The "Vocational Training" Process



Source: Development Bank of Japan

The change in awareness included in the base refers to mentally preparing the psychological environment needed to continue working. This includes actions such as an objective evaluation of one's actual abilities, or suitable acknowledgement of the position in which one finds oneself, and cultivation of the will to work and self-confidence. To accomplish this, the understanding of and cooperation of surrounding individuals are indispensable elements. Sometimes a change in awareness is needed not only the individual himself or herself but also in his or her family. Finally, because frequently psychological ups and downs will occur repeatedly during vocational training, a change in awareness corresponding to one's circumstances is called for.

The first step towards improvement of practical skills that takes these factors into consideration is "taking stock of one's abilities". This is a critical process of looking back over one's employment experience up to the present to "discover" the latent capabilities formed by the knowledge and personal relationships cultivated over the years. This is followed by "reorganizing one's abilities", a process by which these abilities, which at a glance appear to be inconsistent, are combined to "arrange" for any possibility where one can display one's superiority in some area. In the third step, "supplementing abilities", workers "apply" their strengths by taking steps to make up their weaknesses and form added value, which will be displayed as the final result.

When considering vocational training it is necessary to divide training into two categories. One is what might be called short-term, supplemental type of training. This includes responses to the problem of unemployment among middle-aged workers that efficiently forms added-value within a range of what is possible now, basically by utilizing existing abilities. The other is medium to long-term development-type training. Although this requires a certain length amount of time, this type of training aims at even greater, broad-based value added improvement in the future. In Japan the broadening of functions corresponding to both of these needs is required.

2. Short-term Vocational Training of a Supplementary Nature

2.1. The Importance of a Change in Awareness and "Taking Stock" of one's Capabilities

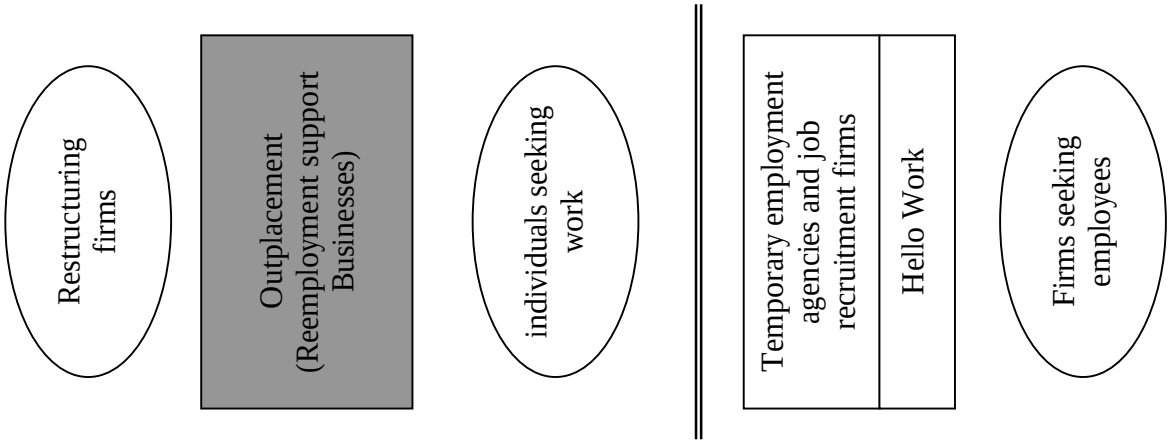
In many cases, individuals such as unemployed middle-aged workers characterized by having lost their jobs for external reasons will lose their will to work and their self-confidence. Frequently they also lack any perception of an objective assessment of their real strengths. In an effort to find work they may register with a temporary employment agency or job recruitment firm. Even when they receive an interview opportunity, however, very often they are unable to make a strong appeal for their own superior abilities and fall into a condition where it is difficult to find reemployment.

In the case of middle-aged workers who own a home, certainly it is conjectured that they are limited by the time or cost they can invest for vocational training. Compared to younger workers, it is harder for them to learn skills in a new field. Middle-aged workers, however, already possess a wealth of employment experience and practically-accumulated knowledge. It would probably possible to greatly increase the possibilities for ensuring their superior abilities if they could just extract these abilities and utilize them efficiently. Businesses such as outplacement (reemployment support), that is being looked upon as the newest personnel business, may be said to be based on this idea.

2.2. Summary of the Outplacement Business

Reemployment support is a business that places importance on a change of awareness, a concept barely touched upon in past concepts of vocational training. Reemployment support also emphasizes the process of "taking stock → reorganizing" of individual abilities (Figure 2-1). The size of the market is currently said to not exceed more than ¥10.0 billion annually (about 1/10 the level in the U.S.). The business has spread more slowly than temporary job placement, which reached a market size of approximately ¥1,570.0 billion in Fiscal 1998. But compared to the growth in the job placement business of 7.7% since Fiscal 1998, as shown in the Nikkei Shimbun's "17th Annual Comprehensive Survey of the Service Industry", outplacement for the same period grew remarkably by 106.6%. This indicates that the importance of this industry has begun to be understood. Outplacement firms receive a consignment from firms that will restructure to provide reemployment support through means such as offering counseling or know-how to employees whose jobs will be eliminated. The company from which they receive their contract pays the reemployment firm, not the individual employees. As shown in Figure 2-2, in contrast to *Hello Work* or the traditional type of executive recruiters, which focus mainly on the needs of companies seeking employees, reemployment firms stand on the side of companies that are restructuring and of the individuals seeking work (employees who will leave their positions). Their aim is to provide support so individuals seeking employment can quickly find work that meets their needs.

Figure 2-2 Characteristics of the Human Resources Business



Source: Development Bank of Japan

Drake Beam Morin - Japan, Inc., founded in 1982, is positioned as the largest company dedicated to reemployment support in Japan. The company has grown to ten offices throughout Japan. The specific content of the firm's reemployment support program is shown in Table 2-1.

It can be understood from the company's inception in New York (1967), that an outplacement business started in the U.S. and has expanded rapidly based on the concept, relieve anxiety "relieve anxiety and act on behalf of both the managers of restructuring companies and individuals seeking employment". This is in contrast to Japan, where the responsibility of many firms towards individuals who will be laid off has stopped with the payment of a relatively large severance payment. Because the thinking, "why does our firm have to be involved to the extent of reemployment support?" has been firmly entrenched in managers minds, the significance of such support was difficult has fear. In more recent years, however, the understanding of the need for such services has finally spread and the number of firms other than foreign-related firms that are using this business has increased.

Together with the growth in the market, the number of entities - including participation by traditional type of temporary employment agencies - has been increasing. Because a strict definition of the reemployment support activity itself is still changing, however, and reliable statistic are also not available, the number of firms is said to range anywhere from 30-40 to as many as 100 companies. This includes firms such as Drake Beam Morin - Japan, Inc. that offer full-scale support, as well as companies that provide only interview training. In addition, competition has recently become more severe with the increase in the number of new participants, contract fees have plunged, and problems such as insufficient know-how on the part of the support service companies or deteriorating quality of counseling have also multiplied. Added to this is another problem. Because outplacement firms participate in the support process up to the point of an introduction to an employer, for individuals seeking employment they have the merit of making it simpler to smoothly find reemployment. On the other hand, however, they can abuse the differences in mechanisms for payment from both businesses and can earn a fee twice for a single reemployment application, once from the restructuring firm and once from the firm seeking to hire workers. Moreover, although currently the industry is exclusively targeting large firms, many future issues - such as the need for the reemployment support function for individuals being laid off by small and medium-scale firms or small business as well as for individuals - have also been pointed out.

Table 2-1. Content of an Outplacement Program

Week One
- Provide encouragement
- Establish a relationship of trust
- Begin self-assessment
- Verify employment history
- Qualification tests
- Employment suitability tests

Week Two
- Explain the results of various tests
- Gather basic data for preparing resume
- Verify own experience, knowledge and abilities
- Verify the objectives of reemployment

Week Three
- Complete resume (Japanese, English versions)
- Interview training (Explanation, videos, simulations, written tests)

Week Four
- Begin employment search activities (Job placement firms, want ads, information from DBM, DM, etc.)
- Provide guidance on how to send letters seeking work
- Handling inquiries

Week Five and after
- Provide advice on negotiating with executive recruiting firms and firms seeking employees
- Provide advice on negotiating terms and conditions with potential employers
- Counseling concerning reemployment (mental attitude, precautions, etc.)

Source: Materials provided by Drake Beam Morin - Japan, Inc.

In the U.S., the stable growth of the reemployment support business is said to be continuing even though the economy has improved, because firms are carrying out continual restructuring as they reorganize their business or because employment mobility is continuing. In Japan as well, the association in regard of outplacement business was formed in December 1999 amidst expected further growth in the size of the market. As of May 2000, 30 companies had joined the association, including ten full-time reemployment support firms. The results of the association's future activities are certain to attract attention.

2.3. Activities of Businesses Related to "Supplementing Abilities"

In addition to outplacement firms that emphasize efforts such as "taking stock of abilities", the first part of vocational training, various kinds of firms illustrating the second part of the process - a change in thinking whereby vocational training now means emphasizing "supplementing abilities" - have also grown (Figure 2-1). In many cases, companies that were participating in the executive recruiting business are characterized by the fact that they have acknowledged that training their registered staff is indispensable to their survival. Many have begun to strengthen their educational and job training systems. In addition firms from completely unrelated industries have also entered the business.

◆ JSL
Takes employees from indirect departments such as general affairs, accounting or personnel in the form of transfers, and places them in companies as expert personnel after providing vocational training. In addition to placing workers with their original firms, also earns a profit by contracting workers to small and medium-size firms that want to outsource their indirect departments. Employees transferred to JSL are guaranteed the salary level they had at their old employer for one year, and can also increase their business expertise.

◆ Price Waterhouse Coopers BPO Japan
Price Waterhouse, one of the world's "Big Five" accounting firms, established this company as the mother firm for new businesses. The company will accept all of the employees from a firm's indirect department such as accounting, finance or personnel, increase the capabilities of the transferred employees' by conducting on-the-job training through expert lectures utilizing sources such as the Internet, and place them for work from the employee's old company or other firms.

◆ FANCL
After considering restructuring activity at large enterprises, FANCL established a "lifetime active service research institute" employment training company in February 2000 to primarily target middle-aged workers age 40 and older. Provides vocational training for specialized skills in a variety of areas such as marketing or production management, as well as guidance in basic activities such as speaking, handling business discussions or creating a life plan. Rather than help workers to acquire new skills, the company develops each individual's areas of expertise by drawing on his or her accumulated abilities.

◆ TEMPSTAFF
Develops the computer skills of middle-aged workers who have a wealth of life experience but have been laid off. After training them as information education instructors, which are in high demand, places them in jobs in sites such as public schools.

◆ Nihon Placement Center
For individuals who want to change jobs and have registered with the company, offers "Required Courses" that teach fundamental business skills and "Elective Courses" that teach specialized skills in various occupations at its G-up Career Center, which the company established in January 2000. The company invites businessmen who are active in industry or consultants to be lecturers, and aims to provide practical business training.

◆ Manpower Japan
Introduced its "Global Learning System" in March 2000, a free IT study system utilizing the Internet. The company's workers can use this system to engage in self-directed study on topics including commercial transactions, building a network such

internal company controls, and safety management to avoid problems such as information leaks.

◆ Federation of Japanese Technologists
A support group established by the Japan Technology Transfer Association, which promotes the improvement and cross-fertilization of technology and knowledge based on the transfer and exchange of manufacturing technology. This is an NPO formed by engineers to cross over the boundaries of their occupation for the purpose of promoting mobility among technical experts. Also conducts occupation training in new technology when necessary.

Source: Information from newspapers and other sources

In the past in Japan, emphasis was placed primarily on the work of creating "things" (manufacturing). In addition to this, however, the work of creating "people" - that is, a personnel business that aims for "cultivation of individual's abilities" or "healing" and the training business - is also expected to grow in importance in the future. Because these fields have a very low up-front cost for investment in facilities and equipment and because it is also simple for new firms to enter the business, differences in business quality can also easily emerge. Along with the increase in needs or diversification, one important issue for the future will be how to ensure that reemployment support and other personnel businesses develop in a healthy manner now that they have at last gotten underway.

2.4. Measures by the Public Sector

According to Japan's Ministry of Labor, the development of employment skills should first and foremost be carried out within companies or through the initiative of private businesses, with the public sector occupying a position that complements these activities. Individuals for which the public sector ought to complement private activities are primarily unemployed individuals who have no prospective employers, or individuals employed at small and medium-size firms that cannot afford the cost in equipment or facilities needed for development of their workers' skills.

The public occupation and manpower development facilities shown in Table 2-2 are currently open at more than 300 locations throughout Japan. As part of the upgrade of public employment training that is being promoted through a three-year plan since Fiscal 1999, the Polytechnic Colleges under the jurisdiction of the Ministry of labor is being converted to a university. The plan calls for setting up a system consisting of Polytechnic University in 10 locations and a single Polytechnic College established by the national government (occupational and manpower development organization) by the time the plan is completed. In addition to specialized and practical courses, various short-term courses are also being prepared by the universities as a special framework for adult members of society.

Table 2-2. Types of Public Occupational and Manpower Development Facilities

(As of April 2000)

Classification	Type of employment training	Policy core	Number of facilities
Polytechnic University	Provides high-level employment training for high school graduates, etc. (Specialized courses) Provides specialized as well as applied employment training at a high level for individuals who have completed the specialized courses, etc. (Applied courses)	Employment and Human Resources Development Organization of Japan	7
Polytechnic Colleges	Provides high-level employment training for high school graduates, etc. (Specialized courses)	Employment and Human Resources Development Organization of Japan Municipal and prefectural governments	10 7
Polytechnic Center	Conducts short-term employment training for individuals who are not working or are currently working	Employment and Human Resources Development Organization of Japan	60
Ability Garden	Development and implementation of guideline and model employment training courses for white collar workers.	Employment and Human Resources Development Organization of Japan	(1)
Advanced Polytechnic Center	Conducts high-level high-tech-related employment training courses for technicians with intermediate skills, etc.	Employment and Human Resources Development Organization of Japan	(1)
Polytechnic Junior Colleges	Conducts employment training for junior high and high school graduates and individuals who are not working or are currently employed, etc.	Municipal and prefectural governments	214
Human Resources Development Centers for the Disabled	Conducts employment training appropriate for the abilities of physically and mentally challenged individuals	Central government※ Municipal and prefectural governments	13 6
			Total 317

Note: Numbers in parentheses ( ) are inclusive.
Management of facilities indicated by a ※ is conducted by the Japan Association for the Employment of the Disabled or municipal and prefectural governments.
Source: Ministry of Labor reference materials

What is commonly referred to in Japan as “polytech” are Polytechnic Center established by the central government around the Occupational and Human Resources Development Center and Polytechinc Junior Colleges established by municipal and prefectural governments. These are the principal public facilities for providing vocational training. It is impossible to evaluate Japan’s “polytech” as a group. But overall, the former can be said to have maintained a specified level of quality, while the latter depend upon the financial condition of local governments and differences in training quality have arisen because some schools make an aggressive effort and others do not. Course content is formed around science and technology classes (technology and skills), in order

to support the high level of technology and skill that have formed the source of Japan's industrial competitiveness. This reflects the decision that support in the form of facilities provided by the central or local governments to contribute to the manpower development of human resources in these fields is indispensable. For the liberal arts, the first school as a polytech for white-collar workers was established in July 1997, called the "Ability Garden" (Lifetime Occupation and Human Resource Development Center). The model for courses aimed at middle-aged workers who have lost or are changing jobs is to be active under the severe employment situation these individuals face. It is difficult, however, to claim that these courses have fulfilled an adequate function in the sense of complementing efforts in the private sector.

Future issues that are critical for Japan's polytech are raising the overall level of the training quality and strengthening liberal arts-related vocational training functions. For the latter in particular, it is thought that "Ability Garden" will actively promote the "development of a skills improvement model for employed white collar workers", which was the initial intent when establishing the facility, as well can demonstrate efficiency by providing accumulated know-how to private companies. When these kinds of public sector approaches are coupled with the actions of private firms, it can be expected to contribute to the progress of Japan's vocational training functions.

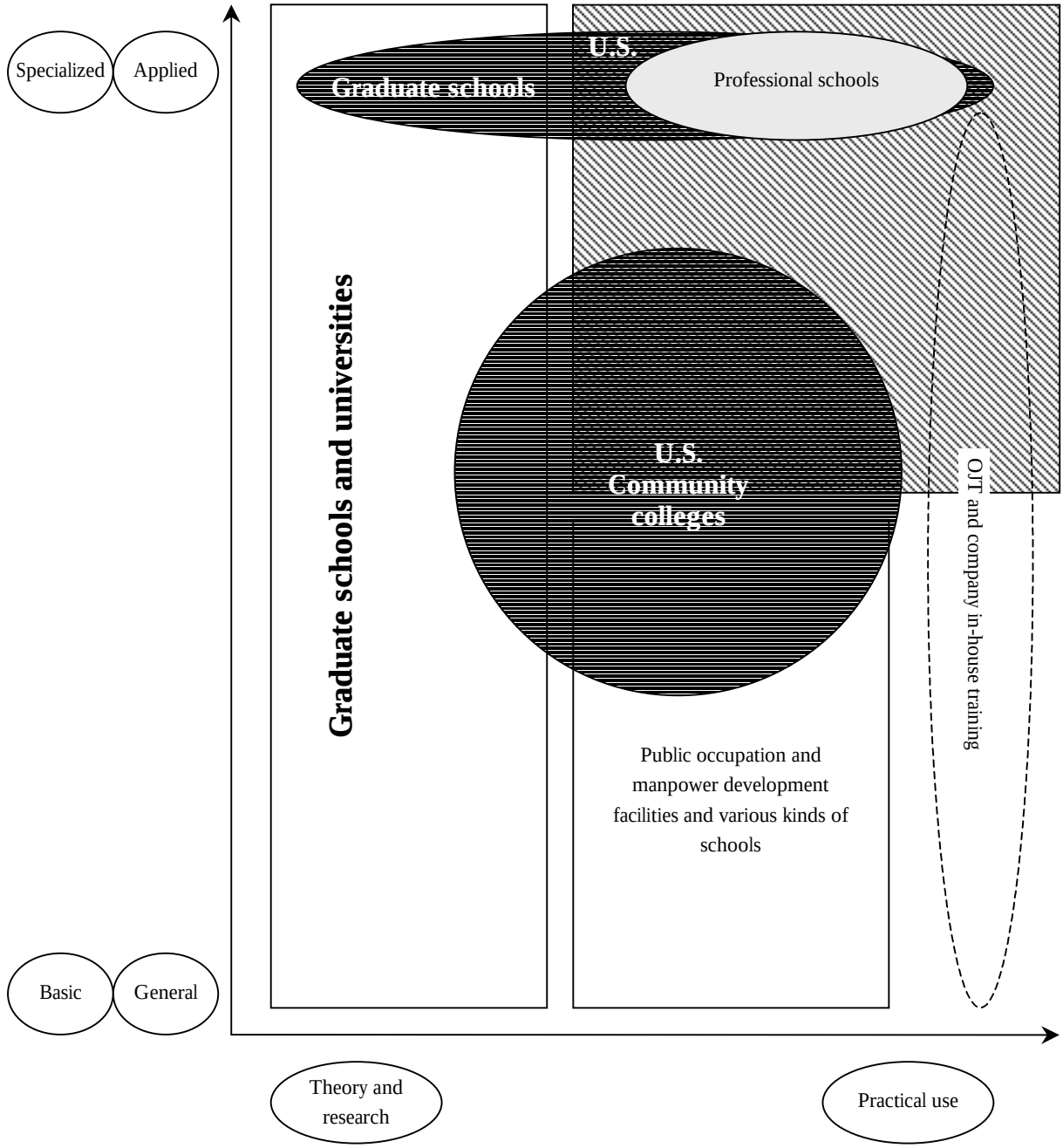
3. Medium to Long-term Development-type Vocational Training

Situations such as those where middle-aged workers who are already unemployed decide to improve their effectiveness and added value call for short-term supplemental-type vocational training. In contrast, the awareness or necessity for workers to decide to improve their abilities on their own prior to entering their middle years is expected to further increase the importance of medium to long-term developmental-type vocational training in the future that can meet this need. The type of medium to long-term developmental-type training referred to here is not based on emergency stop-gap thinking, but takes a medium to long-term perspective and aims at improving added value in the very broadest sense. The fact that young workers are currently taking advantage of this kind of vocational training function to improve their abilities is also thought to be connected to the revitalization of middle-aged workers in the future labor market.

3.1. The Subject and Content of Vocational Training

Figure 2-3 is a simplified diagram of the core of traditional vocational training and the contents in Japan that also superimposes the circumstances in the U.S.

Figure 2-3. The Core of Traditional Vocational Training and Training Contents



Source: Development Bank of Japan

Up to now in Japan, the focus of a university education has been on theories or research. At the postgraduate education as well, the emphasis has basically been placed on the training of researchers or university professors. On the one hand, academically the training is at a very high level, and it is possible to systematically acquire a high level of specialized or applied knowledge. On the other hand, however, universities generally are not involved very deeply in providing practical skills or knowledge. As a nucleus to compensate for this situation there are various

schools that aim to provide, for example, computer training, foreign language capability or acquisition of professional qualifications, in addition to the previously mentioned public occupation and manpower development facilities. All of these generally have come to fulfill the role of providing either a general, basic education or training in a single skill. With regard to the OJT or company in-house training that may be said to have always provided an effective vocational training function nearest to actual practice, deficiencies have long been noted in the training opportunities or contents. Moreover, given the severe business climate, both large corporations as well as small and medium-sized firms are finding it increasing difficult to provide such training because of the time and cost involved.

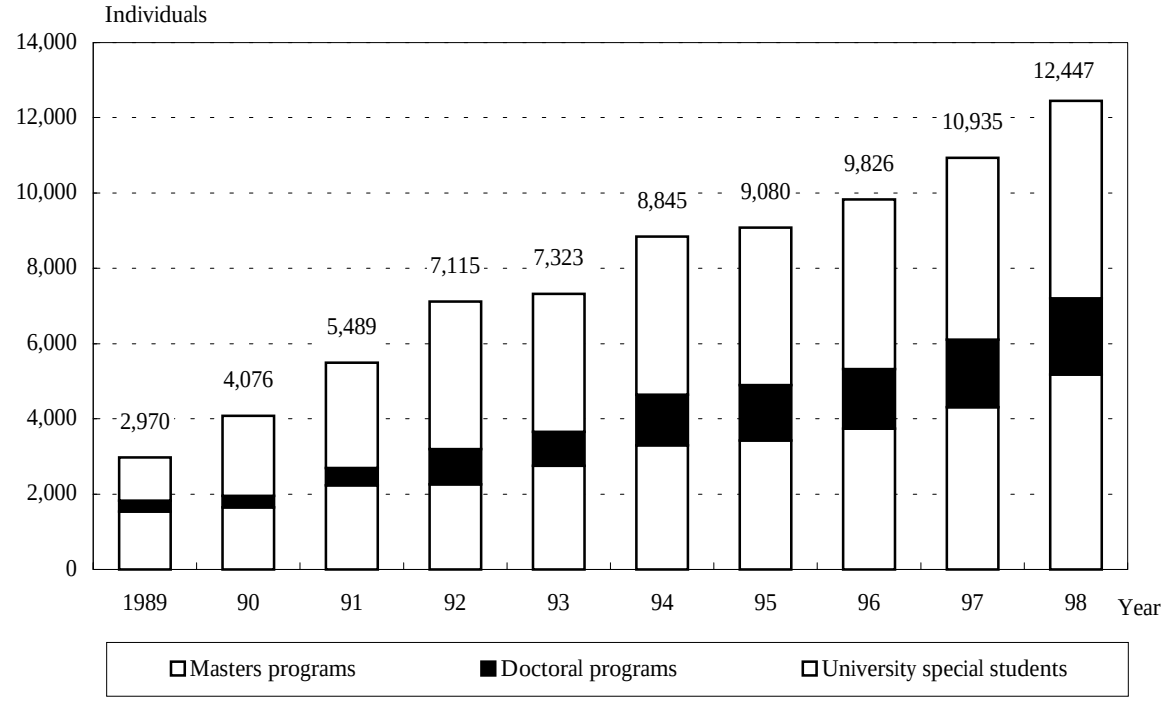
As a result, the function of providing education for applied, practical skills in specialized fields - that is, the medium to long-term developmental-type vocational training function - is particularly inadequate in Japan. This is shown in Figure 2-3 as the area shaded by diagonal lines. Furthermore, because of changes such as scaled-down company in-house training, the tendency to demand this function be fulfilled outside the firm will probably grow stronger in the future. In the United States, professional schools such as business schools or community colleges with roots in their local area are fulfilling this function. Japan must investigate the future direction of vocational training in Japan while continuing to make reference to these institutions.

3.2. University Reform Activities

At Japan's universities and graduate schools, which have provided an education intended primarily for new high school graduates that emphasizes theories or research, the first steps towards steady reform aimed at throwing open the doors for adults can be seen if one looks at the changes from the past. Viewed against the backdrop of a rise in vocational training needs, in recent years in particular these activities have taken on a full-fledged character in a form that is even calling for reviews of educational content.

One example of a system with the objective of opening college doors broadly to working adults is the special framwork of entering examination which is set for adults separately from general one. The number of universities that have been implementing the system introduced in Fiscal 1979 at the Rikkyo University Faculty of Law has been growing annually, reaching 93 colleges and universities in Fiscal 1989 and 333 colleges and universities (more than half of all colleges and universities) in Fiscal 1999. For graduate schools the same system was first introduced in Fiscal 1984 in the Osaka University Faculty of Economics Management Science Program, and in Fiscal 1998 had been implemented at 240 graduate schools. As a result, as shown in Figure 2-4 the trend in the number of adults who entered universities and graduate schools has also continued to increase through Fiscal 1998, and further growth in vocational training needs can be expected.

Figure 2-4. Number of Working Adults Enrolled in Universities and Graduate Schools



Source: Ministry of Education reference materials

In addition, because of the decline in the number of college students resulting from Japan's low birth rate and aging population, the sense of crisis over how university education has been provided in the past, and the rising chorus of voices demanding the further steps be taken towards university reforms, "A Vision for Universities in the 21st Century and Reform Measures" that took into consideration the University Council Report of October 1998 was included in the university reform program amended in September 1999.

The principal points of the reform measures are summarized below.

〔Academic Faculties〕

- Cultivation of abilities for students to pursue their own ends
  - Emphasize the importance of liberal education and secure cooperation between liberal education and specialized education
  - Stress the importance of the basics and principles in specialized education
  - Cultivate students' ability to play an active part on the international stage
- Improvement of teaching methods
  - Specify the criteria for grading students' performance and implement more rigorous grading methods
  - Set an upper limit on the number of courses students may register for and provide student guidance
- Greater flexibility in the education system to cope with diverse learning demands
  - Increase the number of mutual transferred credits and authorize academic credits for extracurricular study from educational facilities other than universities

- Promotion of cooperation and interaction with local communities and industry
  - Develop and implement educational programs through university-industry cooperation
  - Offer diversified learning opportunities through more effective use of information communication technology
  - Adopt and expand the internship system
- Promotion of international exchange
  - Promote exchanges between educational programs and researchers

〔Graduate schools〕

- Upgrade organization and faculty composition
  - Specify by law a system that enables graduate schools to have the same basic organization and faculty composition as undergraduate schools
- Specification of goals and roles of graduate school programs
  - Promote the establishment of graduate schools specializing in practical education, to train professionals with advanced specialties
- Greater flexibility in the education system to cope with diverse learning demands
  - Establish one-year master's degree programs and longer-term programs that will contribute to actively accepting adult students in master's programs
- Promotion of cooperation and interaction with local communities and industry
  - Develop and implement educational programs through university-industry cooperation
  - Offer diversified learning opportunities through more effective use of information communication technology
  - Greater promotion of research between graduate schools and private research institutes based on the affiliated graduate school format or cooperative research
- Promotion of international exchange
  - Promote exchanges between educational programs and researchers

What must receive attention in these reforms in departments and graduate schools is the point that they look at not only the diversification of learning opportunities but also more practical education through change in the educational content. This is especially true at graduate schools, where programs such as sanction to establish evening graduate schools have been prepared. Despite the fact that schools that meet the definition of a professional school in the U.S. have been registered in Japan as well, their academic orientation is in fact still deeply ingrained and there is still a vast difference in quality compared to the system in the United States. Now that the creation of “specialized graduate schools” has been sanctioned, this may possibly generate large future dividends, particularly in liberal arts-related courses where large differences in quality are conspicuous. Universities and graduate schools hinting at this type of reform may also be expected to play a central role in broadening vocational training function in Japan.

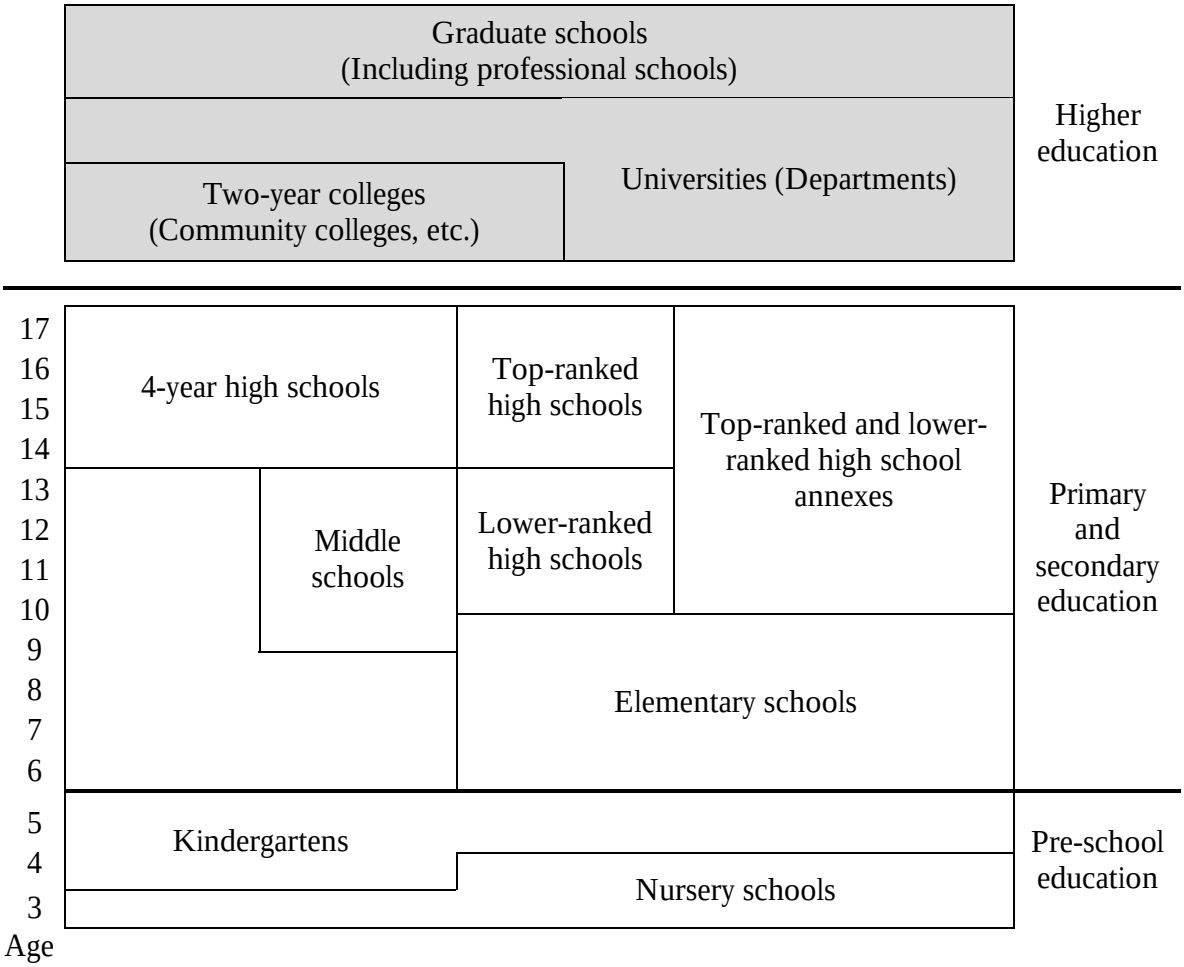
III. The Current State of Vocational Training in the United States

1. Educational System and Vocational Training Subjects in the U.S.

Figure 3-1 illustrates the educational system in the United States.

In the United States, local school systems (school districts) have the strongest rights with regard to educational administration. Because districts have established various systems and curricula independently, the educational system is greatly diversified, particularly at the primary and secondary education levels, as the diagram clearly shows. Higher education as well shows characteristics that at least until now have been absent in Japan. These include graduate schools that are substantially divided between those where learning focuses on theory or research, much like graduate schools in the past in Japan, and professional schools that provide practical courses whose aim is the cultivation of individuals with a high level of specialization, as well as the existence of community colleges with roots in their local community. Because these professional schools and community colleges have taken over a central role in providing vocational training in the U.S., they may be viewed as directly linked to the differences in the vocational training function between the U.S. and Japan.

Figure 3-1. Educational System in the U.S.



Source: the Development Bank of Japan from data from the National Center for Education Statistics

2. The Function of Professional Schools

The principal areas of study at professional schools include management science, law and medicine. Business schools as well as other institutions are included under this designation.

Business schools are institutions that specifically focus their primary curriculum on management, marketing or finance. Their aim is the acquisition of practical specialties and applicable skills in management fields through instruction based on the practical experience of the majority of the professors themselves, as well as through case studies, group discussions or business consulting. Although the doors of business schools cannot be said to be opened widely because of the high level of academic ability demanded or tuition costs, in general they make their contribution as the nucleus of high-level vocational training. Particularly at the highest ranked business schools shown in Table 3-1, the results from acquiring an MBA (Masters of Business Administration) are very high. Although the number of students able to go through such programs is restricted by cost or time, normally schools do not require students to have majored in the subjects or have experience in the field they plan to study at the graduate school as a condition to enter a program. It is perfectly acceptable if students have practical experience for a number of years in an unrelated field. In addition there are also business schools that enable students to take credits at night or through correspondence courses. Including these there are said to be approximately 900 business schools in the U.S. today.

Table 3-1. Top 10 U.S. Business School Ranking in Fiscal 1998

		Average annual salary, first year after receiving MBA (US dollars)
1	University of Pennsylvania (Wharton)	125,500
2	Northwestern University (Kellogg)	125,000
3	University of Chicago	120,000
4	University of Michigan	110,640
5	Harvard University	145,000
6	Columbia University	125,000
7	Duke University	109,000
8	Cornell University	115,000
9	Stanford University	138,000
10	Dartmouth University (Tuck)	127,000

Sources: Business Week and other sources.

3. The Function of Community Colleges

3.1. Historical Transformations and Current Conditions

Community colleges are an educational institution unique to the United States. Their history dates back to the founding of the first private college in 1862. The first publicly founded community college, Joliet Junior College, was not founded until nearly 40 years later in 1901, by the president of the University of Chicago. Many of the private colleges that opened during this first phase of their history, however, faced intense competition from the publicly founded community colleges that received support from their state governments. Inevitably, both the

number of schools and the number of students declined during the 1860s and 1870s. Since then publicly founded community colleges have formed the bulk of community colleges.

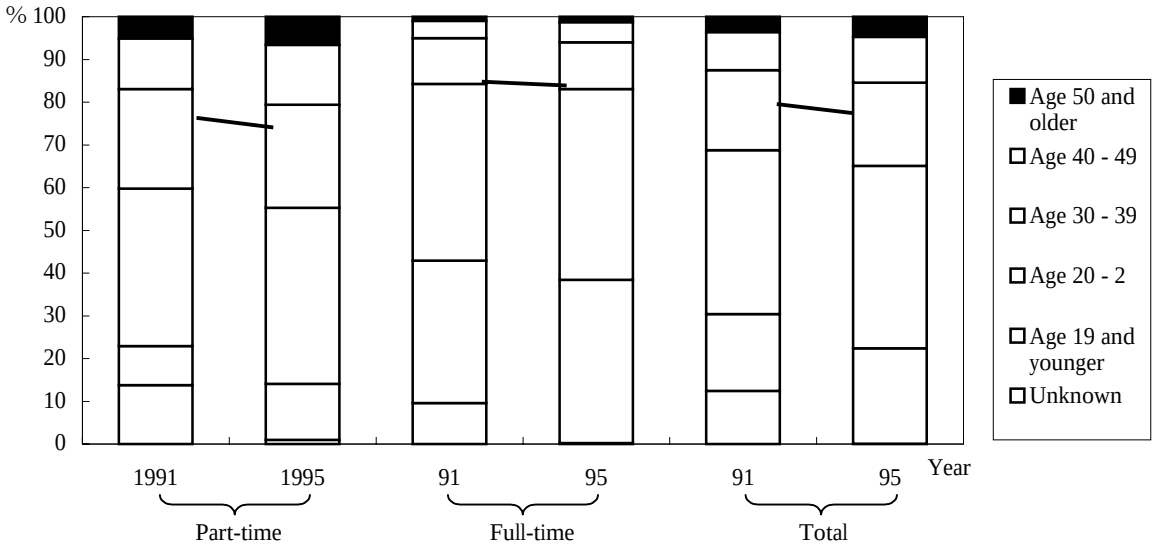
Initially the function of publicly founded community colleges was positioned as "a place to provide training in basic knowledge and thinking to high school graduates who wanted to go to a four-year university". Specifically, California was the first state to approve providing a two-year college education to high school graduates, in 1907. By 1917 a support system for these colleges had been created by the state government or local government administrations, and in 1921 independent school districts (community college districts) were created, which paved the way for closer cooperation with the communities where the colleges were located. With the California state law as a model, during the next 25-year period community colleges rooted in local communities were also established in states such as Texas, Mississippi, Missouri and Iowa, where they fulfilled the function of preparing student to move on to four-year universities.

As America moved deeper into the Great Depression, however, the need to provide relief measures for unemployed workers soon surfaced as a new and urgent local topic. During this period, community colleges themselves were searching for some means to deepen their close cooperation with their local communities, as a means to survive intense competition from other institutions of higher learning. The community colleges' function was thus enlarged to provide vocational training for unemployed individuals in a manner that met the needs of all parties. Since then, community college have changed and grown to meet the demands of the times and their local communities. Today's community colleges have diversified their functions to include "preparation for transfer to a four-year university", occupational training-related education such as "vocational training for working adults, including unemployed workers" and "company occupational training and business support", and functions such as "offering lifelong learning opportunities" to enhance the lives and broaden the interests of residents in the local community.

3.2. Characteristics

In the United States, the majority of two-year colleges are positioned as publicly founded community colleges. In 1996 the number of community colleges totaled 1,113 schools (949 publicly founded schools, 141 privately founded schools). In the fall of 1996 total student enrollment was approximately 5.5 million students, with part-time students making up about 60% of the enrollment. As shown in Figure 3-2 the age make-up of the students was also comparatively well diversified, especially among the part-time students, of whom approximately 20 percent were age 40 or older. When considered in terms of population, one can understand how widely the community colleges in the U.S. have come to be utilized. In Japan, for example, which has approximately half the population of the U.S., the total number of students at two-year colleges, vocational schools and various other kinds of schools in Fiscal 1998 was roughly 1.42 million.

Figure 3-2. Percentage of Students Enter a Community College in the U.S., by Age



Sources: American Association of Community Colleges
"National Profile of Community Colleges: Trends & Statistics 1997-1998"

The following characteristics are the most commonly shared among community colleges that have come to fulfill a function as a vocational training organization with close ties to the local community.

① No age or academic ability required as a condition for matriculation.
② The receive support, including financial assistance from their state government or local administration, keeping tuition fees low.
③ They cooperate closely with industry and effectively grasp the unique needs of their community.

It can be seen from these characteristics that community colleges have established themselves as places where student can acquire a practical, useful education, as well as being places that incidentally also fulfill a role as a "one-stop center" for the local community.

Certainly community colleges fill a role that is a world apart from that of professional schools in aspects such as curriculum. In addition, depending upon the location some colleges as well are burdened by problems such as tight state financing to support their administration or school safety concerns as the student population diversifies. But by the fact that they provide broad opportunities for a practical education while coping flexibly with the demands of the times, as the source of local level education and above all else as the bearer of vocational training they do in fact fulfill a critical function. Furthermore, as concern about a widening income differential deepens, there is a strong likelihood that government policies proposed by President Clinton that set great store on community colleges will be approved in the future. Expectations towards community college training in industry as well, beginning with firms like Microsoft, are also running high.

The United States has always had a society based on the premise that individuals must take personal responsibility for developing and honing their competitive abilities. A broad, adequate mechanism that can help satisfy this premise is indispensable. This is the reason that various educational bodies in the U.S. - including professional schools such as business schools and

community colleges - have clearly established positions and fulfill niche roles to build a comprehensive, diversified vocational training system.

3.3. Concrete Examples

In Illinois, the state where the first publicly founded community college in the U.S. was established, there are currently nearly 50 community colleges with student enrollment in courses for credit of approximately 680,000 students. In addition more than 250,000 people are monitoring courses on a non-credit basis. A Community College Board composed of members appointed by the state governor has jurisdiction for oversight of these colleges, and fulfilling roles such as approving the programs offered by each college, researching common issues, and coordinating the activities of all of the state's local community colleges.

At this point we will introduce the specific program contents of such colleges by focusing on College of DuPage in Illinois, which is the largest single campus community college in the United States.

◆ College of DuPage (COD)

COD is located approximately 50km to the west of Chicago, Illinois. Since being established in 1967 as a community college for Illinois School District #502, the school has given diplomas to more than 500,000 graduates. While the programs and services offered by the college are diverse, COD has earned high marks from companies particularly for its contributions to the local area through programs to increase occupations skills. Specifically, the college provides courses ranging from an IT Training program, in which Microsoft bestows a qualification as a Microsoft Certified Professional to all students completing the course, to training programs for police officers and firemen and women. The college has also established courses that make practical use of on-line or two-way transmission networks. At the same time, these evaluations of COD are reflected in the funding support received from the residents in the school district, private firms and the public sector, which allows the college to keep tuition and fees low. The school organization consists of slightly fewer than 1,600 instructors (including counselors), with a ratio of part-time to full-time instructors of about 5:1. In addition, approximately 800 individuals are employed as staff.

Looking at the student body, the college had enrolled approximately 34,000 individuals as of the fall of 1999, more than 70% of who were part-time. The student body is well diversified by both age and experience. The average student age, for example is 33 and individuals age 40 and older account for nearly 30% of the enrollment. Between 20 and 30 percent of new high school graduates in the school district are matriculated at the college, and more than 20 percent of COD's students have already earned a bachelor's degree or higher credentials. Many students also have work experience. Individuals also have diverse objectives for entering the college, including "earning an associate degree required for admission to a four-year university", "to receive vocational training in order to get a better job", and "pursue cultural enrichment after retirement". As a general trend, students are not overly concerned with earning credits but attend for as long as they need to receive the necessary occupational education they desire.

The following illustrates the principal educational programs offered by COD.

- Transfer Programs
  Programs for students who are thinking of entering a four-year university. Students can earn an associate degree in the humanities or natural sciences. Offers approximately 45 courses such as Accounting, Art, Botany, Business (Law), Computer Science, Economics, Engineering (Tech), Journalism, Languages, Management/Marketing, Physical Education, Pre-Medicine, Pre-Nursing, Therapy, and Speech.
- Occupational/Vocational Programs
  Programs for students who wish to improve or expand their occupational skills. Students can earn an associate degree or Certificate of Completion in applied science fields. Offers approximately 50 courses such as Accounting, Addictions Counseling, Certified Nursing Assistant/Patient Care, Computer Information Systems, Digital and Microprocessor Technology, Management, Marketing/Retailing, and Real Estate.
- Continuing Education
  A so-called lifelong learning program based on part-time course work for young students or older adults. In addition to programs such as computer training or foreign languages, also offers self-development programs through summer camps, seminars and other venues.

In addition to these programs, in 1979 COD established a Business and Professional Institute. Formed around close cooperation with industry, the Institute offers occupational training programs that are order-made for firms and industries, as well as provides business support. Using individuals with both university degree and practical experience in specialized fields to provide instruction as a foundation, the following types of programs are offered.

- Center for Corporate Training
  Offers a variety of training programs in areas such as computer technology or business skills.
  - Computer Training
    Computer training programs utilizing the latest compute software, with courses designed for beginners as well as individuals who are thoroughly versed in computers and software.
  - Manufacturing Extension Office
    Provides support in fields such as management, marketing and product quality improvement, for individuals working in small and medium-sized manufacturing firms.
  - Professional Development Training
    An occupational manpower development program covering topics such as building a team, problem solving, management innovation, and customer service.
  - Technical Training
    Technical training programs covering topics such as ISO, process management and hydraulics.
  - Workplace Literacy Training
    Offers personal improvement training programs such as English as a second language, reading ability and mathematics.

- Center For Work Force Development
  Offers support for firms facing identical kinds of problems, through seminars and research meetings. The Center has set up the International Trade Center, which offers consulting services for companies planning to export their products, and the Small Business Development Center, to support small and medium-size firms. The Center receives back-up assistance from the Illinois State Department of Commerce and the U.S. Small Business Administration.
- Center for Suburban Law Enforcement Academy
  Offers training programs for new law enforcement officials.
- Illinois Manufacturing Engineering Research and Training Coalition
  Organized by nine Illinois universities, five research organizations, seven manufacturing development centers and groups such as the community college system, the coalition works to create an environment in which individuals in small and medium-sized manufacturing firms can easily receive technical support.

◆ Other community colleges

The U.S. Department of Labor and the American Association of Community Colleges created a program to bestow Workforce Development Awards on community colleges for exemplary practices and services in different fields that meet the demands of the times. The following awards are cited as examples of award recipients in recent years.

- Stark State College of Technology (Ohio)
  Received the award in 1997 in the category "Dislocated Worker Services". The college's "Computer Numerical Control Machinist Technician Program" enables unemployed workers to learn special technologies through 18 weeks (640 hours) of training aimed at helping them find new employment. The college has achieved a job placement rate of 85% for individuals who complete the course.
- City College of San Francisco (California)
  Received the award in 1997 in the category "Company-oriented Occupational Training". In 1994 the college formed a partnership with the apparel industry and the U.S. Department of Labor called GARMENT 2000, which supports improvements in international competitiveness of small and medium-sized firms in the apparel industry. In 1996 more than 10,000 individuals participated in the program, which aims to improve the skills of workers employed in various departments of the manufacturing process.
- Southeastern Community College (North Carolina)
  Received the award in 1997 in the "One-Stop Career Center Services" category. The college's Job Link Career Center combines activity at all levels of the local community to provide career-related information to employers and employees.

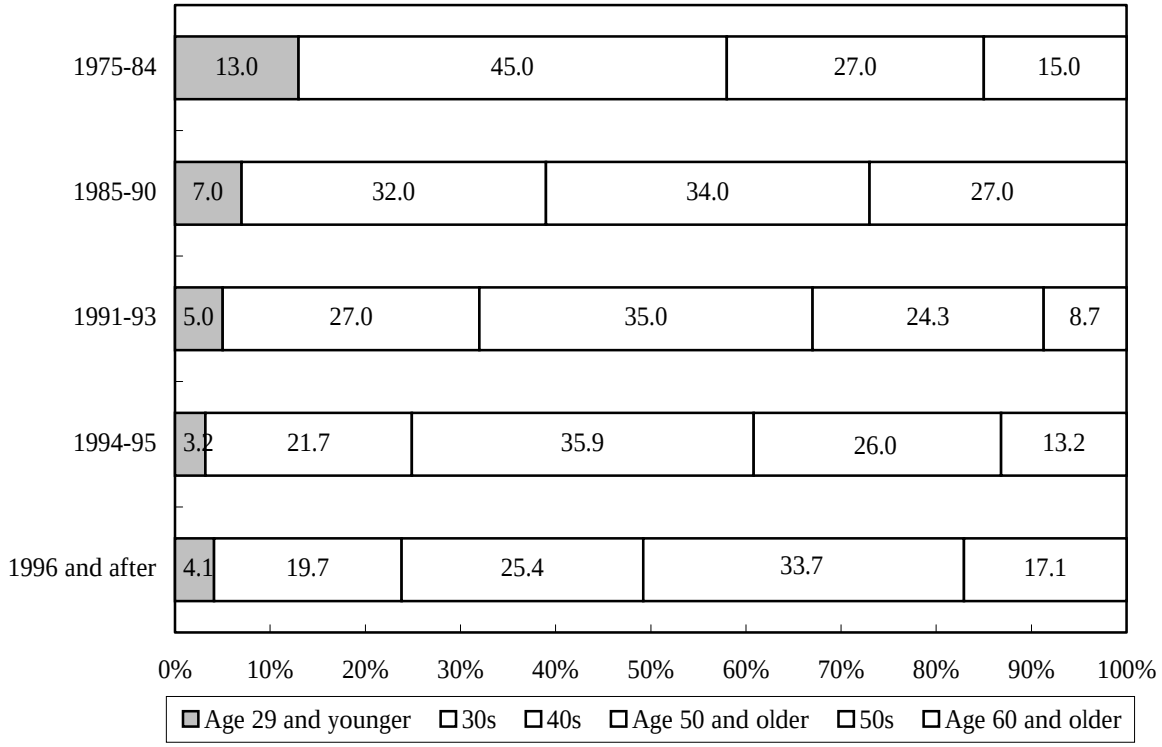
IV. One of the Future Directions for Vocational Training in Japan

1. Human Resources Training for Management-related Sectors

Based on the current situations in the U.S. and Japan, we would now like to consider one direction for vocational training functions in Japan for management-related sector human resource training, which are expected to grow in importance when providing for medium to long-term development-type functions for cultivating applied practical skills in specialized fields, particularly as discussed in Section 3 of Chapter II.

According to the *Survey of the Current State of Small and Medium Enterprise Start-up Activity* from Japan's Small and Medium Enterprise Agency, the age at which individuals start companies in Japan has shown a rising trend. Since 1996, individuals in their 50s have accounted for the largest percent at more than 30% of the total, as shown in Figure 4-1. When combined with the second largest group, which is individuals in their 40s, the percentage rises to nearly 60%. Against a backdrop that spans business management rationalization activities centered on large firms, the number of instances of middle-aged individuals who decide to apply the experience and connections they've cultivated in opportunities to start their own companies for self-actualization and to demonstrate their skills is expected to increase.

Figure 4-1. Ages at which Individuals Started a Company

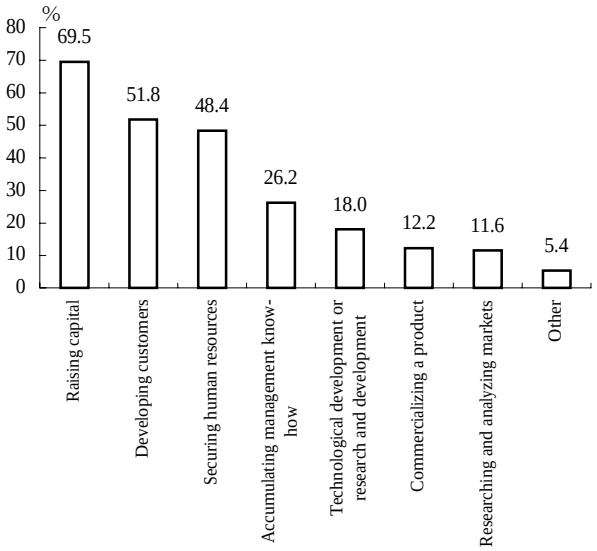


Source: Small and Medium Enterprise Agency, *Survey of the Current State of Small and Medium Enterprise Start-up Activity*, December 1998 and other sources

But now take at look at Figure 4-2. Between 20% and 30% of the businesses surveyed cited "accumulation of management know-how" as an obstacle when starting a company. Moreover, although "raising capital" was given as the greatest obstacle, more than 40% of supporters such

as venture capitalists cited “uncertainty over management ability” as the reason for the decline in the ratio of businesses opened, as shown Figure 4-3. Therefore the lack of management know-how can be considered to also have an influence on an individual’s ability to raise capital as well.

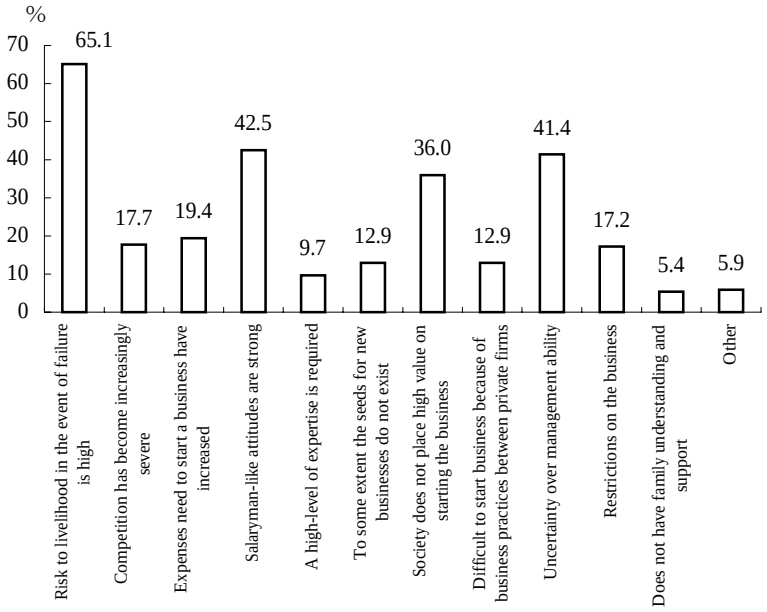
Figure 4-2. Obstacles when Starting a Company



Note: rcentages total more than 100% because respondents could give multiple answers.

Source: Small and Medium Enterprise Agency, Survey of the Current State of Small and Medium Enterprise Start-up Activity, December 1998.

Figure 4-3. Reasons for the Decline in the Rate of Business Start-ups (From standpoint of parties such as venture capitalists who provide support)



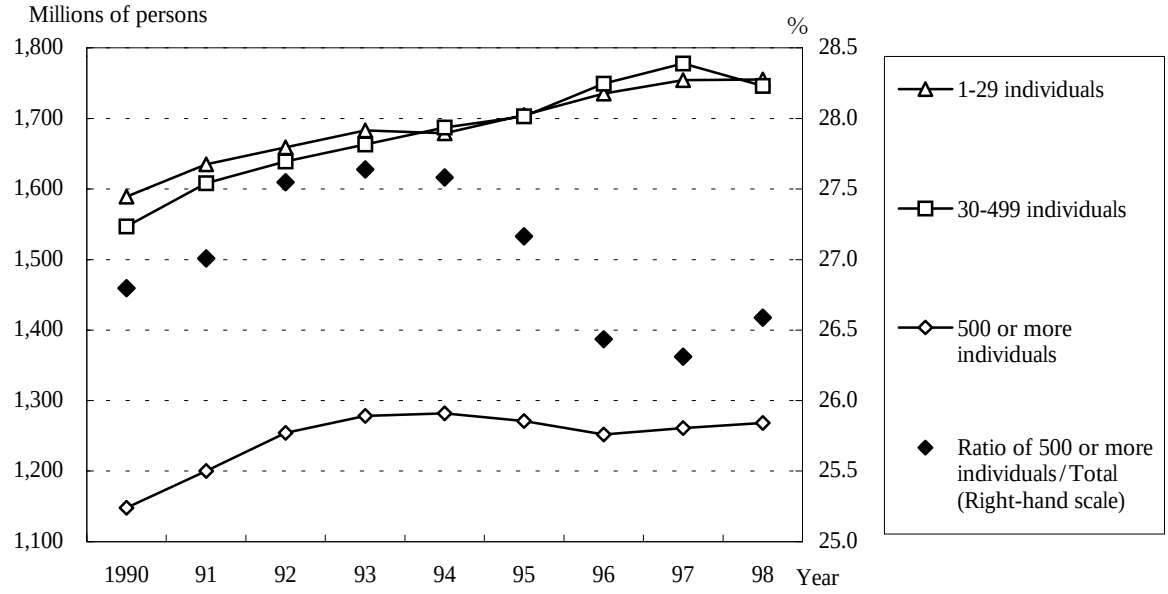
Note: Percentages total more than 100% because respondents could give multiple answers.

Source: Small and Medium Enterprise Agency, Survey of the Current State of Small and Medium Enterprise Start-up Activity, other sources.

Figure 4-4 shows that in Japan in the latter half of the 1990s, as a trend the number of

individuals employed at firms with 500 or more employees peaked while the number of individuals employed at firms with less than 500 employees increased. In other words, the impact of small and medium-scale firms on Japan's economy as a whole has grown stronger. Small and medium-sized firms, however, are also characterized by a high business failure rate compared to large companies, and many observers suggest "immaturity of management know-how" as the primary reason.

Figure 4-4. Change in the Number of Employees, by Level of Employees per Firm



Source: Management and Coordination Agency, *Labor Force Survey (1998)*

Revitalization of new business start-up activity that crosses generational lines can be expected in the future as the environment for new business start-ups gradually becomes more favorable. According to the Management and Coordination Agency's *Employment Structure Basic Survey*, the number of individuals who wanted to start a business in 1997 totaled approximately 1,240,000, which has remained at a high level centered on individuals from their mid-20s to their mid-30s. In existing firms as well, where full-fledged management reviews or rationalization is moving ahead at large firms and the position of small and medium-sized firms as potential employers increases, the demand for human resources with superior talent in various management areas is anticipated to grow. Taking a lesson from these new tides, at the very least the demand for applied, practical ability that can collectively handle fields organized around a specialized areas of business management such as accounting or marketing, will be in demand. It should be possible to seize upon these areas as important fields for vocational training.

In addition to this, the importance of human resources training has been acknowledged even in the IT sector, where so much attention has been focused in recent years. Together with the progress in the application of IT to company management, in broad areas such as systems or network development and protection or user support the shortage of IT-related technicians with the needed expertise has become acute. In the human resources placement market as well, in some cases fees for the dispatch of IT-related technicians reach 4,000-5,000 yen per hour. In this

situation, efforts aimed at cultivation of IT-related technicians are picking up steam. Job placement firms themselves have provided training for technicians in recent years, and the Ministry of Labor is hammering out policies to produce more human resources in the IT sector, using institutions such as private technical schools and various other kinds of schools. Because the speed of innovations in IT is also rapid, the importance of vocational training in this sector is expected to grow even further in the future.

2. Specific Approaches at Universities and other Educational Institutions

Even in Japan, already several universities, either sensitive from the start to these kinds of vocational training needs or else pushed by the tide of university innovation and reform, have been taking a constructive approach and coming to grips with practical education in areas such as management. The Keio Business School, which established a graduate school for management research in 1978, has been a pioneer in this effort, developing a program in collaboration with the Harvard Business School that puts emphasis on practical training using the case study method. Table 4-1 provides a number of examples of graduate schools set up in recent years that focus on practical training aimed mainly at working adults.

Table 4-1. "University" Efforts Aimed at Practical Training such as Management

Hitotsubashi University	- Began offering a lecture course on financial strategy in April 2000 as the first course in its specialized graduate school. - Enrollment limited to 40 individuals; as a general rule, applicants must have at least 2 years practical experience at a firm or government office to be admitted. - Marketing its teacher teams, formed of individuals with first-line practical experience, and the curriculum. - Plans to also begin lecture courses on international management strategy in October 2000. - Enrollment of 20 Japanese and foreign students with employment experience. - Large U.S. securities firms provide complete cooperation such as dispatching individuals for teaching positions; all lectures are conducted in English.
Hosei University	- Opened a one-year graduate program (Masters) in April 2000 specialized in training for information technology (IT) specialists with proven capability - Although program targets working adults and tuition is nearly ¥3.0 million, number of applicants well in excess of the approximately 40 who are accepted. - In addition to lecture by business individuals in the IT sector or venture business managers, also plans internship at venture firms.
Nihon University	- Opened a global business major graduate program in September 1999. - All students are working adults, with the average age above 40 (individuals from financial institutions, venture business managers, etc.). - In January 2000, 31 students from the first class established a joint venture consulting firm for small and medium-size businesses. - Business received is converted to a data base and used as case study educational materials.
Tama University	- Opened graduate school offering a management information studies major in April 1993 (Masters courses only. Later also established doctoral level courses in April 1995). - All students are company employees participating on their own (mostly individuals at the manager and section chief-level); classes and lectures are offered on Saturdays and weekday evenings. - Most instructors have practical experience in companies or government offices, and are individuals with career experience related to their responsible positions.

Source: Created from newspaper information and other sources

In addition, the management academy that was given birth from the Productivity Center for

Socio-Economic Development was established in 1965 to provide high-level practical training in management fields, centered on cooperation spanning the boundaries between academia and industries and merits attention. This academy, positioned as the first substantial management graduate school in Japan, has promoted the concept of "cultivation of experts to form the core of business management" since its inception, and aims at practical, systematic education through instruction from professors representing academia and exchanges among participants from different business backgrounds. In addition to the fact that the range of participants is extremely restricted because individual applicants are not accepted and firms select the majority of participants from within their ranks, the academy is also faced with the decline in the number of participating firms as Japan's economy has deteriorated.

The background for many of these kinds of efforts geared at vocational training is a need for schools to set themselves apart or the size of the demand from private firms, especially in the Tokyo metropolitan area. Besides these, however, there are also distinctive schools such as Otaru University of Commerce, which offers a unique, thorough educational policy based on the strong independent streak of its personnel, or Kochi University of Technology, which was established with the clear objective of promoting new business formation and industrial training in its local area.

◆ Otaru University of Commerce

The only national university of commerce in Japan was established in 1910 as the Otaru Higher Commercial School. Utilizing the leadership of the school's president and the fiercely independent nature of its management system, the school is thoroughly imbued with a basic policy of "fostering top-ranking human resources through practical education in small classes". The faculties, graduate school and Center for Business Creation continually fulfill their respective functions while serving diverse educational needs. In 1997 the university also established a satellite school in Sapporo with the objective of implementing a full program of night courses for working adults in Sapporo, where particularly large demand is anticipated.

◆ Kochi University of Technology

Opened in April 1997 under the direction of the prefecture governor, with the goal of regional promotion through engineering-related industrial training. With the prefecture's Alliance Center in the role of coordinator, business and academia cooperation is aggressively promoted and this three-way team is addressing training needs for local industries. A graduate school (Engineering research program) was established in April 1999 and heavily influenced at that time by the university president's wish to "promote venture businesses by giving engineers the opportunity to acquire business start-up (management) know-how". Through a combination of the faculties and directly cooperating engineering-related courses, the university also established Japan's first formal "business start-up program". Many of the professors and teaching staff have practical management experience, and lectures are offered on Saturdays and Sundays for the benefit of working adults. Many students are accepted into the business start-up program, including individuals participating on their own and graduates of the arts. The program manifests the size of vocational training needs in the management fields.

3. A Vocational Training System that Utilizes Universities as a "Place"

Until now, universities in Japan have placed their emphasis on theory or research, even at the graduate school level. We must acknowledge the fact that they have to be viewed as having a standardized style. In contrast, the development of vocational training with a practical focus as introduced in the previous section may be called epoch-making. With regard to new efforts in recent years in particular, however, these are still just getting off the ground and their first level of full-scale operations and results are still being awaited.

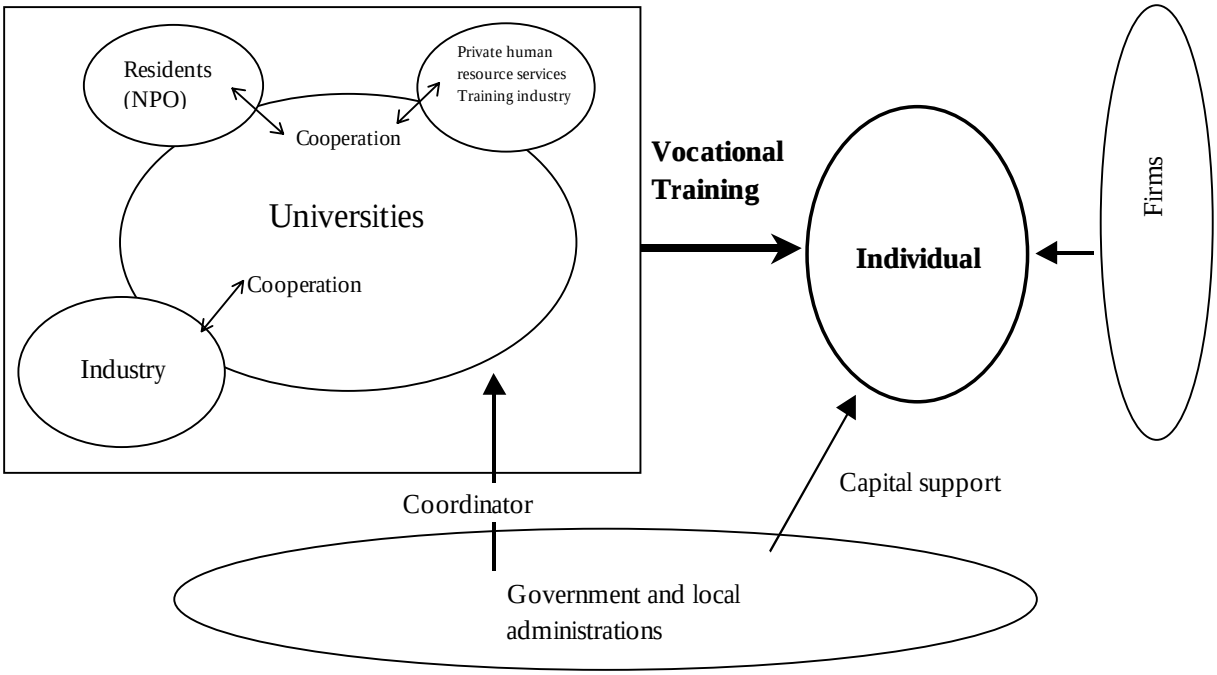
In the future, moreover, the university efforts towards vocational training will preferably be broadened from the high-grade graduate schools to levels that are closer to the individuals who need them. As with business schools in the U.S., vocational training at the graduate school level has extremely effective aspects, but the number of people who can benefit is extremely limited because of the level of ability demanded and high cost. In contrast, the social demand for a function such as that performed by community colleges in the United States - which can provide very broad vocational training opportunities without age or academic ability as entrance requirements, while keeping tuition fees low and time restrictions minimal - is believed to be substantial.

In Japan, however, an educational body that can be considered to fill the role of a community college does not exist. While universities may also be said in some ways to be taking a new approach, in general they are maintaining education that is centered on theory and research. Radically altering this kind of existing university management policy in the short term will probably be exceedingly difficult. Having said that, however, because of actual circumstances in which

- The environment (classrooms, etc.) is in place at universities for people to gather and receive an education.
- Despite the difference between theory and practice, from a medium to long-term point of view the concept of providing a systematic education is well grounded at universities.
- The winds of change are blowing for university reform, and at some universities (graduate schools) the effort towards vocational training is already in full swing.
- The application of the precedent of business and academia cooperation in science and technology-related areas to the arts-related programs as well can cover deficiencies in vocational training know-how.
- The backdrop of Japan's declining birthrate and aging population gives universities themselves an incentive to develop new activities.

When these are taken into consideration, making Japan's universities the central axis when considering vocational training may be most efficient. As a future direction, therefore, we believe an effective vocational training system will involve universities as a "place" where the useful, accumulated know-how continues to be fully utilized. Any deficiencies in human resources or functions can be covered through cooperation with partners such as industry, private human resource service firms or residents (NPO) (what might be called "collaboration between industry and academia also including arts and sciences"). This concept is shown in Figure 4-5.

Figure 4-5. A Direction for the Future Vocational Training System



Source: The Development Bank of Japan

4. A Final Word - Support Being Asked of the Public Sector and Firms –

As Japan considers the expansion of its vocational training functions, another indispensable element is the broad support from the public sector and private firms that will be needed to provide for the training environment.

First, the role of coordinator can best be served by local government administrations when creating the business and university cooperation mentioned earlier, or building a vocational training system based on this cooperation. Up until now business-academic cooperation has primarily been promoted in science and engineering-related fields, such as business-university collaboration on technology development or for research. In the future, this approach should be also promoted in arts-related fields with an eye to realizing more practical training. Specifically this should take a form where individuals from the industrial sector who have both practical management experience and teaching abilities are vigorously utilized at training locations, in return for which firms actively employ the individuals who are trained and already possess real competitive management skills. To secure these kinds of appropriate human resources or prepare networks, the support of local government administrations is absolutely essential.

The government will be expected particularly to provide support for easing the financial burden on individuals that is required for personal development. As a concrete policy measure, the “Education and Training Benefit System introduced by the Ministry of Labor in December 1998 with the objective of promoting employment stability and reemployment has attracted attention and is already fulfilling a specified role as an incentive for personal development. However, despite the fact that financial resources are provided by a employment insurance system that has fallen on financial difficulties, some also point out that criterion for specifying courses and students’ objectives are vague, and investigations will be required in order to increase the effectiveness of support. Moreover, on the point of contributing to a reduction of the

training costs, both direct and indirect support aimed at expanding vocational training opportunities for individuals - including efforts such as promotion of NPO that can form an effective core for training programs - is desirable.

Support in the form of more appropriate recognition for and evaluation of personal development for employees is vigorously required at firms. That is, when an employee wishes to pursue self-development to improve his or her capabilities, firms must make the opportunity available, at least in terms of time away from work, if the training will be tied to the firm's profitability from a multi-faceted and medium to long-term point of view. Moreover, when train actually does result in an improvement to an employee's skills that can contribute in some way to the firm, that result should suitably be evaluated and reflected in the employee's wages, and mechanisms that will act to increase employees' training incentives should be created.

The efforts or support of various individuals such as those indicated above can be expected to trigger a desire for broadening of vocational training functions and improvement of individual skills in Japan. This in turn can also be expected to be connected to the revitalization of middle-aged workers in future labor markets.

[Kyoko Takahashi (Amano)]

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