Research Report No. 162

September 2003

Higher Education and Work: Comparison Between Japan and the Netherlands

(Summary)

The Japan Institute of Labour

Contributing Authors

Keiichi Yoshimoto	Professor, Kyushu University	Chap.1,2 and 5
Rolf van der Velden	Maastricht University	Chap.1,4 and 10
Yuki Inenaga	Lecturer, Kagawa University	Chap.1, 8
Jim Allen	Maastricht University	Chap.1, 9
Egbert de Weert	University of Twente	Chap. 2
Naoyuki Ogata	Associate Professor, Hiroshima University	Chap.2, 3
Peet van de Loo	Netherlands Ministry of Transport	Chap.4
Christoph Meng	Maastricht University	Chap.4,6 and 10
Hiroshi Yamada	Graduate School, Kyushu University	Chap.5
Paul Ghijsen	Maastricht University	Chap.6
Reiko Kosugi	Assistant Research Director, The Japan Institute of Labour	Chap.7
Sendy Farag	Utrecht University	Chap.9
Christophe Boone	Antwerp University	Chap.10

(The titles of authors and the names of organizations are those at the time of writing.)

1. Introduction

This research aims to elucidate the realities of higher education systems and labor markets in Japan and the Netherlands and issues especially in relation to governmental policies that both countries are facing, based on the results of a survey on the career selection and development of those who completed higher education in the two countries. As we all know, Japan and the Netherlands share a history of friendship that spans more than 400 years. The cultures, educational systems, and labor market structures of the two countries, however, have not so much influenced each other as developed distinctively and as a result, there are major and seemingly essential differences. Therefore, the process of learning from each other's societies through the exchanges or clashes of cultures probably had a major impact only for a very limited period and in very limited fields.

What the Dutch scholars are trying to learn from Japan will be explicitly revealed in a separate English report that the Dutch editor is currently preparing. The Japanese side, on the other hand, has shown interest in the policies related to the Dutch model of employment and work sharing as well as in the Netherlands' rapid reform of higher education through such measures as introduction of university evaluation.

The approach that the Japanese editor proposed, however, is not only to focus on individual and noticeable policy trends and gaining fragments of information on limited areas, but to comprehensively understand the unique features of the system that is behind such policy trends.

The Dutch scholars may be interested in Japan's economic system, which, unlike the Anglo-Saxon market model, is marked by a strong central control of the government and in the connection between the elites in business community and in the government, in other words, a system of political and economic cooperation. In terms of human resources development, Japan's higher education system has academic leaning and has not necessarily worked together with the business community in training business people. Thus, the systemization and organization of the labor market has advanced only with respect to transitional process of new graduates to employment. Through such advancement, namely the periodic collective employment by firms, graduating students smoothly transfer into the business world. It should be noted here that the university-industry cooperation does not necessarily aim to match a student's area of study with occupational requirements of knowledge, skills, and competence. Instead, such cooperation developed in the form of a division of roles between the academic and industrial worlds.

On the other hand, of particular interest to Japanese scholars with respect to the Dutch higher education is less to do with the university education but more with the expansion and development of the higher professional education (HBO). The Netherlands can be considered unique in that the supply of business people receiving specialized training was sought not from the academism of the university education (WO) but from the HBO. With the overwhelming influence of the neighboring Germany, Dutch universities do provide occupational experience and other instruction in specialized occupational training, but this type of education is much more pronounced in the HBO. There are also some interesting features with the Dutch business community. The so-called Polder Model, a model of joint management of the economy by the Dutch business community and political elite, is based on agreement between worker representatives and employers, and Dutch unions have agreed to keep wages low on the condition of maintenance of the employment level and commitment to invest in professional training. As Japan also takes the approach of labor-capital reconciliation, the two countries may be able to find commonalities in this respect.

The cultural orientation of the two countries also has direct influence on how a business organization is formed and how work is allocated. For example, the traditional Confucian orientation that is at the heart of the Japanese society asks for strong self-discipline and general respect for one's elders and authority, which is also reflected on seniority-based treatment in Japanese firms. As Koike points out, it has led to "slow promotion." Compared with the Netherlands, other European countries, and the U.S., the Japanese society places more emphasis on group than on individualistic values, and this may have a peculiar effect on the career development of those who have completed higher education. On the other hand, the Netherlands are advancing social and economic modernization as well as breaking away from the traditional, fixed division of labor based on gender. It can also be observed that the development of work sharing as a measure against unemployment has laid a greater emphasis on egalitarian orientation as well as on individualistic values and private life.

How have these educational and social differences in Japan and the Netherlands impacted the education and career development of those completing higher education in the two countries? It should not be overlooked that even though the two countries have taken different paths of development, they are under the same pressures of the times. In the context of globalization, common global pressures that call for reform are gaining strength in both higher education that is becoming more massified and universalized and in the occupational world of the knowledge-based economy that newly graduating students are entering.

In light of the above, our approach will not be one of explaining the peculiarities of specific systems, but one of exploring how those completing higher education in the two countries are dealing with the above issues in their career selection and development. 1) How are the different higher education systems in the two countries responding to the common requirements of the times? 2) How are those completing higher education in the two countries developing occupational competence they are required in the distinctly heterogeneous labor markets of the two countries? 3) More youths in Japan and the Netherlands are apparently opting for non-regular employment. In view of the differences in labor market systems in the two countries, how does the situation in two countries differ substantially? What career prospects do such youths have? 4) A comparison of higher education will require not only factual evaluation of distinctive professional careers in the two countries, but also comparison in a broader social context of the behavior and thinking of those completing higher education with respect to public activities of their professional careers as well as their private life, which gives a distinguishing color to the public activities. In this respect, it is possible to ask how group values and individualistic values mentioned above relate to professional careers. In this report, we look for answers to these questions using data obtained from surveys in Japan and the Netherlands.

2. Data

For the purpose of our international comparative study, we need high-quality data that make detailed comparison of the two countries possible. For this report, we used data obtained from surveys on those who completed higher education (those who has obtained internationally recognized first degree) in 11 European countries and Japan. The surveys were coordinated by Professor Ulrich Teichler of the University of Kassel in Germany and conducted from 1998 to 2000.

The surveys (hereafter called the "CHEERS Project") were conducted in 12 countries, including nine EU countries (Italy, Spain, France, Austria, Germany, the Netherlands, the United Kingdom, Finland and Sweden), Norway from EFTA, Czech Republic from Eastern Europe, and Japan from outside Europe. In nine countries (Italy, Spain, France, Austria, Germany, the Netherlands, the United Kingdom, Finland and Norway), the surveys were funded by the EU's socioeconomic research program. The surveys, conducted under the same format, were self-financed in three other European countries. In Japan, the Laboratory for the Sociology of Educational Organization of Kyushu

University surveyed the older cohort, while the Japan Institute of Labour (JIL) studied the younger cohort.

The surveys were carried out from 1998 to 1999. Investigation on the younger cohort (those who had obtained their degree from 1994 to 1995) was made in all 12 countries. Investigation on the older cohort was made in the Netherlands and Japan. In the Netherlands, those who had obtained their degrees from 1990 to 1991 (single year) were surveyed; while in Japan, those who were conferred their degree from 1987 to 1990 (three years) were examined. In other words, the younger cohort comprised of those who had been graduated for three to four years, and the older cohort, those who had been graduated for seven to ten years. While the specific sampling methods differed from country to country, it was agreed that a national sample of more than 3,000 should be collected in each country. The response rates in the Netherlands and Japan are shown on Table 1-1.

Table 1-1: Respondents' attributes

	The Netherlands		Japan	
	90-91	94-95	87-90	94-95
Valid response	2,723	3,087	2,585	3,421
Response rate (%)	45.4	47.0	31.2	30.0
Sex (%)				
Women	52.0	55.8	40.7	47.1
Men	48.0	44.2	59.3	52.9
Institution type (%)				
Higher professional education (HBO)	64.1	60.6	-	-
University	35.9	39.4	100.0	100.0

(Excluding those who did not respond)

The respondents' basic attributes are shown on Table 1-1. In the Netherlands, the percentage of HBO graduates among all graduates of higher education institutions was 72 percent and 66 percent in 1985 and 1990, respectively. Therefore, the population parameter is fairly represented by the HBO respondents, who make up slightly less percentage. With respect to sex, however, the percentage of women in both countries is slightly higher than the population parameter of the two countries.

A combination of two comparable data of the two countries allows us to study in detail the transfer from higher education to professional life as well as career development of those completing higher education.

Subject and theme

The current survey covers the following seven objectives:

- Gain a deeper understanding on the current issues involving higher education and work,
- Describe the social background and educational career of those completing higher education,
- Explain the trends of employment and career of those completing higher education on European and international dimensions,
- Trace early careers,
- Explore the impact of higher education,
- Develop theories and methodologies related to the theme, and
- Conduct preparatory research on a database for a regular follow-up study.

Grounded upon the wide range of objectives mentioned above, general questions were asked on the following themes:

- Variables on social background and early education (up to secondary education)
- Higher-education participation and environment for study
- Study process and behavior
- Academic achievement
- Job search and process of transfer from higher education to professional career
- Employment at the time of survey and before
- Regional and international migration
- Requirements for job performance and usefulness of academic qualifications
- Occupational orientation and job satisfaction
- Continued education and training
- Prospect for career development

3. Structure of the main report and related indicators

The main report is comprised of four sections. A Japanese and Dutch research team examined each country's system and conducted data analyses at workshops that were held both in the Netherlands and Japan. Based on this study, each member contributed to writing respective chapters of the report. Therefore, while the authors of the chapters below approached the same research themes using the same data, each chapter was written by different authors at their own responsibility. It should be noted

that in some cases, the analyses and interpretations of different authors may not be mutually consistent, requiring further examination and discussion.

Section I, is an introduction to reading the rest of the report. In Chapter 2 (de Weert, Ogata and Yoshimoto), a comparison of the two countries is made with respect to the trends of policies on transfer from higher education to professional career after the 1990s.

In Section II, analyses are made on the experience of higher education of those who completed higher education in the two countries. The related indicators for Section II are described below.

With respect to qualification for receiving higher education, an overwhelming majority of Japanese students obtain the qualification in the general secondary education sector (general senior high school course). On the other hand, secondary education in the Netherlands is divided into the general secondary education sector and the vocational secondary education sector. More than half of students going to HBO receive the qualification through secondary vocational education (MBO) and junior general secondary education (MAVO). Slightly less than 90 percent of students going to WO receive the qualification through senior general secondary education (HAVO) and pre-university education (VWO)

With regard to the age of entrance, the years required for graduation, and the years of enrollment, the prescribed years of enrollment in higher education are four years in both the Netherlands and Japan. In the Netherlands, however, students, especially university students, are enrolled for over five years on average. Whereas the average age of entrance differs only by a year in the two countries with 19 in Japan and 20 in the Netherlands, the age of graduation is 23 in Japan and 25 to 27 in the Netherlands. The standard deviation of the age of entrance and graduation is higher in the Netherlands, which shows that students with a wider range of age are studying in the Dutch higher education.

Table 1-2: Indicators related to respondents' experience of higher education

	NL 90-91		NL 94-95		JP 87-90	JP 94-95
	HBO	WO	HBO	WO		
Qualification for higher education (%)						
General secondary education	33.4	87.8	30.9	84.8	95.3	95.5
Other secondary education	59.1	10.8	66.3	14.3	2.6	2.6
Others (high school equivalency exam, etc.)	7.5	1.4	2.8	1.0	2.1	1.9
Age of entrance (age)						
Average age	23.4	20.9	20.9	20.7	19.2	19.3
Standard deviation	*7.03*	*4.68*	*4.48*	*4.26*	*1.56*	*1.54*
Age of graduation (age)						
Average age	27.4	26.5	25.2	26.3	23.3	23.4
Standard deviation	*6.56*	*4.30*	*4.52*	*4.15*	*1.60*	*1.53*
Years of enrollment (year)						
Average	3.9	5.4	4.1	5.4	4.0	4.0
Standard deviation	*1.33*	*1.64*	*0.96*	*1.70*	*0.67*	*0.61*

(Excluding those who did not respond)

Note 1: Description of categories under "Qualification for higher education" is as follows:
General secondary education: [NL] General secondary education [JP] general senior high school course and science and mathematics course
Other secondary education: [NL] Vocational secondary education [JP] technical college

Noting these differences, analyses are made from three different angles. In Chapter 3 (Ogata), the relation between competencies acquired through university education and competencies required at workplace is examined. Using various competency development models, the author analyzes competency development in higher education, the impact of university education on competency development, competencies required in workplaces, and a gap between competencies obtained at universities and those required at workplaces. While there are differences in the competencies required in the respective labor markets of the two countries, the author focuses instead on the common processes. In particular, attributes such as personality and attitude are emphasized when new recruits are employed, but as one develops his or her career, the importance of abilities that were not valued at the time of graduation increases. In this respect, the author sees a possibility of the contribution of university education.

In Chapter 4 (van der Velden, de Loo, and Meng), the relation between experience of higher education and income after graduation in Japan and the Netherlands is analyzed. Experience of higher education that influences incomes is broken down into three elements of difference in the screening process, difference in the accumulated competence, and difference in the social network of particular schools, to elucidate how much impact these elements have on one's income after graduation. The authors point

out that university ranking in Japan has strong impact on professional career because of the difference in entrance exams and social networks that each institute has. In the Netherlands, on the other hand, while there are institutional differences between the academic oriented universities and higher professional education of HBO, the higher education system is relatively standardized and there is no screening in most courses. The differences within the Dutch university sector and within the HBO sector are smaller compared with the differences within the Japanese university sector. There is nonetheless a growing interest in the Netherlands in recent years on differences in the quality of educational institutions. The differences, however, are not so much related to screening at the time of entrance, but related to the quality of the curricula, faculty members, and environment for study.

The same theme is treated by Japanese researchers in Chapter 5 (Yoshimoto and Yamada). By focusing particularly on work experience that relates to the long-term effect of the usability of knowledge acquired at universities on professional life, the authors examined the relevance of transferring from higher education to professional life, while carefully considering the commonalities and differences in Japan and the Netherlands. They looked at "vertical relevance" (relation between educational background and career) and "horizontal relevance" (relation between field of specialization and occupation), and measured the "screening effect," "educational effect," and "career effect" of both types of relevance. They pointed out that firstly there was a positive "delaying effect" in Japan. Secondly, a screening effect could be recognized in both countries. Lastly, they mentioned the importance of academic and vocational mission of higher education institutions in the two countries with respect to the educational effect. They discussed the issue of bridging WO and HBO in the Netherlands and the issue of "mid-level universities" in Japan, which have lost a sense of direction under a shadow of conflict. In addition, they pointed out that the Japanese society would need to address the issue of the work experience of students in the form of part-time jobs.

In Section III, the careers of those who completed or dropped out of higher education are examined. First, we look at some of the indicators related to professional careers.

Table 1-3: The current status of respondents (activities)

		The Netherlands				Japan			
		90-91		94-95		87-90		94-95	
		Men	Women	Men	Women	Men	Women	Men	Women
Employed	Full-time regular employment	69.0	36.3	67.7	48.7	82.2	46.2	76.1	59.6
	Part-time regular employment	8.3	33.1	3.3	16.6	3.1	2.9	2.7	2.3
	Full-time temporary employment	5.4	5.6	15.4	14.8	0.5	2.2	2.9	6.6
	Part-time temporary employment	1.4	4.1	2.0	6.5	0.4	2.3	0.9	4.0
	Other employment	6.7	5.6	2.5	3.5	6.7	6.4	6.8	8.8
	Self-employed	6.8	5.8	6.5	3.7	4.7	3.8	1.5	2.2
Unemployed and looking for job		1.4	2.6	1.4	2.0	1.7	2.6	3.5	3.9
Receiving vocational training		0.8	2.2	1.2	1.4	0.2	0.3	0.6	1.1
Enrolled in graduate school or other advanced schools						0.5	0.7	5.0	3.9
Housekeeping and/or raising children		0.1	4.8	0.1	2.8	0.1	32.7	0.1	7.6
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N		*1,245*	*1,331*	*1,328*	*1,623*	*1,499*	*1,014*	*1,789*	*1,601*

(Excluding those who did not respond)

Note: Education and training were not broken down in the Dutch survey

On the current status of activities, slightly less than 70 percent of Dutch men and about 80 percent of Japanese men are employed as full-time regular employees. The percentage of women with full-time jobs is around 45 percent for women in the older cohort and 60 percent in the younger cohort. Whereas in the Netherlands, this is compensated by women who work part-time or as temporary workers, an overwhelming number of Japanese women in the older cohort are instead occupied in housekeeping and child-rearing. In Japan, many men and women in the younger cohort advance to graduate schools and other advanced schools. This is because the parameter in Japan is those who have obtained a bachelor's degree.

Table 1-4: The current status of respondents (occupation)

	The Netherlands				Japan			
	90-91		94-95		87-90		94-95	
	Men	Women	Men	Women	Men	Women	Men	Women
Percentage of persons with a job	97.7	90.4	97.4	93.8	97.5	63.7	90.8	83.6
Occupation								
Managerial occupation	12.7	7.6	11.8	6.0	10.2	2.0	6.3	2.5
Professional occupation: Medical specialist	6.0	11.7	4.3	9.8	5.3	10.1	4.8	9.2
Professional occupation: Educational specialist	13.7	16.0	5.8	14.2	12.4	27.1	7.5	17.1
Professional occupation: Engineering and natural	23.7	9.7	32.0	10.5	25.7	14.0	22.1	9.6
Professional occupation: Legal, financial, and social	17.3	26.7	13.0	24.9	6.6	4.7	5.7	4.6
Professional occupation: Art and other specialist	5.9	5.8	3.8	4.4	0.2	0.5	0.3	1.2
Subprofessional occupation	16.4	16.3	23.5	20.4	2.6	2.8	3.8	3.4
Clerical occupation	2.5	3.9	3.7	7.3	18.9	26.9	22.9	39.3
Services and sales	2.5	3.9	3.7	7.3	18.9	26.9	22.9	39.3
Other occupation	0.6	1.7	0.8	2.3	12.6	6.0	21.2	11.3
Annual income (¥ 10K)	1.2	0.6	1.3	0.1	5.5	6.0	5.4	1.8
Average	450.7	332.5	376.3	284.9	582.5	429.2	390.3	307.3
Standard deviation	415.6	242.0	372.3	200.5	237.6	217.1	233.6	140.7

(Excluding those who did not respond)

Note: Annual income was calculated based on the exchange rate at the time of survey (1EUR = 122.7JPY).

Next, we look at the occupation and annual income of those completing higher education. With respect to occupation, whereas a high percentage of those in Japan are in clerical jobs and services and sales, a high percentage of those in the Netherlands are in professional and subprofessional occupations. Moreover, a comparison of those in professional occupations in the two countries shows that the percentage of those in the fields of legal, financial, and social sciences is high in the Netherlands, which suggests there is a well-established route to becoming specialists in the fields of social sciences. The average annual income of Dutch men in the older cohort is ¥4.5 million and that of Japanese men in the older cohort is ¥5.83 million. On average, income is higher among the older cohort and among men. The standard deviation for income of Dutch men is very large, which indicates that incomes vary widely even among the same cohort.

Section III is composed of two chapters. In Chapter 6 (Ghijsen and Meng), a discussion is made on the use and creation of competencies that are appropriate for the new knowledge economy. In advanced countries, the transformation from the old economy to the new economy is often regarded as a paradigm shift. Despite the global economic recession of recent years, new sectors and new occupations and jobs are being created through information and communication technology (ICT), which is bringing

about significant changes in the economic environment. Interestingly, although Japan's research and development expenditures are maintained at a comparatively higher level than those of the U.S. and European countries, Japan is not gaining a sufficient return from such investment. This poses a question on whether the workforce comprised of those who have completed higher education are sufficiently equipped with the necessary tools for carrying out new developments. The analysis focuses on the extent to which those completing higher education in Japan and the Netherlands have acquired the competencies for succeeding in the knowledge economy and the extent to which such competencies are actually used in the labor market.

In Chapter 7 (Kosugi), the effect of the diversification of employment pattern on the early career of those completing higher education is examined. For a long time in Japan, permanent full-time employment had been the mainstream, and most graduates were employed full time as new recruits. During the economic slowdown of the 1990s, however, the percentage of youths who became temporary or part-time workers rose. The percentage of part-time workers has also been increasing in the Netherlands since the latter half of 1980, but the increase has been made within the context of reallocation of employment through work sharing. The number of part-time workers in the Netherlands surged dramatically after a new law on equal treatment of part-time workers was introduced in the 1990s. The author scrutinizes the commonalities and differences of Japan and the Netherlands regarding the consequences of part-time or short-term work on the future career of higher education graduates and competency development.

In Section IV, issues related to the values and occupational orientation of those completing higher education in Japan and the Netherlands are dealt with. To begin with, we overview the respondents' current situation and awareness from a number of angles.

Firstly, the age of the respondents at the time of survey was from the second half of 20s to their 30s. As with the age of being enrolled in higher education institutions, the range of age is greater for the Dutch respondents. Secondly, we look at their families. Respondents who lived with their parents at the time of the survey were about a quarter among the older Japanese cohort and about a half among the younger Japanese cohort. In contrast, less than 10 percent of the Dutch cohorts lived with their parents. The ratio of respondents living with a spouse or partner was about two thirds with the exception of the younger Japanese cohort. The percentage of respondents who have children did not differ very much in the two countries, which was slightly less than 50 percent for the older cohorts and around 10 percent for the younger cohorts. Naturally,

the younger cohorts are expected to enter the period for giving birth in the future.

Thirdly, on the question of overall satisfaction with their occupation, both Dutch cohorts marked an average of 3.9 on a scale of one to five (with five indicating greatest satisfaction), whereas the older Japanese cohort scored 3.4 and the younger Japanese cohort 3.2. Occupational satisfaction was clearly higher among the Dutch respondents. The percentage of respondents who replied that university education was useful in the development of one's character was higher among the Dutch with more than 70 percent. In terms of the university education's usefulness in the development of long-term career and finding a satisfactory job, about half of the Japanese respondents said it was useful, but the percentage was again lower compared to the Dutch respondents. On this point, there were hardly any differences between younger and older cohorts.

Table 1-5: The current status of respondents (family and awareness)

	The Netherlands		Japan	
	90-91	94-95	87-90	94-95
Current age (age)				
Average	35.4	29.8	33.3	27.4
Standard deviation	*5.98*	*4.54*	*1.79*	*1.53*
Family structure				
Living with parents (%)	1.2	5.2	23.8	49.0
Living with spouse/partner (%)	75.0	65.9	64.7	18.7
Have children (%)	43.8	13.7	49.4	5.6
Average age for having 1st child	30.5	28.4	30.1	26.1
Occupational satisfaction (one-to-five scale: 5=very satisfied; 1=totally dissatisfied)				
Average	3.85	3.86	3.43	3.26
Standard deviation	*0.90*	*0.85*	*1.04*	*1.08*
Usefulness of university education (one-to-five scale: a total of those replied "very useful" or "somewhat useful")				
In finding satisfactory job	69.8	69.0	52.1	49.0
In development of long-term career	52.4	60.0	49.8	51.4
In development of one's character	74.9	78.5	64.5	69.1

(Excluding those who did not respond)

Section IV consists of three articles. In Chapter 8 (Inenaga), the higher education career patterns of those completing higher education are identified from their background data and moreover, subjective data on "life's turning point" and subsequent career selection are analyzed to elucidate the meaning of higher education in the life and career of those who have completed higher education. One of the focal points of discussion is the gender issue as a reflection of the social and cultural context of the two countries. The author asks whether higher education is playing a role in assisting the

development of their public careers and what commonalities and differences can be found between Japan and the Netherlands and between the genders. The results showed that although the selection of an educational career in itself was not as significant as "life's turning point" compared to other events in life in both countries, it was observed, from background data on higher education and selection of careers after life's turning points, that there were signs that recurrent higher education was expanding in a number of fields in the Netherlands among both men and women. It was also found that one selects between part-time work and withdrawal from public career at childbirth in the Netherlands, whereas in Japan, reproductive and other events related to forming families, including marriage, force the selection between withdrawal from both academic and professional public careers and "double burden of gender roles" only on women. It can be read from the data that events in the person's private life as a reflection of social and cultural background had a significant effect on each person's selection of public careers including higher education. The author points out that this viewpoint of the relation between one's private life and selection of public careers tends to be overlooked in the discussion on the universal access to higher education and the importance of higher education's role in the knowledge society. Therefore, the discussion on higher education and occupation would be insufficient if it is limited to within public careers.

In Chapter 9 (Allen and Farag), a series of dimensions on the occupational orientation of those completing higher education in Japan and the Netherlands and the relation between occupational orientation and overall occupational satisfaction are examined. The authors suggest that Japanese and Dutch graduates have different occupational orientation as well as different work results and that the matching of occupational orientation and results is also different. They also indicate that the correspondence of occupational orientation and results may be shown as occupational satisfaction and if so, this might partly explain the difference in job satisfaction between Dutch and Japanese graduates.

In Chapter 10 (Boone, Meng and van der Velden), the significance and the effect of individualistic or group value systems in Japan and the Netherlands are considered. The focus is on the question of which kind of behavior, individualistic or group-oriented, plays a more central role in the two countries. Generally, the Dutch culture is more individualistic than the Japanese culture, which is more group-oriented. Based on these basic cultural differences, the authors surmise that an actor in the labor market in one country pays attention to different occupational characteristics and competencies and have different values from actors in the other country. If such cultural differences

are still important, such differences would naturally be reflected on many aspects of our societies, and the process of selecting and categorizing skills and competencies of employees in the labor market would also be dissimilar in the two countries. Employers would design work to match his or her country's ingrained cultural values and would prefer, select and reward employees who have competencies that match such values. In terms of occupational characteristics and competencies, employees whose work is more fitted with the cultural "self" would be satisfied with their work and would not want to quit that work. These hypotheses are examined.