

# Keynote

# Recent Reforms of Higher Education in Japan: A Sociological Study of the Relationship between Social System and Higher Education System

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## Introduction

A logic of academic reforms: society at international, national, and local levels affects the university and these social conditions bring about academic reform; the university through its research, teaching, and service affects society and these social functions bring about social development. We are able to observe various results related to their functions and dysfunctions to the extent that there are numerous problems that are thought directly or indirectly to bring about reform of higher education.

Accordingly, the main theme of this paper is to make a sociological analysis of various aspects connecting the two systems – the social system and the higher education system – that are identified by the following headings.

- (1) Differentiated society and higher education
- (2) Life-long learning society and higher education
- (3) School education and higher education
- (4) Labour market and higher education
- (5) Declining population society and higher education

Recently Japanese society has achieved a developmental stage in higher education of universal access, beyond that of massification. This year, 2006, approximately 650,000 students, or 52% of the 1.35 million members of the 18-year old cohort, are enrolled in universities and colleges. In 2007, the number of students who want to go universities and colleges will become equal to the enrollment capacity according to a statistical simulation so that theoretically all potential students can be accepted in the universities and colleges. It is interesting to note that this phenomenon is similar to the regular situation for elementary and middle schools, which are expected to accept all students seeking compulsory education. University and colleges are about to attain the status of the schools in terms of *quasi*-compulsory education.

Of course, it is true that this quantitative phenomenon is not at all equal to a qualitative phenomenon. Student selection among the universities and colleges will certainly become more and more competitive despite the fact that enrollment for all students is theoretically available. It cannot be denied that the haves and the have-nots - the rich and the poor in the academic social stratification -

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will be differentiated in the competition to select these students for their survival. As a result, a differentiated society, or unequal society at the level of universities and colleges will be formed more drastically than ever before. Many important issues in the relationship between Japanese society and higher education, including these problems, are emerging.

Based on such a viewpoint, this report seeks to comment on the present situation of Japanese higher education reforms by using the five headings listed above. We will analyze these topics in attempt to shed light on the present situation and to some extent their causality, background, diagnosis, and perspective.

### **Differentiated Society and Higher Education**

It is a fact that a differentiated society has developed increasingly in recent years. Even so, it was not much discussed approximately 10 years ago when the Japan Society of Sociology (*shakaigakkai*) conducted a national survey focusing on the social stratification of Japanese society (Hara, 2000; Kondo, 2000). However, various of arguments have been started in recent years by way of discussing the matter both positively and negatively. It proves to be a controversial issue so that we should be cautious in dealing with the matter.

Fumio Otake, one of the leading scholars in research on social stratification, pointed out in a careful discussion that a differentiated society was certainly developing. He expressed the situation as follows: "A characteristic of the change of differential society in Japan is caused by the expansion of income due to an aging population and so the expansion of income within a generation is small." But, based on his own survey, he showed that 66% of respondents saw an expansion of income in the past five years, and 74.4% who expected to see more expansion in the future. In addition, as many as 85.6% said that they felt that numbers in the poorer class were increasing in recent years (Otake, 2005, p.35, p.45).

What kinds of problems are there in a differentiated society? We can point out that social stratification is differentiated between upper, middle and lower classes. In the process of differentiation it becomes evident that the richer (upper) and the poorer (lower) classes increase in size, while the middle class decreases. This is a real testimony to uneven allocation of income among social classes. Why is the differentiation occurring?

Probably it is caused partially by a change in the employment system through the process of collapse of the bubble economy, which has lasted about 10 years since around 1995. It is also due in part to the expansion of income differentiation among people from expansion of new categories such as the NEET (Not in Education, Employment and Training), the FREETER (freelance *arbeiter*), and the working poor.

This kind of economic gap has had a number of effects on education, such as the differences of scholastic achievement among social classes, contraction of educational opportunity due to conflicts from differentiation, and differentiated society at the level of universities and colleges. It is especially

significant to note that the share of upper class students is increasing in universities and colleges ranking high in the social stratification.

If a differentiated society is producing many effects on a differentiated academic society, education is required to prevent reproduction of such differentiated and unequal society, though many studies make clear it is difficult to do so in spite of much endeavor (Coleman, *et al.*, 1966). In Japan, some studies recognized the difficulty (Kariya, 2001). A difficult situation is developing in Japan, although even more difficult facts are already reported with regard to the U.S. where students from higher income classes attend highly selective elite universities and those from lower income classes go to universities and colleges with low selectivity (Johnstone, 2005; Richardson & Hurley, 2005, p. 322).

As far as Japan is concerned, under-enrollment in the less selective universities and colleges is already observable. Approximately 40% of private institutions enroll less than their full complement of students and many of these institutions confront the crisis of closure. As described previously, the recent situation relates to a differentiated higher education society, and it cannot be denied that the relation between the economy and education has made worse a situation that was already difficult. Yet in recognizing this, we can note that, where possible, economic differences should be excluded from consideration of educational opportunity because as far as educational ideals are concerned, a guarantee of access based on students' abilities is necessary, regardless of their economic background.

### **Lifelong Learning Society and Higher Education**

It is realistic to stress the necessity of provision of lifelong learning in the 21st century when universal access is increasingly widespread and when many more people are expected to enjoy the opportunity of access to higher education. In this context, what are the conditions that may impede the development of lifelong learning?

(i) The first is probably related to the bureaucracy of the national government. There are two bureaus in the MEXT. In order to promote lifelong learning, in July 1988 the Ministry created a Lifelong Learning Bureau by reorganizing and expanding the Social Education Bureau. On the other hand, in order to advance higher education, the Higher Education Bureau is responsible for the formulation of basic policies for higher education, the establishment and authorization of universities, junior colleges and colleges of technology, selection of new students and the conferring of degrees, duties related to student welfare guidance, scholarships, and the promotion of student exchanges. The important thing to take note here is no or less integration of two bureaus, though they are keenly associated to the education and learning of human being. The Lifelong Learning Bureau (*shogaigakushu-kyoku*) was institutionalized as separate from the Higher Education Bureau (*kotokyoiku-kyoku*) in the MEXT, although interaction between the two seems not to be infeasible.

However, if an integrated lifelong learning process, combining school and social education, is to be conducted integration rather than separation and fragmentation of the two Bureaus is likely to be necessary.

(ii) A second reason is related to the insular attitude characteristic of universities and colleges toward lifelong learning. Lifelong learning has been traditionally thought to belong to the category of social education rather than that of school education so that its relation to the latter is not strong in terms of norm, role, structure, practice, or administration. As the universities and colleges have been categorized as school education for many years, they have had an insufficient relationship with lifelong learning.

(iii) A third impediment is related to the above two reasons. Universities and colleges have been less involved in promoting lifelong learning either at undergraduate or graduate levels, though they are now gradually introducing career education into their curricula.

For example, many university and college presidents put little importance on a priority for lifelong learning in their institutions according to their responses to our recent questionnaire about university education (Arimoto *et al.* 2006). A question was included on the reasons why improvement and revitalization are needed for enhancement of university education. Top five items selected by 305 respondents were as follows: (1) encouraging students to study seriously (93.3%); (2) the obligation of academic staff to enhance university education (71.5%); (3) a necessary response for academia's survival in the light of a declining 18 year population (58.9%); (4) enabling students to learn valuable knowledge (55.2%); (5) responding to the problem of articulation of high school education and university education (46.7%). In contrast, "the role of university as institutions of lifelong learning is increasing" attracted much less importance (33.7%): the percentage share of this factor actually decreased in comparison with the response in the 2003 survey (42.2%).

### **High School and Higher Education**

Articulation between high school and higher education, and especially with universities and colleges, has not improved over many years.

Superficially, the articulation seems to be working well, because more than half of high school students now proceed to universities and colleges: from a quantitative perspective, articulation is continually developing.

Yet from a qualitative perspective, the articulation has been confronted with many difficult problems including remedial education and the first year university education – that is, the transformative education necessary for access to higher education courses. Increasing numbers of students who are enrolled in universities and colleges are reportedly below a minimum scholastic achievement level adequate for access to higher education. They are unable to adapt to the teaching and learning processes in classes at university level. It is increasingly necessary to convert high

school fourth grade students to university freshmen as soon as possible after enrolment by way of first year and remedial education.

What are the reasons for insufficient articulation between the two levels?

(i) First, it derives from an inadequate curriculum in high school. Historically, under the elite education system in which a preparatory education for universities and colleges took place, high school could provide students with scholastic aptitude appropriate for higher education. Massification of higher education was accompanied by diversification of high school as well as university students. In response to the diversification of their students, high schools usually adopted various curricula, such as elective systems and comprehensive departments. Under such circumstance, it is probably difficult for high school to provide students with adequate scholastic achievement for university education.

(ii) Second, although the proportion of high school graduates has risen, the number of applicants has decreased to the extent that many universities and colleges cannot readily obtain the number of student required to meet their fixed enrolments. Accordingly, the shortage of applicants is forcing many institutions to conduct effectively open door entrance examinations in order to escape the possibility of closure. Unfortunately, such a policy invites the alternative crisis of declining student's ability.

(iii) Third, since the 1980's and especially since the 1990's, national higher education policy has tended toward a market mechanism orientation. It has introduced a post-evaluation system including deregulation to replace the previous regulated pre-evaluation system. In other words, this policy is transforming an entrance-oriented society, which stresses the entrance examination, to an exit-oriented society, which stresses the graduation examination.

- What specific plans can be considered to resolve these problems? There are some possibilities: (a) the market mechanism resolves the problems by causing universities to evolve in conformity with the market; (b) a re-regulation policy could be practiced once more instead of the market mechanism; or (c) some coordination is to be adopted between (a) and (b) to allow market forces to be tempered by educational needs. Among these, (c) seems to offer the least unrealistic solution to the problems.

### **Labor Market and Higher Education**

An articulation of the university and the labor market is as important as that of school and university. In fact, we can recognize a situation in which many university graduates do not adapt themselves to the labor market. For example, it is said that approximately 4.5 million people can be categorized as NEET or FREETER.

In addition, there is also the problem of successfully articulating university education with the professions and vocations. The contents of university and college curricula have been continually innovated in response to both academic development and the social expectations. They

have changed from being totally discipline oriented to becoming increasingly mission oriented in accord with student consumerism and market forces. The substantial development of future society in the 21<sup>st</sup> century necessarily requires further development of higher education to train adequately the younger generation. Additionally, on the basis of a proposal made by the Central Educational Council, the MEXT is also demanding academic reform for the development of human resources in response to globalization (MEXT, 2005).

The backgrounds and causes of the inadequate linkage of university and market are illustrated by the following factors.

(i) Academic reforms to meet the rapid social changes were delayed so that a sort of cultural lag appeared. Consequently, there are many gaps between companies and university in terms of the implementation of reforms, and equally there are also many gaps between the two sectors in terms of the non-implementation of reforms. In addition, by failing to recognize problems, the government and the MEXT have also allowed lags to appear as shown by the delayed response to the problems of NEET and FREETER.

(ii) Society is now changing from a traditional Japanese management structure, including a lifelong employment system (*shushinkoyo-seido*) and a seniority system (*nenkojoretsu-seido*), to a Western management structure, including a contract employment system and an annual salary system. Furthermore, university education is expected to innovate to a great degree, although it was not expected so dramatically as has been the impact of 'on-the-job-training' in the companies. There is also tendency to seek students who have practical ability and experiential knowledge in connection with professional education.

(iii) Direct observation shows that it is fairly difficult for academics and students to escape from a system created around permanent employment and seniority. On the academic side, an introduction of a contract system (*ninki-sei*) to faculty members has not been easily realized thus far (Yamanoi, 2005). For students, on the other hand, the introduction of new arrangements to replace the system of graduation without any dropout has not been well realized, though a series of reforms such as GPA (*grade point average*), CAP, strict evaluation, and a dropout system has begun to appear.

(iv) Although a background of general education is needed in the workplace as well as by citizens in society, general education (*ippan-kyoiku*) was notably removed from the curriculum after 1991 when a deregulation policy was introduced to universities and colleges (Arimoto, 2003). In addition to the collapse of general education, liberal arts education (*kyoyo-kyoiku*) has not developed well in the undergraduate course thus far, although the Central Council of Education stressed the enhancement of liberal arts education in its proposal in 2002 (Central Council of Education, 2002).

In this difficult situation, we have to think about some possible solutions. There may be two approaches: one from the point of view of national society and one from a university perspective. The former offers three possibilities.

(a) It is necessary to see clearly the consequences of selecting a society committed to contract employment in place of lifelong employment. Many young people today have little sense of identity, increasingly feeling anxiety for their future without any clear image of it in regard to their careers or the pattern of their lives. This increasing lack of identity in the younger generation may be profoundly connected with an absence of identity and the lack of future vision in society.

(b) Establishment of a differentiated society is rapidly leading to the emergence of a cyclical reproduction mechanism: upper class students → enroll in upper class universities and colleges → employed by upper class companies → reproduce the upper class. The 'Matthew Effect' (Merton, 1973) is clearly working with respect to reproduction of both culture and affluence. Various approaches from policies and management are needed to attenuate the effects of such reproduction processes, at least as far as education is concerned.

For example, one of the best measures to guarantee opportunities for less affluent students for enrolment in universities and colleges may be by development of policies for adequate scholarships. Consideration of cost sharing is now growing worldwide among governments, taxpayers, parents students, and philanthropists. The costs of tuition and fees, food, accommodation, and other living expenses have usually been covered by parents and students. The increased burdens provided by increases in these costs and the need for loans to cover them are becoming issues. In this situation, expenditure on these items from the less affluent is becoming difficult: this is already well documented for the U.S. and other countries (Teixeira, Johnstone, Rosa, & Vossensteyn, 2006). As a result, adequate policies for scholarships and cost sharing are becoming important.

(c) Improvement of the evaluation system is necessary. For example, improving both the newly introduced accreditation system as well as the established self-evaluation system is important in order to enhance the standard of university education.

To improve articulation of the university and the labor market, three possible approaches can also be identified from the perspective of the university.

(1) Improving university education has a high priority among these planning solutions. Integration of general education and professional education, and enhancement of the standards of scholastic achievement are specific objectives that need to be implemented and practiced to realize the necessary improvements.

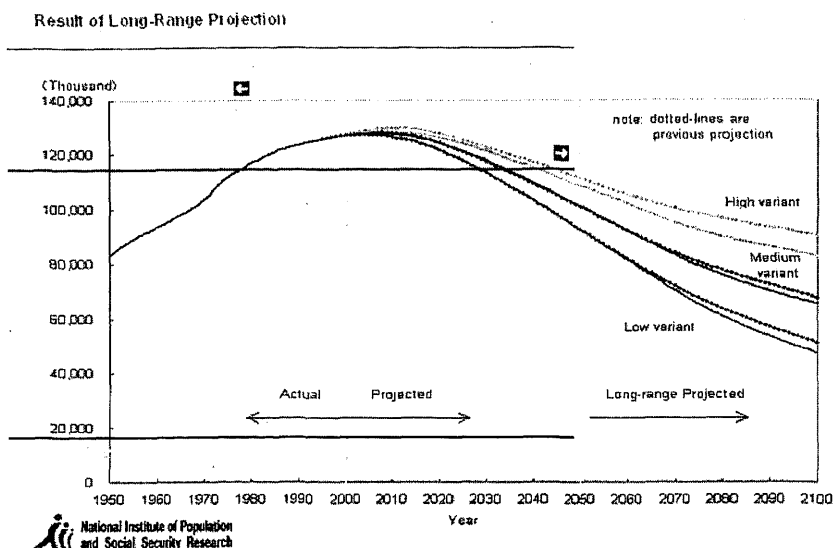
(2) General education has declined since 1991 following closure of Faculties of General Education (*kyogyo-bu*). These changes have to be reconsidered. Adequate provision for general education is inevitably necessary.

(3) Enhancement of student's scholastic achievement at the outcome level of the undergraduate education must be realized by the general introduction of some specific measures, including GPA, CAP, strict evaluation, and faculty development (FD) (Arimoto, 2005).

## **Declining Population and Higher Education**



According to statistical projections, the national population of Japan is estimated to decline to about 80 million by the end of the 21<sup>st</sup> century (National Institute of Population and Social Security Research, 2004). **Figure 1** shows the actual and projected population of Japan over the period 1950-2100, with three variants of the statistical projection.



Source: National Institute of Population and Social Security Research

**Figure 1. Actual and Projected Population of Japan, 1950-2100**

Moreover, *gokei tokushu shusseiritsu* (the total fertility rate) in 2006 was 1.26 offering no sign of reducing the decrease in the population, because it is constantly decreasing since 1973 when it showed as high as 2.14.

Probably there are some crucial factors working in relation to the decline of population, especially that of the total fertility rate. One of the most important factors is social change after around 1970 when the shift of the higher education developmental stage occurred from elite to massification. As a result, many female students went to four year universities and colleges in replace to junior colleges which were main higher education institutions for women. Accordingly, these graduates took part in jobs and got married or some of them attempted to stay as long as possible in the jobs. Average marriage age was delayed two or three years compared with the previous generation bringing about effects on the total fertility rate.

The effects of declining population on both society and higher education are incalculably great. The range of consequent problems is immense: the small birth rate implies a high proportion of senior people, a decrease in and shortage of a working population, an increase of the burden on the younger

generation, a decrease in enrollment not only in schools but in universities and colleges, and an increase closures of universities and colleges.

Contributing to the conditions and causes creating the particular situation that affects Japan are a number of factors.

(i) First is probably the delayed provision of the government in regard to population policy. Of course, this is not trait peculiar to Japan: many advanced countries have similar problems as a sort of disease of civilized countries. However, among these are some countries that, by introducing suitable programs, have been able to recover from low birth rates. Japan has delayed in identifying and practicing specific policies and measures. Having good policies and measures could improve the situation. An example is provided by Fukui prefecture, where the birth rate was eventually increased thanks to a policy allowing a family with more than three children to enjoy free medical treatment. (Fukuiken Somubu Seisaku Tokeishitsu, 2006) .

(ii) A second contributory factor can be found in inadequate higher education policies. Two aspects can be illustrated.

(a) Higher education policy has been based on an assumption of an increasing 18-year-old cohort. This stance has proved inappropriate for response to a decrease of population and the closure of higher education institutions. For example, every year – even today – establishment of about 10 new institutions is approved by MEXT, while approximately 60% of all private institutions nationwide are now facing problems of low enrolment leading to a crisis of closure of institutions.

(b) Emphasis on the market mechanism as a means of encouraging competition among institutions corresponds to a diminution of control as well as planning. Under the policy of the market mechanism priority, universities and college that are successful in increasing student enrolment can survive, even if they attain low quality in terms of education and research. Institutions seeking to enhance quality introduce recognized reforms (GPA, CAP, strict evaluation, core curriculum), but these are generally thought to be unpopular devices to attract students. There is a saying that bad money drives out good.

Some provisions are needed to cope with these situations.

(1) A social response of increasing the total fertility rate and population is being promoted. In this context, the government is planning to introduce benchmarking of the birth rate in the hope of increasing it from the 1.26 mentioned above to 1.40 in the future, a value which is thought to be the minimum base for sustainability of the pension plan nationwide.

(2) A national policy is necessary to constrain the market mechanism by limiting its negative effects and inadequacies for the education system and especially for the higher education system. In

other words, an adequate coordination between government regulation and market mechanisms needs to be established in order to sustain quality assurance in higher education.

(3) A clear vision of the number of universities and colleges appropriate to a moderate scale of higher education has to be achieved.

### **Concluding Remarks**

We have discussed five problems with regard to the policy, problem, and perspective of present day higher education in Japan, with an intent of clarifying a number of issues.

(1) There is likely to be an intimate relationship between society and higher education, as higher education, which constitutes one of the key social institutions, has a mutual interaction with the central components of society such as the economy, polity, science, engineering, and religion. It is natural that the functions of higher education are defined by social conditions and that they are forced to make various innovations owing to social changes. The relationship between society and higher education will bring about reforms in terms of the norms, structures, and functions of the higher education systems and institutions.

Through the process of reform, the universities and colleges conform to the demands of social changes in attempt to resolve some of the problems: the normative structure such as ideals, aims, and goals; the organizational structure such as governance, administration, and management; the social functions such as research, teaching, and service. Without implementing such reforms as soon as possible, the universities and colleges will lose their *raison d'être*.

On the other hand, it is an important mission for the universities and colleges to lead social development by their own characteristics as centers of learning in society. They contribute to society mainly by the development of human resources and the discovery of knowledge, because they are pursuing the roles of integrated teaching and research proper to them. In the emerging knowledge based society, the center of learning committed to teaching and research on the basis of scientific knowledge and disciplines is to be responsible for social development. To this extent national as well as local society is expected to prepare suitable conditions so as to encourage academia's activity, while the latter is also expected to recognize its own mission.

From this perspective, the relationship between society and academia, especially the linkage of the two sectors is important. The problems may be mixed, partly due to the university's response to social changes and partly deriving from the university's mission to maintain its academic work of research and teaching so as to lead society.

(2) There is a phenomenon of an emerging differentiated society accompanying a differentiation of stratification through expansion of its upper and lower parts at the expense of its prevailing middle part. The problem of social stratification and higher education is old and new. The fact that higher education used to be accessible only to an elite class derived from the medieval university and, as far

as Japanese higher education is concerned, it was reproduced in *Teikoku Daigaku* (Imperial University), established about 130 years ago.

In general, the university was accessible to the brightest and best students, so that many students who had ability were able to enter from various social classes regardless of their social or economic background. Social mobility was promoted to a considerable degree regardless of the social class background for about one century after the Meiji Restoration. In other words, a structure for flexible social mobility among the various social classes was fairly well established and was retained fairly well in the modernization process. According to this viewpoint, the current situation is thought to be a turning point in the pattern of this traditional structure.

(3) The problem of university's articulation to society is related to the problem of input and output of university education.

First, the input refers to the relationship with the high school. As was previously discussed, the elite university system had a strong intimate relation with the upper class, while the mass university system has extended the relationship to the lower class. The particular benefit of massification has been to give more opportunity to the lower class, which was traditionally excluded from access to higher education. This trend is promoted to a great extent by proceeding according to the front-end model of higher education development from elite through mass to a universal stage of access.

At the elite stage of higher education the entrance examination brought about a disconnection between high school and university through its structure of one day at 18-years of age when selection was to be done. The disconnection controlled a candidate's developmental lifecycle. However, for universal access to higher education, the disconnection has to be converted to a connection.

Second, the output implies articulation between university and society including the labor market and the professions. Just as with the problem of articulation between high school and university, a connection should be formed between the university and the professions from a perspective of the lifecycle of human development. Of course, school and university share the common characteristic of both being places of education concerned with the teaching and learning process; their relationship differs from that between the university and the professions.

From a viewpoint of professional socialization, it is clear that school and university remain at the stages of preparatory socialization and primary socialization, while in the labour market the professions belong to the stages of post-preparatory and post-primary socialization. There is a clear cut distinction between the two.

However, we are now facing the problem that many high school students are unqualified to become freshmen even after enrolment in universities and colleges: we call them fourth-grade high school students. At the same time many university students are unable to become members of society as workers even after graduation. These facts must be testimony to the disconnection of the two stages, between high school and university, and also between university and the labour market. Resolution of

these problems is necessarily and closely related to the role of higher education, and especially of university education.

(4) Emergence of a declining population is unprecedented in Japan, although it has precedents in other advanced societies. If national policy succeeds in raising the birth rate from 1.25 to 1.40 immediately, its effects will not appear before a further 18 years as far as its impact on the scale of higher education. There is clearly no guarantee of an improved situation for a long time.

Accordingly, the facts of the declining birth rate combined with an aging society is certain to impose many serious consequences on social systems and institutions for many years. A selection of obvious examples would include: a decline in the numbers of younger workers; a necessity to recruit and secure workers; a reduction in productivity and national wealth; collapse of pension plans; economic decay in local areas.

In higher education the problems will include a declining population of students who advance to higher education, under-enrolled universities and colleges, the closure of institutions, increasing demands for adult students as well as international students. Necessary improvements will be possible in the form of enhancement of high quality education to the declining population of students, and better quality assurance to a larger proportion of the declining population who are invited to come to universities and colleges in accordance with rising universal access and a lifelong learning society.

In addition to traditional school-leaver students, new types of students – notably adult and international students – are expected to increase, both in absolute number and proportionately owing to the decline of numbers of traditional students. In this context, it will be necessary for the universities and colleges to identify global standards as the benchmark for improvement of quality assurance. Individual institutions will need to pursue their own identities in the emerging differentiated society, in which the differentiation of universities and colleges between the haves and the have-nots will characterize the distinction between success and failure.

## References

- Arimoto, A. (2003). Recent Higher Education Reforms in Japan: Consideration of Social Conditions, Functions, and Structure, *Higher Education Forum, 1*. Hiroshima: Research Institute for Higher Education (RIHE), Hiroshima University, 71-87.
- Arimoto, A. (2005). Daigakuyoujushoku to FD: America to Nippon (*Academic Profession and FD: The U.S. and Japan*). Tokyo: Toshindo Publishing Co., Ltd.
- Arimoto, A., Daizen, T., & Huang, F. (2006). Daigakuyoiku no Sitsutekihosho nikansuru Kenkyu (4) 2003nen to 2006nen no Gakucho Chosa no Hikaku (Study of Quality Assurance of University Education (4) : Comparison of President Survey between 2003 and 2006. Presented to the 58<sup>th</sup>

- Annual Conference, the Japan Society of Educational Sociology at Osaka University of Education, on September 22-23, 2006.
- Coleman, J., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfield, F., & York, R. (1966). *Equality of Educational Opportunity*. Washington, DC: U.S. Government Printing Office.
- Fukuiken Somubu Seisaku Tokeishitsu (2006). "Shusseiritsu Yuryouken no Tokeiteki Bunseki" (A Statistical Analysis of Good Prefecture in terms of the Birth Rate), *Gekkan Chiikizukuri*, (Internet Magazine) <http://www.chiiki-dukuri-hyakka.or.jp/book/monthly/0701/html/t03.html>
- Hara, J. (2000). *Nippon no Shakai Kaiso System: Kindaika to Shakai Kaisou (Social Stratification System in Japan: Modernization and Social Stratification)*. Tokyo: Tokyo University Press.
- Johnstone, D. B. (2004). Cost-Sharing and Equity in Higher Education: Implications of Income Contingent Loans, in Teixeira, P., Jongbloed, B., Dill, D., & Amal, A., (Eds.), *Markets in Higher Education: Rhetoric or Reality?*. Dordrecht: Kluwer Academic Publishers, 37-59.
- Kariya, T. (2001). *Nippoin niokeru Kakusa Shakai to Kyouiku Kiki nimukete (Toward Differential Society and Educational Crisis in Japan)*, Tokyo: Yushindo Kobun-sha Publishing Co., Ltd.
- Kondo, H. (Ed.) (2000). *Nippon niokeru Shakai Kaisou System (Social Stratification System in Japan 3: Educational Society postwar)*. Tokyo: Tokyo University Press.
- Kosugi, R. (Ed.) (2005). *Freeter to Neet (Freeter and Neet)*. Tokyo: Keiso Shobou Publishing Co., Ltd.
- Merton, R. K. (1973). *Sociology of Science: Theoretical and Empirical Investigations*, in Storer, N. (Ed.). Chicago: University of Chicago Press.
- Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2002). *Vision of Liberal Arts Education in the New Era*.
- MEXT (2005). *Future Vision of Higher Education in Japan*.
- National Institute of Population and Social Security Research (2004). *Actual and projected population of Japan, 1950-2010*.
- Ogata, N. (2007) 21seikigata Kotokyoiku System Kochiku to Shitsuteki Hosho (21<sup>st</sup> type Higher Education System and Quality Assurance), COE Research Series 26, Research Institute for Higher Education, Hiroshima University, pp. 131-144.
- Otake, F. (2005). *Nippon no Fubyoudou: Kakusa Shakai no Gensou to Mirai (Unequalness of Japan; Illusion and Future of Differentiated Society)*. Tokyo: Nihon Keizai Shinbunsha.
- Richardson, R. C., & Hurley, A. D. (2005). From Low Income and Minority Access to Middle Income Affordability: A Case Study of the US Federal Role in Providing Access to Higher Education, in Gornitzka, A, Kogan, M, & Amal, A., (Eds.), *Reform and Change in Higher Education: Analysing Policy Implementation*. Dordrecht: Springer, 304-325.
- Teixeira, P., Jongbloed, B., Dill, D., & Amal, A. (Eds.) (2004). *Markets in Higher Education: Rhetoric or Reality?*, Kluwer Academic Publishers Change in Higher Education. Dordrecht: Springer, 305-324, 322.

- Teixeira, P. N., Johnstone, D. B., Rosa, M. J., & Vossensteyn, H. (Eds.) (2006). *Cost-Sharing and Accessibility in Higher Education: A Fairer Deal?*. Dordrecht: Springer.
- Sato, T. (2000). *Japan as Unequaled Society* (In Japanese). Tokyo: Chuoukoron-shinsha Inc.
- Yamanoi, A. (2005). The Academic Marketplace in Japan: Inbreeding, Grades and Organization at Research University, *Higher Education Forum*, 2. Hiroshima: RIHE, Hiroshima University, 93-114.