THE JAPANESE EDUCATIONAL CHALLENGE?

by

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What were once considered routine problems to the educational world are today called "crises." Thus we find that virtually every contemporary nation is in the midst of an educational crisis. Somewhat unusual in the analyses of the current wave of crises is the interest in Japanese education as a possible model, just as Japanese business management was looked to only yesterday.

Indeed, at least from a distance, Japanese education is impressive:

> Equal opportunity of educational condition is realised in the compulsory system
>
> The national curriculum is rich and challenging
>
> As indicated by several comparative studies of educational achievement, an exceptionally large proportion of young people master this curriculum, including the "difficult" math and science subjects, at a high level
>
> Children stay in school; 94 percent actually complete the 12 year course entitling them to a high school diploma; 35 percent attend a tertiary institution
>
> The system graduates more engineers annually than the U.S. which has twice the population
>
> Youth disorder is minor
>
> Over 90 percent of the youth seeking jobs are employed within three months of graduation.
>
> Finally Japan's public expenditure for education are a smaller percent of GNP than in virtually any other advanced society
>
> Japan seems to get more for less.

As these achievements have become more widely known, the foreign interest in Japanese education has quickened. Yet as outsiders explore the Japanese "challenge," they often become unsettled. For miracle Japanese education is also facing its crisis, not of process or performance but of

legitimacy. We will argue here that the Japanese educational system is fulfilling victim to its success. Over the postwar period it has steadily improved in "warming up" youth for advanced education by virtue of cumulative egalitarian shifts in the process and performance of primary education. But the Japanese system has failed to develop corresponding "cooling down" mechanisms at the upper levels.[1] As a result, increasing numbers of youth have developed high expectations for success at the upper levels. But in the striving, to realize these expectations, those from more affluent homes have been progressively more successful. The dislacement of egalitarian forces by stratifying forces has eroded to system's legitimacy. I would argue that other nations, to the extent the Japanese system, will experience the same fate.

BACKGROUND

The Old System

Many of the most distinctive features of Japanese education were evident centuries ago. Schools were well attended in pre-modern Japan. It has been estimated that, in 1850, 40 percent of the males and possibly 15 percent of the females had achieved basic literacy.[2] The ascetic self-denying character of schools and study was already evident in the Buddhist monasteries and retreats of the Kamakura period. The stress on whole person education, or the integration of bu (martial arts) and bun (letters), was central to the philosophy of the bakufu and fief sponsored schools of the Tokugawa period. In the village schools of the same period, moral qualities of virtue and perseverence were taught alongside mathematics and reading by respected village elders. All of these traditional schools stressed the pedagogy of mastering basic materials

through memorization and repetitious exposition, profound insights were expected to flow. Also many schools taught traditional arts and domestic skills.

Pre-modern education, though extensive, was based almost solely on Eastern learning. Following the visitation in 1853 by Commodore Perry and his steam-powered boats, members of the ruling class concluded that the nation would have to acquire Western learning in order to maintain its independence. Subsequently, the ruling Tokugawa house was overthrown and a new government was formed under the Emperor Meiji which declared its intent "to seek knowledge throughout the world." An important theme in an analysis of the subsequent developments is the actual mix that evolved between indigenous and foreign elements.

In 1872, the Meiji leaders took the first steps towards the establishment of the centralized educational system. Over the next years, they examined the educational systems of leading Western nations, experimenting extensively during the seventies with American ideas, before concluding these allowed too much local autonomy. Shifting toward continental models and drawing on the traditional "Eastern spirit" as a necessary balance to "Western knowledge," by the mid-1880's the Meiji government had established the basic outlines of what today is called the "old system" of modern Japanese education.

The system began with a broad base of compulsory primary education, supported several vocational streams of terminal secondary education as well as an academic stream, and was topped by a single Imperial University and several higher educational institutions, many of which were privately sponsored. (see Figure 1) The system was designed: (1) to realize the spiritual training of the people so that they would be loyal, hardworking

subjects of the emperor and not find Western liberal and hedonistic ideas too attractive; (2) to promote national integration through providing a uniform system throughout the nation; (3) to develop in the vocational streams of the secondary and tertiary level a technically competent labor force that would build a strong economy and nation; and (4) to select by meritocratic means into the Imperical University the most intellectually able youth for positions of leadership in government and business.

The old system expanded rapidly and is generally regarded as contributing significantly to Japan's modernization.[3] The modern sector of the labor market came to rely almost exclusively on the educational system for the identification of employees. A degreeocracy (gakureki-shugi) emerged with new hiring, especially of white collar and managerial staff, being restricted to the pool of individuals annually graduated from the tertiary level institutions, and especially the Imperial University. To a considerable degree, recruitment to the top management of particular modern organizations came to be restricted to graduates of a particular university; the national civil service and the banks drew largely on the Imperial University of Tokyo and after its establishment the second Imperial University of Kyoto while private firms often favored a private university such as Keio or Waseda. Thus a form of academic cliquism (gakubatsu) emerged in promotions policies to reinforce the academic degreeocracy. Those with ambitions for employment in the secure and remunerative jobs of the modern sector exerted all their effort to do well in school. In response to the rising private demand for education, a system of entrance exams evolved with the most competitive node being for entrance into the key higher schools that prepared students for the Imperial University. At times, only one out of 20 succeeded in these exams.

The New System

As Japan approached World War II, this "old system" was subject to increasing strains. Its content became increasingly nationalistic, students became increasingly competitive in their efforts to enter the university stream, and graduates experienced difficulties in obtaining the jobs to which they aspired. After Japan was defeated in World War II, both the American Occupation authorities and a select group of liberal Japanese leaders who were asked to help in reforming the nation agreed that the educational system required fundamental change. Indicative of their determination was the preamble to the Fundamental Law of Education (1946), where it is stated: "Education shall aim at the full development of personality, striving for the rearing of the people, sound in mind and body, who shall love truth and justice, esteem individual value, respect labour, and have a deep sense of responsibility, and be imbued with an independent spirit, as builders of a peaceful state and society."[4]

The reformers proposed legislation to democratize and demilitarize the curriculum, to replace the former multitrack structure with a single track similar to what is found in the United States, and to decentralize control over education. The shape of the new system is depicted in Figure 1. The institutions of the old system had to scramble to find their place in the new system, but by the early fifties the reorganization was completed.

Feeling that teachers had been severely stifled under the old system, the reformers organized many workshops to convey new democratic teaching methods and proposed measures to promote the security of teachers. Of greatest importance, teachers were allowed to form unions, and ultimately these unions combined to establish the Japan Teachers' Union (Nikkyoso). From the beginning the union strongly identified with the "progressive" democratizing and decentralizing themes of the proposed reforms.[5]

The Politilization of Education

All of these reforms received the firm support of the U.S. Occupation's Supreme Command, which in the early postwar months was the major political voice. However, a primary goal of the Occupation was to foster the reestablishment of a democratic polity, and thus as soon as a new constitution was formulated and the members of the new Diet were selected by a popular election (with universal suffrage), the Occupation curtailed its efforts to influence the reform process. To the dismay of both the Occupation and the leading exponents of educational reform, the newly constituted Diet was on balance conservative. The conservative majority in the Diet resisted many of the new reforms and sought to have them replaced with more traditional policies. For example, the new system of elected school boards was replaced with appointed boards. The authority for selecting textbooks was shifted from schools to the boards, and the Ministry of Education formed a special council to screen textbooks prior to their consideration by the local boards. Moreover, the conservative majority sought to have the Teachers' Union disbanded, maintaining that the union might attempt to use the educational system as a means for promoting its political ends. Thus the stage was set for conflict between the conservative government and the progressive union.

Over the postwar period, the powerful Japan Teachers' Union has continued to challenge the ruling elite's traditional educational policies. Whereas the conservative establishment has seen education as a means for training a skilled labor force and highly qualified manpower, for identifying prospective elites, and for teaching a common culture, the union has emphasized the educational system's capacity for developing rich personalities and critical abilities. In alliance with progressive

political parties, the union has repeatedly sought the support of rank-and-file teachers in political efforts aimed at toppling the ruling conservative regime. These battles at the central level, extensively covered by the mass media, have served to sharpen public understanding of education and its supposed consequences.

The Larger System

The reforms introduced by the American occupation initially caused much confusion to the administrators, teachers, and consumer of Japanese education, but gradually a new arrangement emerged. Distinct from the accomodation in the formal system and the political arena are three developments external to the formal system of Japanese education that require emphasis.

The Japanese Employment System As the old system evolved, the employment needs of modern organizations and Japanese education became increasingly intertwined. With the postwar democratizing reforms, the concern to expand educational opportunity resulted in the establishment of more universities. But the prestigious employers tended to disregard these new institutions, perpetuating their old practice of recruiting only from a handful of elite universities. As the Japanese economy prospered, increasing numbers of companies came to think of themselves as top companies and hence also needed to recruit from the elite universities. As a result the corporate competition to catch the graduates of the elite institutions picked up. While social critics and government commissions periodically pointed out the irrationality of focusing recruitment efforts on the handful of elite universities, individual corporate personnel

officers saw no reason to alter their procedures unless their rivals followed suit. And of course, the government, which had been the first employer to restrict its recruitment to graduates from the elite institutions, also persisted in this narrow orientation. So, while the postwar reforms "democratized" the opportunity of access to higher education, the recruitment practices of prestigious employers remained elitist.

Parents and Juku The general public expressed enthusiasm for the democratizing reforms of the immediate period, and tended over the subsequent decades to support the spirit of these reforms through their comments at PTA meetings, and local government meetings, their contributions to newspapers, and even their participation in protests organized by the leftist Teachers Union.

However, distinct from the public acting as a whole were the individual actions of the public, especially in their roles as parents. Parents recognized the objective reality that their children's prospects for career success were tied to their children's performance in school and especially in the crucial interest exams. While most parents were inclined to do all they could to promote the educational performance of their children, not all possessed adequate educational or financial resources. However, as postwar Japan became more prosperous and the public's educational level improved, increasing numbers of parents acquired the resources to back their children in the educational competition.

Parental support has taken many forms including home-coaching, the purchase of work books, and increasingly paying for remedial and enrichment lessons at private schools called juku. Recent surveys suggest that at

least one-quarter of advanced primary-level students and 40 percent of middle school students attend juku.[6]

Mediating Institutions While many large firms had been accustomed to publishing textbooks and providing supplies, the new system created a need for a wide variety of additional services. Perhaps most pressing was the need for information on how to prepare for and gain admittance to higher educational institutions. While newspapers and magazines had always featured stories on these topics, the service became more specialized. Several firms came to specialize in guidebooks to the entrance procedures and examination topics of key universities. Some of these firms also developed mock tests so that young people could compare their preparation with others aspiring to the same institutions. Also many preparatory schools were established to provide supplementary exam-oriented preparation for children.

To assist graduates in obtaining jobs and reciprocally to assist companies in their recruitment, a function traditionally carried out through informal contacts and connections, a recruitment industry gradually evolved. This industry developed tests of ability and personality for companies to use in selecting recruits. These same tests also provided useful information on the quality of education provided by different educational institutions.

Mass Media In 1950, the Japanese people were already heavy consumers of newspapers and that tendency continues. At that time, one in two homes possessed a radio. Today, 90 percent of Japanese homes possess a TV and 15 percent a home computer. In a typical area, at least four television

channels are available, two managed by the quasi-government NHK. The typical family eats breakfast and dinner watching the TV and may relax watching the TV before heading to bed. The quality of programming, especially of the public TV, is impressive with frequent educational and cultural programs such as foreign symphonies, historical dramas, and public lectures. Quiz shows where young people compete to answer a wide range of factual and trivia questions are given considerable emphasis. It is generally believed that the media also have a significant, albeit unmeasurable, educational influence.

Thus, we can see that a number of institutions have evolved outside the formal educational system that also have had important influence.

EQUALIZING FORCES

Having completed the discussion of the background for recent developments, I now wish to review the forces shaping two seeming contradictory outcomes of the postwar system. The first of these outcomes is towards greater equality in the values and the cognitive achievement of young people.

The evidence on cognitive equality comes from the aforementioned international achievement tests where the average Japanese achievement is much higher than for most other advanced societies, and at the same time the distribution around the mean is more bunched.[7]

The evidence on values is more diffuse. One example I find especially convincing is the trend towards a preference for participation and a reluctance to uncritically follow established leaders or obey teachers that has been reported in the surveys conducted by the National Institute of Mathematics every five years since 1953.[8] Related is the levelling of

occupational prestige reported in surveys administered both to school-age youth and to nation-wide samples of adults.[9] Another illustration is the democratization of language usage; whereas five levels of respect language were commonly in use in the pre-war period, today at most three levels of respect language are prevalent.

These equal outcomes are best understood as the product of a number of mutually reinforcing developments in postwar education, especially as it is practiced at the primary level. These developments, which I now turn to enumerate, were cumulative. That is, they were evident in some degree in the fifties. However, over time they have become increasingly characteristic of Japanese education throughout the nation and thus have had an increasingly profound effect on each successive cohort of young people.

1. Japanese schools are equal—The postwar public concern with education has placed pressure on the central government to reduce inequalities in educational expenditures per student. The system of finance for Japanese education greatly facilitates the realization of equal expenditures. Japanese school boards, unlike their American counterparts, are not dependent on local property taxes. School districts in Japan tend to be much larger, which facilitates access to a wide variety of local tax sources. Moreover, for most categories of educational expenditures such as salaries, texts, and lunches, the central government is required by law to pay up to half the expenses required to realize the national standard. The national laws on educational expenditures also include equalizing measures to help prefectures that, due to special features of geography, population structure, or industrial composition, experience difficulty in collecting sufficient tax revenues.

Thus today, at the compulsory level, there is virtually no variation between prefectures in annual operating expenditures per student.[10] While some areas lead and others lag in the introduction of the latest educational technology, such as color televisions, language laboratories, and the like, remarkable equality in distribution has been established with respect to the essentials. Similarly, teachers tend universally to have similar qualifications; the major exceptions are those prefectures that have lost population to the large cities. In these prefectures few new teachers have been hired for several years and, hence, the teacher age-distribution is older.

Some of the government's equalizing measures are directed at disadvantaged social groups. For example, one law subsidizes children from low income families for school lunches, excursions, and other regular activities. Another law includes provisions aimed at equalizing the educational conditions of children in remote areas: it provides transport subsidies to enable children living on small islands to ride boats to mainland schools, and it authorizes hardship salary supplements to induce skilled teachers to take positions in these areas.[11] Recently, the government began to put additional funds into the schools that receive children from the "outcast" burakumin community. As these outcast children traditionally have done poorly in schools, the supplements are used to pay for tutoring after school and other compensatory programs. The programs are so intensive that expenditures per student for outcaste children can be three times as great as the expenditures for the other children.

2. Japanese schools are demanding--The central government's role in providing a large share of educational revenues enables it to exert considerable leverage over certain aspects of the educational process.

The central government drafts a detailed course of study prescribing the contents of the curriculum and inspects commercial texts to insure that they conform to the official standard. One virtue of this procedure is that children throughout the nation are exposed to a common body of knowledge in an identical sequence.

At the same time, the curriculum is demanding. It covers a wider range of subjects and pursues these in greater depth than is the case for the curriculum of a typical U.S. school district. The differences are evident from the first grade of primary school. Young Japanese pupils spend a larger proportion of their time in subjects such as art, music, and physical education than do American students.[12] Whereas many American schools do not offer a science curriculum at the primary school level, this is offered in Japan from the first grade. In arithmetic, a subject central to both the Japanese and American curricula, the Japanese texts move faster than a typical American text.

In order to cover the demanding curriculum, the government requires each school to operate an educational program for at least 240 days each year, in contrast with 180 days for American schools. In most cases, this means that children attend school 6 days a week for over 40 weeks. School occupies a very central places in the lives of Japanese children.

3. Japanese teachers believe in "whole-person" education--The specter of exam competition and the concern many parents express for their child's cognitive development have been mentioned. Japanese teachers recognize these demands and do their best to respond. However, they feel that their most important task is to develop well-rounded "whole people," not just intellects.

Teachers at one of the schools I visited selected the following goals to guide their work: to develop children with pure and rich hearts; to build up strong and healthy bodies; to promote the spirit of curiosity and intellectual achievement; to encourage the will to endure in whatever is attempted; and to help each child to understand how his strengths complement those of his classmates.

The willingness of Japanese teachers to develop whole people is a crucial factor in Japanese education's capacity to promote change. In teaching values to their pupils, the teachers influence the way these young people respond to established patterns of behavior.

The officially prescribed curriculum provides an important vehicle for whole-person education. Along with the standard academic subjects, the curriculum also sets aside a substantial amount of time for systematic instruction in art, music, physical education, and moral education. Teachers seem to be as conscientious in their attention to these subjects as to the standard academic ones.

The concern with whole-person education is especially evident in the early years of primary school where teachers work hard to establish order and to induce their pupils to perform in the classroom. During these early years, teachers are more concerned with getting all their pupils involved in learning than with making progress through the curriculum. This concern with proper behavior and motivation yields important long-run dividends. For instance, orderly classrooms mean that most of the school time can be spent on learning. Due to the attention to pupil motivation, repeating is exceedingly rare. Although some pupils fall behind, nearly all who are mentally able acquire a basic proficiency in reading, writing, public speaking, arithmetic, and graphics by the time they complete their compulsory education.

Another aspect of whole-person education is the effort teachers devote to moral education. Both through the moral education course and through a wide range of other activities, teachers try to convey certain moral principles to their pupils. They stress the egalitarian, individualistic, and participatory orientations that underly postwar egalitarian change; yet, at the same time, teachers try to teach conventional values of friendship, cordiality, cooperation, and discipline.

4. The school is the educational unit--The foreign observer is impressed with the extent to which schools rather than individual grade levels and classes constitute the basic unit for integrating Japanese education. At the primary level one finds an orderly progression, from preparation for schooling in the early years to intense and disciplined cognitive training toward the end. Teachers, while in charge of a particular class, feel a responsibility to speak to students from other classes when they see these children misbehaving in the halls or on the grounds. Most teachers eventually gain experience in teaching at several different grade levels.

The faculty meeting, as the basic decision-making body of the school, works to realize the school's integrated program. Each spring it decides on an educational objective for the entire school and plans a schedule of school events around its objective. The faculty reassesses the school's progress periodically. In these general reviews, as in discussions on specific pedagogical issues, there is considerable communication between teachers responsible for different grade levels and specialities. Other aspects of school life from the weekly chorei (early-morning school assembly) to club activities and festive occasions, such as sports day, reflect the emphasis on the school as the basic educational unit.

5. Japanese teachers are secure--Teaching in Japan is a respected profession. Teachers receive social status and a reasonable salary. Most teachers expect to spend their complete working life as teachers. As public servants, they automatically receive tenure upon initial employent, providing that no special circumstances intervene. In the past, one possible circumstance that could have led to a teacher's dismissal was the feeling by a local elite or official that a teacher was not performing his or her job in a satisfactory manner. But today, in most areas of Japan, teachers do not have to fear dismissal on this basis. Roughly three-fourths of all teachers belong to the strong Japan Teachers' Union, which is prepared to fight for each teacher's right to employment. In the past, too, the union saved the jobs of a number of teachers to the great embarrassment of local governments. Thus, teachers do not fear the governments that employ them.

When employers make unreasonable requests, teachers sometimes express their reservations. In other instances, teachers ignore or prevent the implementation of official requests. For example, when the central government passed a law requiring school principals to fill out job-performance evaluations for each teacher under their authority, teachers in most areas persuaded the principals to ignore the regulation, arguing that it would destroy staff harmony. Likewise, teachers feel secure enough to stand up against pressure exerted by powerful parents. At the same time, teachers do not always comply with the requests of their union. Many teachers who are members of the union do not support the union's explicit, politically oriented protests such as the outbursts organized against American involvement in the Vietnam War.

The security that teachers enjoy enables them to run their schools without excessive influence from any outside body. Teachers spend a large amount of time each year deciding what their school should attempt to accomplish. This discussion takes account of the various external pressures but is unlikely to submit to any of them. Balancing the external demands, the teachers collectively agree on the program that they want to pursue for their school. Over the course of the year, they then do their best to realize it. They are at once autonomous from external power and responsive to these pressures. It is because the egalitarian line of the teachers' union is among the more credible of the external influences that it has such a significant impact on the policies of individual schools.

6. Japanese teachers are conscientious--A number of mechanisms are built into the school routine to induce teachers to do their best. In each school, teachers spend a surprising amount of time discussing teaching in general--at the morning and weekly faculty meetings, the biweekly research meetings, and the quarterly public-research seminars. In addition, the teachers who teach a common grade level share desks and frequently consult with each other on ways to solve specific problems. This interaction establishes a collective expectation for good teaching within each school that individual teachers feel constrained to live up to. Moreover, local school boards and the Japan Teachers' Union arrange pedagogical seminars that many attend. Due to the extensive communication and training opportunities, teachers share a common stock of knowledge which is translated into relatively homogenous performance within classrooms.

To enhance communication with parents, teachers make a point of visiting each pupil's home to meet the pupil's parents at least once each school year. These visits also help teachers learn about the home

circumstances of their pupils. Many teachers make adjustments, based on this information, in their routine to provide better in-school opportunities for those children who lack favorable home situations. Parents are officially invited to the school once a month to watch their children in the classroom. Once every quarter, parents have an opportunity to discuss their child's progress with teachers. Parents are given the telephone numbers of their children's teachers and encouraged to call if there is any special problem. The concerned eye of the ordinary parent is another factor inducing teacher conscientiousness.

7. Japanese teaching is equitable--The embattled conditions in which Japan's teachers are trained and work help to make them ideologically mature. The continuing battle between the central government and the teachers' union highlights the implications of educational actions.

Given its traditional concern with education as a means for identifying and furthering talent, the central government has advocated tracking and ability-grouped instruction. However, the union has opposed these reforms, arguing that they would destroy the harmony of classrooms and the collective feeling that exists among age-mates. A common phrase in the union's rhetoric of opposition is "discrimination." Union leaders appreciate that tracking could end up with lower-class and minority-group children being permanently assigned to low-ability tracks.

Teachers are sensitized by these debates, and this affects their behavior. In the classrooms, teachers show an impressive concern with eliciting the participation of each pupil, thereby building up a positive orientation to schoolwork. Few teachers openly show favoritism to their best pupils, nor do they denigrate the performance of the weak performers. Rather, the teachers do what they can, given the constraints of time and the curriculum, to guide all pupils through the program.

STRATIFYING FORCES

Due to the equalization of values and ability, increasing proportions of each successive cohort have considered entry to higher education. But as greater numbers have actually proceeded to higher education, those from affluent homes have actually improved their chances for getting into good universities relative the chances of aspirants from more deprived homes.

During the early years of the postwar period, with the disruption of the old class system and the reorganization of the educational system, access to higher education was remarkably equal. For example, according to the Ministry of Education, in 1961 only 26.1 percent of the new entrants to national universities were from families with incomes of the top quintile, and only 43.2 percent were from this top income group if all universities were taken into account.[13]

However, in subsequent years, despite a significant increase in the scale of higher education, access has become less equal. The proportion from the top quintile has steadily increased, with this inegalitarian tendency being most marked at the national universities where by 1976, 35.4 percent were from the top income quintile. The class bias is believed to be even more extreme at the highest prestige national universities which are the gatekeepers to the best employment prospects. One journal reported that 17 percent of the entering 1976 class of the University of Tokyo came from families whose head was a company president; an additional 26 percent were from private sector managerial families.[14] Another large group were the children of civil servants and professionals. Only two percent had fathers in agriculture, and not even one percent were from blue-collar families.

Below are several developments that are related to the inegalitarian trend in educational access:

1. The expansion of Secondary and Tertiary Education In 1950 less than one-half on the high school cohort actually attended a high school, and less than one-half of these took the college preparatory course. Even at that time, however, the college prepatory course was the first choice for most young people. Since then, the secondary system has expanded so much that, today, there are places for virtually all high school age youth (See table 1). Much of the expansion has been due to the proliferation of private schools, and reflecting the desires of young people, the vast majority of the new places have been in college-preparatory tracks. For economic reasons most young people would prefer to attend a good public, upper secondary school; however, many finally decide that their changes for success in the university competition are better served by the private sector.

The rapid expansion of secondary education has been paralleled by an impressive expansion at the tertiary level enabling at least half the high school graduates who wish it, to enter some college or university.

Table 1 shows the increase in the number of students completing the high school academic track, that is, 68 percent of the age group in 1980. In the fifties, surveys suggested that about 40 percent of all high school youth sought a place in a university. Today, over 80 percent seek to enter a higher educational institution. The majority of those seeking a place persist until they get one. The growing demand for higher education has enabled massive expansion so that, now, Japan has more higher educational institutions than any nation except the United States. Possible, even a greater percentage of Japanese youth attend these institutions than do their counterparts in the United States.

TABLE 1

HISTORICAL TRENDS IN NUMBERS ENROLLED AT THE SECONDARY AND HIGHER EDUCATIONAL LEVEL, AND RELATED INDICATORS

Year	Number in upper secondary	Percentage of age cohort	Percentage of upper secondary students in university preparatory	Percentage of university preparatory in private school	Percentage of all high school graduates going to university	Percentage of university preparatory who go to university	Number in universities and junior colleges
1900	121,171	2.9	4.7	0	3*	60*	1,620
1910	259,734	15.9	2.4	0	2*	80*	5,821
1920	974,223	25.0	1.0	0	1*	90*	9,696
1930	1,047,223	36.1	1.9	10.9	2*	90*	46,690
1940	1,118,136	46.0	1.8	11.5	2*	90*	81,999
1950	1,935,118	69.3	65.2	24.1	20*	30*	447,486
1955	2,592,001	78.0	59.8	33.2	18.4	30.8	589,904
1960	3,239,416	80.0	59.3	49.4	17.2	29.0	698,726
1965	5,074,059	83.8	59.4	55.3	25.4	42.8	1,069,377
1970	4,273,506	89.2	58.4	52.0	24.2	41.4	1,645,062
1975	4,333,079	90.0	62.9	48.0	34.2	54.3	2,020,135
1980	4,621,936	92.0	68.2	41.2	31.9	46.8	2,124,915

NOTE: *Estimate

Source: Ministry of Education. Educational Statistics in Japan: Present, Past and Future, 1971.
Mombus no. Wagu Kuni no Kyoiku Suijun, 1981.
Momubus no. Tokei Shosaka: Kyoiku Teihyo no Kokugai Kikaku, 1982.

The ruling conservative party which traditionally viewed higher education as a vehicle for elite training and the development of professional manpower has not allowed public higher education to satisfy the demand, but limited expansion primarily to technical fields. Thus, private universities have been the major source of response to expansion. Whereas they provided only 55 percent of the places in 1950, today they account for over 80 percent of them.

While high schools have graduated increasing numbers of students, and while the overall standard of high school education has certainly improved, not all higher education aspirants seek an academic experience or are capable of doing demanding academic work. Indeed, a large proportion of them say they are continuing simply because their friends are doing the same. Others enter because it will add to their chances for marriage. These varied motives have put pressure on the universities to diversify their programs. The most obvious response has been the proliferation of junior colleges which have proven especially popular for young girls, who make up over 75 percent of the student body. Most of the junior colleges offer low-cost finishing courses in subjects such as literature or social studies, while a few specialize in nursing or child psychology courses that might be suitable for kindergarten teaching.

Distinct from junior colleges are a group of postsecondary specialized schools (kakushi gakko) which aim at providing such vocational skills as computer programming, English translation, tour guiding, electronics, and similar areas; these schools have become especially popular over the last decade. Clearly, we can say that the high school's expanding supply of graduates has transformed the former elitist character of higher education so that a variety of needs and abilities are now accommodated.

The rising aspiration for higher education has been accompanied by an exceptionally strong demand for certain opportunities, especially those of acceptance into the elite universities or into a medical faculty at any university. Consequently, there have been a few instances where well-placed individuals exploited these situations for personal gain. Exhorbitant entrance fees became commonplace at most of the private medical faculties, and an applicant's ability to pay became more important than his ability to study. In most cases the revenues from these fees were turned over to the universities for institutional development, but there were instances of individual profiteering, as well.

Regardless of the amount an individual paid to get accepted to a private institution, there were no guarantees of the quality of the education he would receive. Given the general laissez-faire attitude toward educational standards, many private institutions permitted their student-teacher ratios to rise to alarming levels, sometimes in excess of 100 to one. These conditions were partially responsible for the vigorous protests that rocked Japanese higher education during the late sixties. The outcome was a new law to establish the Private School Promotion Foundation. This foundation, established primarily with government revenues in 1971, has gradually devised policies to reward those private universities which upgrade the quality of their educational programs. Evidently, the expansion which first invited opportunism has now stimulated a healthy counteraction.[15]

2. Judging One's Ability The reforms brought about by the Occupation caused major transformation in the institutions regulating the examination competition, and, initially, this caused much confusion. Middle schools, which previously had been the original point of competitive selection,

became compulsory. Thus, far more youth came to complete nine years of academic education, and hence were in a position to compete for university entrance. Higher schools, which previously had been the main focus of "exam fever," were disbanded. In their place the three-year comprehensive high school was established. Both the academic and general track of these high schools provided young people with the qualifications necessary for university entrance, and many more places were created in these universities than had been available in the higher schools of the older system. Thus, the new system was providing far greater numbers of youth with the paper qualifications to compete for university entrance. The large majority of the new wave of university aspirants hoped to earn the top prize, that is, passing the exams of one of the elite universities. These institutions, however, could accommodate only a small fraction.

Inevitably, many of the young people were disappointed by their failure, and, at least in the early years, large numbers tended to express this through drastic measures, including suicide. The youth-suicide rate sharply accelerated through the mid-1950s and then began a steady decline that continues into the eighties, suggesting that youth gradually became more realistic about the competition.

A number of "early warning" mechanisms have evolved to help young people and their parents understand their prospects in the exam competition

(1) Cumulative knowledge is conveyed through the media that many fail despite good school records and outstanding ability.

(2) There is an abundance of magazines and books providing information about the system and "how to beat it." For example, there are books which detail past competition rates for every faculty of every university, average scores on standardized achievement tests for

past entering classes, and the most frequent high school alma maters of these classes. Other books provide the questions used in past entrance exams for leading universities, along with suggested answers.

(3) A series of tests have been developed to provide norm-referenced indicators of individual ability, often given as early as in kindergarten. Most important, however, are the "mock tests" administered nationally by Obonsha and other private companies, which provide students with their scores compared with the average scores of the individuals who succeeded in in entering top universities the previous year.

(4) Youth can apply and take admission exams at a host of primary and secondary schools that are known to excel in placing students in the top universities. Those who are offered admission to these schools, whether they accept or not, gain confidence in their chances to get into a top university.

The overall effect of these early warning mechanisms has been to inject greater realism into the educational planning of young people. However, by class the response has varied. For those with money, the early warning has often stimulated an intensification of expenditure. In contrast, the less affluent on receiving discouraging signals have tended to reduce their ambitions.

3. Choosing the Right School[16] It is important to recognize that all secondary schools operate under national school standards that require them to provide a common curriculum. The standards for the curriculum have been set by the Ministry of Education with the aim of developing a well-rounded young person, not simply a youth capable of passing exams. Thus, the high school curriculum includes mandatory physical education, music, and so on.

Schools are not really able to skimp on these subjects, even though the student's performance in these areas will not affect his chances for university entrance.

Given the realities of student demand and the uniform curriculum standards, schools have developed an interesting range of responses. Some schools have responded by rejecting the need to offer special preparation for the exams, arguing that the best preparation is that outlined in the official curriculum. Most schools, however, have bent in some way to the exam pressure; and the exam-oriented adaptations are probably the major theme in postwar Japanese educational innovation.

Public Upper Secondary Education Schools in the public sector are somewhat under the jurisdiction of local boards who are somewhat obliged to provide secondary opportunities within a reasonable distnce of a child's home. Most boards have a number of upper secondary schools under their jurisdiction and can consider various options for assigning students. The American Occupation proposed the neighborhood-school principle whereby children would be sent to the upper secondary school nearest their home; they also proposed that some effort be made to insure that all secondary schools be fairly identical in quality. This option has come to be called the small-district system. At the opposite extreme is the large district which includes five or more schools which are explicitly recognized as varying in quality; students with the best lower secondary performance are given first option on the best school, and so on down the line, so that the weaker lower secondary students tend to get grouped in a low quality upper secondary institution.

In the immediate blush of postwar democratic idealism, most prefectures organized their upper secondary schools according to the

small-district principle. However, it was soon perceived, or believed, that the democratic mode of organization would cause all students to sink to the lowest common denominator, at least in academic terms. Many districts decided that the small system would deprive the best students of their rightful opportunity to be exposed to the stimulation of other bright students and exceptional teachers; thus, over time, may prefectures abandoned the small district for medium and large districts. In the large district system an academic hierarchy is established with a particular school designated as the recipient of top scorers in a combined average of middle school grades and an upper secondary entrance exam. Another school is designated as second best, and so on; only the top school offers a college prepatory course, but there will be others which offer a combination of academic and vocational tracks and possibly, some schools which are exclusively vocational. This arrangement tends to relegate weak students to the vocational tracks. These tracks thus acquire a stigma which makes them the last choice among most young people seeking upper secondary education. Many youth who end up with an assignment in a public-sector vocational school thusmake an effort to move out into the private sector.

In the prefectures that have adopted the large system, typically, the school with the longest tradition was designated as the main academic preparatory school. These famous older schools were once known not only for their academic excellence but also for the prowess of their students in national athletic competitions such as the annual baseball match. However, their teams now lose out, at an early stage, to teams from schools that are lower in the academic pecking order. Thus, the large-district system fails to serve the whole-man educational ideal.

Only those districts run by progressive governments have maintained the small system; Kyoto, under Governor Ninagawa, was for many years a lone example. Schools in small-district systems strive to offer a full program of both curricular and extracurricular activities, but, increasingly, they find that third-year students are unwilling to participate in anything that competes with their studies. Moreover, a large segment of the public remains doubtful of the academic effectiveness of public schools that recruit from a small district and attempt to provide a comprehensive program with multiple tracks and a full program of extra curricular activities. The parents of high academic performers tend especially to send their children to outstanding private schools, rather than take a risk in the public sector.

National Schools Distinct from the public schools are a small group of national schools which are the "experimental" schools for the teacher-training facultiies of national universities. Parents have always assumed that these schools ought to provide superior education, as they are supervised by educational experts and have the opportunity to select the most able teachers. The competition for entrance is thus quite severe. In general these attached schools have resisted parental pressure for special admissions or an exam-oriented curriculum, and simply try to provide a stimulating and somewhat avant-garge education. But to the extent that the graduates of the national schools fail to do well in the university competition, the public may disparage their innovative educational ideas. As a result, several national schools bias their chances for good exam results by picking top applicants and offering exam-oriented instruction within the framework of the official curriculum.

Private Schools The notion of opening up a schools to serve the public or realize some personal ideal or whim is firmly rooted in the Japanese educational tradition. The constraints on the scale and program of public upper secondary education combined with increased demand has provided abundant opportunity for the growth of the private sector. Private schools have succeeded to the extent they can offer an interesting program, a safe ticket, or simply hope.

Most of the earliest private schools were established to realize a special educational goal cherished by their founders. The majority were founded by foreign missionary groups and benefited from the input of foreign funds and teachers.[17] A few were established by local figures who wished to create independent men (Waseda) or women (Tsuda), or individuals with a creative and free spirit (Tamagawa Gakuin). Over the years these schools acquired their loyal alumni who often sent their children in turn. In the postwar educational expansion their fame increased, in considerable part because they had been around for so long and offered an alternative to public education. The quality of their applicants improved so they tended to become more selective, even to the point of passing over the children of alumni. And as they became more selective, their graduates did even better on exams, thus further enhancing their reputation. The improved reputation enabled an increase in tuition, hence better buildings and facilities. In many cases it was questionable if their apparent success was consistent with the special goals that led to their foundation.

Since they are managed by private bodies, these schools are more capable of introducing innovations. One that has proved especially popular is providing children with a guaranteed route to a university, thus relieving them from the uncertainty of the standard exam cycle. In the

extreme case the private school is actually a system from kindergarten through the university, such as the Doshisha of Kyoto or Aoyama Gakuin in Tokyo. The lower levels of these systems have fewer places than the higher ones. Thus, if an child enters the kindergarten of the system, so long as the academic performance is acceptable, he os she can eventually find a place in the system's university. Parents are prepared to pay the extra price of private tuition in order to preserve their child's ticket to the university.

The provision of a ticket has some potentially promising educational advantages. When the school and its children know that they will not have to face crucial entrance exam two years hence, students feel under less pressure to become full-time grinds, and the schools can feel free to offer a broadly based educational program consisting of both academics and extracurriular activities. Thus, the sports and music programs at certain of the private schools are impressive. On the other hand, the offering of a ticket may invite a total disregard of study, so most private schools assert their option to fail a minority.

Nada High School of Kobe, one of the most famous private secondary schools, does not have an attached university, and therefore cannot offer a complete ticket. However, by taking exceptionally able students in at the lower secondary level and giving them a rapidly paced academic course over an uninterrupted six-year stretch, it is able to provide a firm background for the university exams. Students are expected to participate in extracurricular activities and are discouraged from attending exam preparation schools at night. Indeed, the majority of Nada's graduates enter top universities. Competition to enter Nada is keen; annually, busloads of children come from as far as Hokkaido (over 1500 miles) to sit

for Nada's entrance exams. Rohlen's recent study indicates 60 percent of the fathers of Nada students had received a university education, in contrast with a 10 percent for fathers of that generation.[18]

Apart from the exceptional private, upper secondary schools are many others, usually somewhat lower-priced and less adequately provided for, which offer lower secondary graduates of average potential an option to the vocational tracks that they are offered in the public system. These less prestigious schools offer their entrants hope: the schools do cover the academic curriculum, and if the students apply themselves, they may make up for their past, weak performance and yet compete successfully for a top university. While most students from the lesser private schools end up in lesser universities, a few do fly high.

4. The Ronin Phenomenon Along with selecting the right school, some students attend special nighttime exam-preparation schools and may obtain tutors to increase the effectiveness of their private study. Nevertheless, for a large number of them, these efforts prove insufficient. Every year a substantial group fail to pass the annual entrance exams of the university first on their list.

A failure of this kind, in most contemporary educational systems, implies that the individual is somewhat not up to the standard and hence ought to pursue a lesser goal; moreover, the institution that rejects the applicant may keep a record so as to automatically pass over any who tries a second time. In Japan, however, the thinking is different. A first-time failure is not considered an indication of the individual's inherent ability. Rather, it suggests that the individual was poorly prepared or did not try hard enough. Thus, the universities keep no formal record of who fails, and applicants are free to try as many times as they wish.

If their parents can support them, many students who "fail" in the exams decide to devote a further year of special study to exam preparation instead of entering a lesser university or the labor force. The youth who take this direction are known as ronin, and the number has steadily increased from 1950 into the late sixties after which it leveled off. Some are content with studying by themselves, but the majority seek the aid of special yobiko or preparatory schools which provide a stiff regimen of exam-oriented lectures, often taught by the very individuals who have writte the exams to be taken by the students. The prevalence of the ronin year has led some to say that the exam pressure has converted the official 6-3-3-4 system into a 6-3-3-1-4 system.

5. Is Higher Education Worth It? Over the postwar period, the total number of places for new higher education entrants has increased rapidly, but the number of places at prestige universities has remained small. Tuition at the national universities has increased somewhat but is still modest. In contrast, tuition and fees at some of the high demand faculties of the private sector have risen to astronomical levels (over $50,000 for six years at some medical faculties); even in the normal faculties, four years of tuition and fees may exceed $15,000.

Along with the increase in the cost of higher education is the increase in the cost of preparing for higher education. Virtually all of the new services enabling young people to improve their changes such as attending the right school, going to a juku or during the ronin year to a yobiko, or even taking a mock test cost money.

At the beginning of the postwar period, it was assumed that higher education would enable a young person, especially a male, to obtain a secure well-paying white collar job. Thus families were prepared to invest

whatever was required to facilitate their children's prospects. But by the early seventies it was becoming apparent that many graduates of higher educational institutions even among the males were no longer securing attractive jobs. Increasing numbers were starting in service and even blue collage work and with employers who could not guarantee job security. This situation was further aggravated in the late seventies as the Japanese economy was affected by the world recession. Also during this period, the lifetime differential in the income stream derived from blue and white collar work steadily narrowed. One report estimated the differential at 80 percent in 1976 compared with 64 percent in 1960.[19]

In sum, over the postwar period, in pure monetary terms the private returns to an investment in higher education have steadily declined. Increasing numbers among the families with modest income, recognizing this, have decided to forego the expense of sending their children on for advanced education.

In contrast, for well-to-do families, higher education has become an essential status symbol. Apart from the degree's value in the job market, it has become a prerequisite for a good marriage and for participation in community organizations. Sons must complete a four year college program and daughters at least a junior college program.

The differential salience of higher education as a social good has thus led to a widening of class-based investment patterns. While many low to modest income families forego investment in higher education, the more affluent families are prepared to invest heavily both in the preparatory costs for higher education and in the normal tuition and fees. The widening differentials in investment help account for the trend towards greater disparity in attendence rates.

6. Adolescent Culture Concern with choosing the right schools, and then doing well once there, has profound effects on young people's values and their use of time. In recent years there have been a number of excellent studies that document these aspects in a comparative perspective. Perhaps most informative are the findings from a 1978 survey jointly conducted by the Prime Minister's Office in Japan and the Department of Health, Education and Welfare in the United States.[20] Over 1500 students from a variety of high schools in each country answered a number of questions concerning their lives and values. This excellent study clearly shows that the primary concern of Japanese youth is school and study, and that most of their associations and activities are school-related. In contrast, American youth are more interested in extracurricular activities, and they have more social relationships outside of school including considerable involvement with members of the opposite sex.

The extraordinary commitment of Japanese youth to their studies is a large part of the explanation for the exceptionally high levels of achievement in several, recent international evaluations of academic achievement. But additional factors also need to be taken into account. The Japanese school year is longer than it is in most other societies which thus enables Japanese youth more time to cover the material, and Japanese school texts move more rapidly through more subjects than do the texts used in other public educational systems, especially those found in the United States; the typical Japanese ninth-grader attacks problems in mathematics that few American students encounter until their first year of college, if ever.

Japan's higher academic standard is not "caused" by the adolescent culture, but, the culture has supported the academic emphasis in the past.

An important development of the last several years, however, has been the emergence of new trends in youth values. The dominant new trend appears to be towards greater equality and individuation and a more muted emphasis on achievement. While this trend does not threaten the existing system, it does result in modest changes in style and emphasis. Young persons are more willing to settle for second and third choices in universities; they expect to be given more responsibility and voice in school and work relations, and they seek more time for their own private pursuits.[21]

Notwithstanding, there are increasing signs that a counterculture is emerging which simply rejects all that is involved in the search for academic success and turns instead towards hedonism and even hooliganism; the most obvious expression of the countercultural trend is seen in the bosozoku gangs of motorcyclists who terrorize the streets of the central cities and certain highways on weekend nights.

THE CRISIS OF LEGITIMACY

On three occasions since World War II, Japanese youth have rebelled. In the first two instances, the youth were university students and mounted a protest primarily against questions of national and international importance, notably Japan's alliance with the United States. In the second of these protests beginnin in the mid-sixties, educational issues were also emphasized. In response, the national government formed several commissions which eventually proposed modest reforms of the educational system, subsidies for private universities, a new entrance exam system for national universities, a diversification of the high school curriculum. Now once again, Japanese society is confronted by youth rebellion, but this time they have not taken the trouble to organize and articulate their concerns. Instead they ride motorcycles and beat up teachers.

The actual incidence of youth rebellion is still quite modest, especially when considered in comparative terms. For example, in 1976 the arrest rate for Japanese youth was four per 1000 compared to 79 in the U.S., reported incidents of students assaulting teachers in Japan compared to over 7,000 in the U.S.[22] While the incidence is low, the trend is upward, and parents as well as national leaders are deeply concerned. However, the older generation does not seem to understand what youth is saying. Because the current wave of youth rebellion is apolitical, they assume it is due to the excessive competitiveness of the educational system and its failure to inculcate moral standards.

However, my analysis leads to a different interpretation. I would suggest that the educational system is facing a fundamental loss of legitimacy. The young rebels in their early years had been told that education provided the key to a secure life so long as they studied hard. While the young people did not always feel comfortable in the orderly and self-denying environment of the schools, they nevertheless conformed. Thanks to the effectiveness of primary education, the great majority acquired the basic cognitive skills and attitudes necessary for academic advancement. But as the young people reached adolescence, they began to realize that the future might not be as bright as they had imagined, that adequate academic performance was not enough, and that good jobs might not be available. They began to ask why they should work so hard in school and observe so many restrictions when it might not get them anywhere. Meanwhile, they saw certain of their peers moving ahead in school or transferring to prestigious "right schools" due in large part to the special coaching they could afford to purchase from tutors and preparatory schools. Thus, the young people came to appreciate the contradiction

between the meritocratic dream they had internalized and the realities of the social selection they were experiencing. Their anger boiled, and with increasing frequency they sought for avenues of expression. The disparity between the system's effectiveness in warming up youth with the required cognitive skills and motivation and its inability to provide equitable opportunities at the advanced levels has created a crisis of legitimacy.[24]

Young people questioned the drudgery of the educational system, its moral prudishness, and the class-based inequities in outcomes. Unfortunately, there is little evidence that Japan's leaders understood these concerns. Over the past year, extensive commentary has appeared in the national media and from July of 1984 a special council directly under the Prime Minister will be formed to review the current situation and propose reforms. Thus far the official approach is censorious to youth and to the "American" features of the educational system which are said to incite youth towards lawlessness. The official discussion fails to recognize the failure of the current system to honor its egalitarian committments, nor does it recognize the fundamental repressiveness of the educational experience. Thus the crisis in the legitimacy of Japan's educational system is likely to deepen.

CONCLUSION

I began with the irony that educational reformers are looking to Japan for ways out of their educational malaise at the very time that Japan is experiencing a crisis of its own. The carrot behind the Japanese educational system has been the employment opportunities it has provided to dedicated students. With this carrot ahead of them, students traditionally were prepared to exert extraordinary effort to their studies: enrollment

ratios steadily increased and achievement levels reached an impressive level, even when compared to more selective European systems.

There are certainly many features of the Japanese system that deserve the careful scrutiny of foreign observers. The overall budgeting procedure as well as the way schools utilize their revenues are impressive both in terms of efficiency and effectiveness. The integrated rituals of the school calendar and the high level of communication achieved between school personnel are also noteworthy. The rich curriculum, including at the primary level the inclusion of music and art along with the sciences and math, should invite interest. Finally, the techniques teachers have developed to maintain an orderly classroom, to maximize student participation, and to make effective use of groups should be of interest.

However, in considering these innovations, it is useful to keep in mind that they have served Japan well in warming up educational demand, but have been less effective in channeling educated graduates into the labor market.

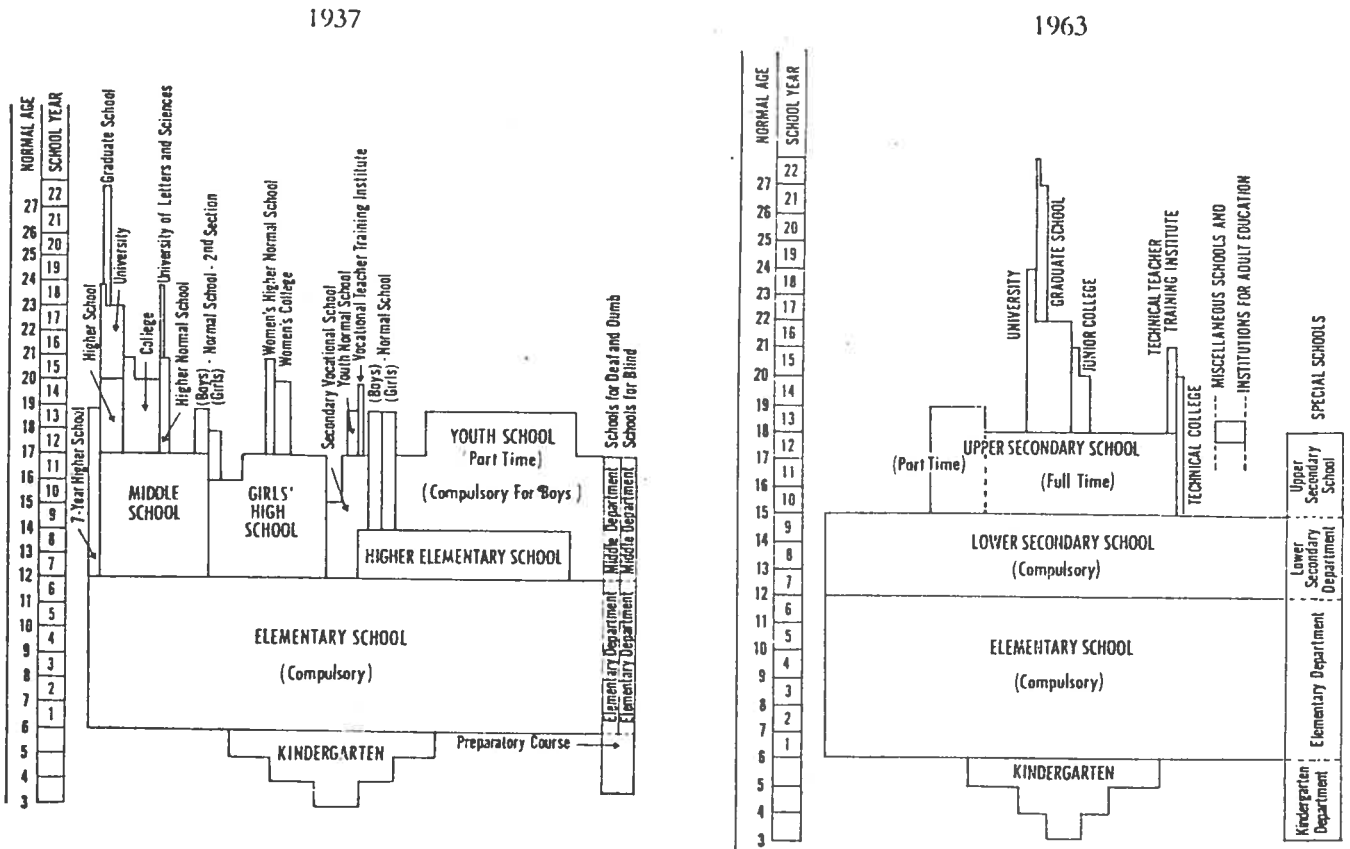

FIGURE 1 SCHEMATIC CONTRAST: THE JAPANESE SCHOOL SYSTEM

SOURCE: Herbert Passin, Society and Education in Japan, pp. 308-309.

NOTES

1. The imbalance between warming up and cooling down has been emphasized by Ikuo Amano.

2. Herbert Passin Society and Education in Japan (New York: Teacher's College Press, Columbia University, 1965), p.

3. See Makato Aso and Ikuo Amano. Education and Japan's Modernization (Tokyo: Ministry of Foreign Affairs, 1972).

4. For a survey of changes introduced during this period, see Ronald S. Anderson, Education in Japan: A Century of Modern Development (Washington, D.C.: Government Printing Office, 1975). pp. 61 ff.

5. See William K. Cummings. Education and Equality in Japan (Princeton: Princeton University Press, 1980) pp. 40-76.

6. For a summary of the surveys, see Cummings, op. cit. 212-15.

7. For 11 year-old children, Japan's mean, coefficient of variation, and standard score on the motivation scale are 21.7, .35, and .19 respectively, compared with 16.7, .47, and .02 for all other advanced societies. For 14 year-old children, Japan's mean, coefficient of variation, and standard score on the motivation scale are 31.2, .47, and .20 respectively, compared with 22.3, .53, and .01 for all other advanced societies. These figures are based on my calculations from data found in L.C. Comber and John Keeves, Science Achievement in Nineteen Countries (New York: Wiley, 1973).

8. A full introduction to these surveys may be found in National Institute of Mathematics, Nihonjin no Kokuminsei: Volume III [The Japanese national character] (Tokyo: Shiseido, 1975).

9. The 1975 social mobility survey, managed by Professor Kenichi Tominaga of the University of Tokyo, is composed of two parts. Survey A on social mobility was administered to 2,724 respondents from a national probability sample of 4,001 (68.1 percent response rate). Survey B on occupational prestige was administered to 1,296 respondents from a sample of 1,800 (72.0 percent response rate). The basic report is 1973-Nen SSM Chosa: Kiso Tokeihyo [Report of basic statistics from the 1975 SSM survey] (Tokyo: 1975-Nen SSM Zenkoku Chosa Iinkai Jimukyoku, 1976). The calculations reported in the text are the author's own.

10. Extensive data by prefecture on educational expenses are found in the basic educational statistics collected by the Ministry of Education and published periodically. From these, total operating expenses per primary-school student by prefecture for 1972 were computed. Forty of the 46 prefectures spent between 135,000 yen and 170,000 yen per student or varied within a range of 30 percent. The most extravagant prefecture. Tokyo, spent 208,700 yen per student, or 56 percent more on operating expenses than Kumamoto, with 133,333 yen per student. Within prefectures, operating expenses per student were adjusted to take account of the scale of schools. As for capital expenditures, most prefectures spent more per student in rural and isolated schools.

11. These laws are summarized in Ministry of Education in Japan 1971: A Graphic Presentation (Tokyo: Government Printing Bureau, 1971). pp. 92-109.

12. Ibid., pp. 56-63.

13. The tables are reported in Cummings, op. cit., p. 226.

14. Shukan Gendai, April 8, 1976.

15. One discussion of the private sector is Cummings, "The Japanese Private University." Minerva 1 (July, 1973): 348-371.

16. Thomas Rohlen in Japan's High Schools (Berkeley: University of California Press, 1983) provides an excellent summary and ethnographic descriptions of several Japanese high schools including Nada, mentioned below.

17. See Iva Burnstein, Protestant Colleges for Men in Japan. (University of Michigan, Comparative Education Series, No. 11. Ann Arbor, 1967).

18. Rohlen, op. cit., p. 130.

19. Nobuo Shimahara, Adaptation and Education in Japan (New York: Praeger, 1981), p. 93; Also seeKatsuji Okachi, "An Analysis of Economic Returns to Japan's Higher Education and its Application to Educational Financing," Journal of Educational Finance 9 (Fall, 1983): 185-212.

20. Reported with an English summary in Nihon Seinen Kekyusho, Nichibei Seinen Hikaku Chosa Hokokusho., (Tokyo, 1979).

21. Cummings, op. cit. pp. 172-176.

22. Statistics reported in Rohlen, op. cit. pp. 297-98.

23. I am indebted to Professor Hidenori Fujita of Nagoya for some of the ideas presented here.