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- 12 Kitayama, "Kaigai hōsō shōshi (ichi)", p. 114.
- 13 Kitayama, *Rajio Tōkyō: Shinjū Wan e no Michi*, p. 110.
- 14 Kitayama, *op. cit.*, p. 178.
- 15 *Hōsō* was NHK's monthly magazine.
- 16 Kitayama, *op. cit.*, p. 178.
- 17 Kitayama, *op. cit.*, p. 193.

## Vocational education and training in the Republic of Korea: Trends and contrasts

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### Introduction

As the Republic of Korea prepares for membership of the OECD élite "club" of developed industrial nations, an intense debate is under way on the adequacy of the nation's education and training system. Alleged deficiencies include a lack of vocational as opposed to academic orientation, too much emphasis on higher education; a mismatch between the levels of skilled manpower demanded by the market and that produced by the education and training system; and too great an emphasis on "quantity" rather than "quality" of trained manpower, especially that produced by the higher education system.

Korea's vocational education and training (VET) system is often assumed to be very different from those found within the (current) 12 nations of the European Union. Yet some features of the existing Korean system have been deliberately based on European models, and many of Korea's current problems echo those found in Europe and indeed the wider "industrialized" world of OECD which Korea is about to join. While institutional environments differ, this paper will stress the importance of underlying economic factors in explaining the challenges facing national VET systems and the need to use economic incentives to reinforce VET patterns and practices.

International comparisons of VET are fraught with difficulties to an even greater degree than, say, comparisons of unemployment rates. Nevertheless, such comparisons are made and have become increasingly common in the last decade. This reflects the increasing globalization of markets for goods, services and capital, the accumulating evidence that workforce skills and training are a key factor in promoting productivity, and the fact that government policies to enhance national skills bases are one of

the few remaining "legitimate" means of improving national competitiveness within the changing regional (European Union or North American Free Trade Area) or global (GATT/WTO) free trade networks.

### The Korean system

The process of the modern Korean education system's development may conveniently be divided into four stages. The foundation stage, from 1945 into the 1950s, paralleled the general construction of the Republic of Korea's governmental infrastructure. The second stage began in the 1960s, when Korea's per capita GNP stood at around US\$100, a level similar to that of the newly emerging nations of sub-Saharan Africa. The second stage continued throughout the 1970s, including the realization of general elementary education, the labour force being formed mostly from primary school-leavers. There was rapid quantitative growth with non-competitive entrance to middle school. By the 1970s, when per capita GNP had reached US\$1,000, there was general secondary education and the labour force consisted basically of secondary school graduates. The 1980s, which saw per capita GNP grow from US\$1,600 in 1980 to US\$5,700 in 1990, have been characterized as a third stage, one of qualitative enhancement. Commentators argue that the 1990s should form a fourth stage, in which advanced education standards will need to be realized.

Today Korea's formal education system is essentially a single US-style 6-3-3-4 year ladder, which delivers a standard national curriculum. However, it is interesting to note that by 1991 the kindergarten enrolment ratio had reached 61%. Six years of primary or elementary school begin at age 6, followed by three years of middle school from age 12; compulsory education still formally ends with year 9 at the age of 14-15. The middle-school stratum includes "trade" schools and "miscellaneous" schools, but these appear to play a relatively small role.

Formal vocational education emerges strongly at the high school level, with distinct higher trade school (and miscellaneous school) streams supplementing the academic high school system from year 10 (age 15-16) to year 12. In 1988 academic high schools accounted for 68% of all students and in 1992 the high school enrolment rate stood at over 89%. From 1997 a fourth high school year is planned to provide improved vocational preparation for academic programmes. Thereafter students join the various strands of Korea's higher education system.

While Korea's system is characterized by strong directive government control on curriculum, examinations, etc., much of the provision is actually by the (regulated) private sector. Private-sector provision increases with education level, from 29% of high schools to 76% of universities. Since it is

known that spending per student is much lower in private schools, the quality of private provision is an area of continuing concern.

However, the size of the private system coupled with (admittedly relatively modest) fees paid even within the public system is indicative of the priority Korean parents give to their children's education. Thus in 1985 an official estimate put the share of educational expenditure in total household consumption at 12% for rural areas and 7.8% for urban ones.

Overcrowding - at least by European/US standards - is another feature of Korea's current system. Thus, in 1991 the nationwide average number of pupils per classroom was almost 41 in primary schools and just under 50 in secondary schools; the ratio of students per teacher stood at 34 in primary schools and 24 in secondary schools. However, for the six largest Korean cities the average numbers of students per class and per teacher were appreciably above the national average.

In 1988 the gross advancement ratio (the ratio for entrants to higher education, including repeaters, over the number of high school graduates) was 52%. Gross enrolment rates in Korea's higher education system expressed as a percentage of the relevant age group rose from 16% in 1980 to 33% in 1984 and 37% by 1988.

Over the whole period 1961-1989 the average annual growth rate in students enrolled at universities and colleges for four-year courses was 10.7%. Some 79% of Korea's higher education students were reading for a four-year degree and 21% studying for a two-year junior college diploma. Across all four-year degree enrolments the "hard" science/technologies areas (engineering, natural sciences and medical sciences/pharmacy) accounted for almost 35% of the total. Teacher training accounted for over 7% of enrolments. Social sciences, languages and humanities together comprised over 44% and other subjects almost 13% of the enrolment total.

Outside the formal education system, VET falls within the jurisdiction of the Ministry of Labour, which is responsible for the network of public-sector vocational training centres spread across the country. The current framework stems from the Korea Technical Qualification Law of 1973 and was developed in the mid-1970s. From 1977 the Korea Technical Qualifications Testing Agency acquired the right to national qualifications testing, and in addition the Korea Vocational Training Management Agency (renamed Korea Manpower Agency from 1991) was established to co-ordinate vocational training, youth skills olympics and national qualifications testing.

While over 730 occupational titles exist, covering vocational levels from assistant to professional/master craftsman, and the overall average test pass rate stood at 78% in 1991, the system remains small in relation to the economy as a whole. In 1991 just over 62,000 applicants successfully

completed the Korea Manpower Agency tests at all levels, which is hardly a large figure for an economy with a GNP of almost US\$282 billion, GNP growth of 8.4% in 1991 alone, and a population of 43 million.

The *chaebol* business conglomerates and other large enterprises have extensive and impressive training facilities for their employees, who enjoy considerable job security along the Japanese model within "internal" corporate labour markets. In some cases these arrangements include corporate "universities". However, the role of national occupational qualifications in the general labour market is unclear, except in the public sector where formal VET qualifications attract enhanced remuneration and promotion prospects.

### European and Korean parallels

Like two well-known European examples (France and the Netherlands), Korea has developed a distinct formal stream of vocational education within its secondary schools - the vocational/technical high schools - offering three years of vocationally orientated education as an alternative to the academic high school route with its higher education entry focus.

Interestingly, the share of such vocational schools - at around one third of the age cohort - is broadly similar in both Korea and France. In the Netherlands junior vocational schools cater for around 35% of 15 year olds. Moreover, Korean dissatisfaction with this vocational secondary education system has many echoes in France, where the three-year full-time school based VET stream is often criticized for being out of touch with the "real" industrial environment; using old fashioned equipment; and only attracting those pupils with lower ability who are unable to follow the majority's academically focused curriculum.

French commentators frequently (and adversely) compare their country's approach to the "dual" apprenticeship system used in Germany, although it is important to note that traditionally around one quarter of French school leavers have actually entered enterprise based apprenticeships (*apprentissage*). This is a significant figure, but well below the approximately two-thirds of German youth who enter into the "dual" system on leaving school at 15/16 and the three-quarters or more of the German age cohort who pass through the system at some stage, including 18 year-old school leavers and even university graduates.

One key problem underlying the existing French vocational secondary school system is the quality of the qualifications produced - typically the *certificat d'aptitude professionnelle* (CAP) commonly held to represent the weakest, most traditional and lowest level craft certificate. It is extremely difficult to persuade young people and their parents to invest time and

money (often in the form of foregone earnings) in vocational qualifications which are not perceived as of high quality and likely to command enhanced future earnings - one of the key strengths of Germany's "dual" apprenticeship regime.

It was in a deliberate attempt to overcome this problem that a new high level vocational qualification - the *baccalauréat professionnelle* aimed at 18 year-old school leavers and conferring university entrance rights - was introduced in France in the second half of the 1980s. However, as yet most French high school pupils have continued to pursue the traditional "academic" *baccalauréat* route.

Over one quarter of all the young people attaining craftsman-level qualifications under Germany's "dual" system eventually go on to achieve "master craftsman" (*Meister*) qualifications, typically in their late twenties. Such *Meister* combining technical and first-line management skills have often been cited as an important competitive strength of the German economy.

Korea has, of course, experimented with the adoption of such a *Meister* system - notably at the two industrial masters' colleges (Ch'angwŏn and Inch'ŏn). However, to date the total output of "masters" has been small. In part this reflects the obvious problems involved in "transplanting" a foreign training system to Korea, in spite of the acknowledged contribution the *Meister* system has made to Germany's industrial success - notably by combining technical knowledge with training and first-line supervisory skills.

Supporting mechanisms for Germany's *Meister* system which are not found in Korea include the massive "dual" craftsman training apprenticeship system from which the *Meister* are drawn; the clear and substantial pay differentials available to an individual progressing to craftsman and *Meister* status; the legal obligation to have *Meister* status in order to set up an enterprise, at least in the traditional handicraft trades; and the requirement to have at least one *Meister* in all enterprises undertaking the training of apprentices.

### Korean contrasts

The most obvious contrast between Korea and Europe is the existence of a longer established "mass" higher education system in Korea. In 1980, for example, only around one in eight of young people in the United Kingdom entered higher education, although in recent years the share has passed 30% and is currently projected to be around one in three by the year 2000. Furthermore, the United Kingdom's main employers' association, the

Confederation of British Industry, has called for a new target of over 40% by the end of the century.

Nevertheless concern is already mounting as European countries consider how to fund their growing higher education systems - especially since private-sector provision in higher education is small, compared with Korea. Moreover, the appropriateness of the subject mix being taught within higher education is questioned with particular focus upon the slower rate of expansion in the "hard" mathematics, physical sciences and technology-based disciplines.

In 1992/93 the UK saw the long-established polytechnics, which unlike the universities had traditionally emphasized technical and vocational subjects and local industry linkages, were redesignated as "universities" -- creating a so-called "single tier" higher education system covering over 100 institutions, i.e. all the former universities, polytechnics and the more specialized colleges of higher education. While this may well be justified to avoid confusion, especially in the increasing international dealings of the former British "polytechnics", it is to be hoped that it will not signal a further shift away from the traditional - more highly vocational - strengths of these institutions. This is happening exactly at the the time Korea is planning to establish vocational and technically based "polytechnic" institutions to supplement its existing "open" universities.

### Small and medium-sized enterprises

Across the European Union small enterprises have created three million additional jobs in the five years since 1988, enterprises having fewer than 100 employees providing a total of 53 million jobs in 1993. Meanwhile employment in large enterprises actually declined over the period. Moreover, despite the *chaebol*, small and medium-sized enterprises are significant within the Korean economy. Even among relatively high-technology computer-related companies some 99.9 per cent are small concerns with fewer than 300 employees. In terms of employment, production and value added, these small companies account for 79, 43 and 44 per cent of the sector respectively.

Smaller Korean enterprises clearly face major challenges in terms of recruiting and retaining labour. In 1992 the average wage in companies with 500 workers or more was 38 per cent above that in companies with 10 to 20 workers, while monthly welfare fees per worker in small companies were only 81 per cent of those for larger ones. Labour turnover rates in 1990 averaged 7.4 per cent in companies with fewer than 30 workers, compared with only 1.7 per cent in companies with 500 workers or more.

On the training front the record of small and medium-sized enterprises (SMEs with under 500 employees, using the European Union's definition) is far less impressive. Indeed, it is precisely at this level that significant international differences are most likely to be apparent. The workforce skills deployed by Imperial Chemical Industries in the UK and BASF in Germany (or indeed LG in Korea) are likely to be far more similar than those found in, say, small independent retail outlets or motor vehicle repair shops in London and Bonn, or Seoul.

Case study evidence suggests that the more highly-trained skilled labour forces can significantly raise output per person (labour productivity) in otherwise "matched" plants within sectors which are dominated by small and medium-sized enterprises - for example, clothing manufacture and small private hotels. Nevertheless, the planning of, budgeting for and participation in training declines sharply with decreasing enterprise size across several European Union countries. Thus for example in Denmark in 1990 the proportion of enterprises with a training budget rose from just over one-third in enterprises with fewer than 10 employees to more than three-quarters in those with 250 or more employees.

All enterprises are necessarily reluctant to invest their own resources in training of use to other employers, i.e. in creating "general", "occupation" or "transferable" skills rather than "specific" skills of use only to the enterprise concerned. However, SMEs face particular problems due to their much greater difficulty in retaining skilled personnel. For example, in French industry in 1991 annual percentage labour leaving rates in enterprises with 50 to 199 employees were twice those of large enterprises with 500 or more employees. They are also more reluctant than larger undertakings to invest in training .

It is in relation to SMEs that the various national non-market (institutional) frameworks found across the European Union's 12 member states are most likely to have their impact. Certainly legal requirements to train, as in France where the percentage of total wage bill which must be spent on training activity has parallels in Korea, and "peer" group pressures, as under the "dual" apprenticeship system run by Germany's Chamber of Commerce and Industry, do appear to set some floor under training activity for SMEs, although the operation of the various national systems remains difficult to assess and explain. A European Vocational Training Platform to spread "best practice" was recently recommended to the Enterprise Policy Directorate (DG XXIII) of the European Commission.

## The Future

It is widely considered that Germany has Europe's most impressive and systematic approach to VET, its strengths being particularly marked below higher education levels. However, even Germany faces challenges, notably in terms of the time taken to restructure and modernize the apprenticeship "curriculum" and methods; and mismatches between the output of and labour demand for apprentices trained in particular trades and occupations. These were apparent even before the additional strains involved in absorbing the new *Länder* of the former German Democratic Republic. Nevertheless, if Germany is taken to constitute the closest single model for "best practice" within the European Union context, certain key elements can be discerned.

In institutional terms, balance appears to be a key message from Germany, notably:

- (i) the combination of theory and practice through a blend of college-based and in-plant work, under the "dual" apprenticeship system, with the latter building knowledge of the "world of work" and work discipline as well as specific occupational skills; (ii) the mixture of academic and vocational disciplines so as to produce a rounded apprentice-trained craftsman who has been "trained how to learn"; and (iii) the presence of clear promotion routes in terms of both pay and status (to *Meister* level) following completion of the initial apprenticeship and in the case of *Meister* training itself a blend of enhanced technical and managerial/supervisory skills.

No one would deny the importance of the "training culture" found within the German-speaking world - not simply in Germany itself, but also in Austria and Switzerland and indeed in much of Central Europe that until 1918 was the Austro-Hungarian Empire. However, while acknowledging the "cultural" factors it is important to note how economic incentives can - to use a wooden furniture-making analogy - work with rather than against the underlying "grain" of cultural values.

Thus, for example, German "dual" apprentice trainees receive relatively low pay during their training, allowing training-minded German employers to take on trainees in large numbers and let them focus on training rather than production. In essence, much of the cost of the "dual" apprentice system of "transferable" skills training is borne not by the German employers but by the young trainees themselves and their families, mainly through foregone earnings during their training, and the public sector which funds the colleges used for the "off-the-job" element in the "dual" system. This is, of course, exactly what economic principles would predict if a system of VET aimed at creating "occupational" and "general" skills which are "transferable" between employers and hence which no single employer will have an economic interest in funding. All employers will of course have an interest in, and hence tend to fund, "specific" training of use solely to their own enterprise, but that is a separate issue.

Education generally, and VET in particular, can be viewed as an economic investment decision. In Korea the share of this investment made by the private sector (in practice mainly by parents) rises with the age of young people, while that of the government declines. The willingness of young people and their parents to invest in the future is, of course, an enormously valuable base on which to develop national systems for the "initial" education and training of young people in "transferable", "occupational" and "general" skills. Although continuing training and retraining for adults is likely to become more important in the future as technical change accelerates, it seems that for the foreseeable future the "initial" investments in young people will remain critical. It is while they are young that foregone earnings are lowest, the future pay-back period maximized and other social commitments minimized. Thus sound "initial" training is the bed-rock for future development.

## Conclusion

It is my view that Korea should consider shifting the emphasis in initial education and training towards more vocational areas during the fourth era of its educational development in the 1990s. At the same time, the nation's Confucian "learning culture" could profitably be expanded to encompass non-academic excellence. Technology will help, as the number of jobs subject to the "3Ds" ("dirty", "difficult" and "dangerous") declines even in the industrial sector. However, economic incentives (and disincentives) must also be carefully designed to reinforce curriculum changes, etc., if an affordable, sustainable and successful VET system is to be developed, capable of delivering the skills Koreans will need to earn their living in the 21st century. This, rather than any specific institutional or policy feature, is perhaps the key lesson from Europe's experience.

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## The ethnic and political borders of Mongolia and the resurgence of Mongolian nationalism

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### Introduction

The disintegration of the Mongol empire and the growth of Russian and Manchu imperialism superimposed new political borders across traditional tribal boundaries, separating Mongol communities from one another and from Khalkha, the Mongol heartland, and subjecting them to alien administrative, cultural, religious and commercial pressures. When the princes of Khalkha accepted Manchu sovereignty in 1691, the boundary between the Russian and Manchu spheres of interest in North-East Asia had already been established by the 1689 Treaty of Nerchinsk. While Mongolia's northern border was determined by the 1727 Treaty of Kyakhta between Russia and Qing China and its protocols, Mongolia's southern border emerged gradually during the formation of the independent Mongolian state, at the Qing boundary between Outer Mongolia (Khalkha) and Inner Mongolia.

As part of the Qing empire Mongolia had long been isolated from the outside world and bypassed by modern socio-economic development. With the collapse of the Qing from 1911 Mongolia entered a brief period of self-proclaimed independence but actual autonomy, during which a treaty was concluded with Tibet, but its hopes of reuniting the Mongol people were quickly destroyed. After 1921 Mongolia was Sovietized and entered a new era of nominal independence but even greater isolation, recognized only by Soviet Russia and Tuva - once part of Outer Mongolia. Having earlier become separated from the Buryats, Kalmyks and other Mongol and Mongolized nations in Russia, the Khalkha people now found themselves also cut off from the Mongols of Inner Mongolia and other regions of China.

Mongolia's national independence endured against Chinese and Japanese pressure under Soviet protection and eventually was recognized by