

## **HRD practices in Korea and Singapore\***

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### **I. Introduction: Importance of Training and Skill Development**

Recent studies have shown that training or skill acquisition/improvement is an essential component of high performance work systems (Pfeffer, 1998; Ulrich, 1998; Patterson, West, Lawthom & Nickell, 1997). These studies rebuked the conventional wisdom that the primary sources of success are to be in the right industry, to be large, to be technically and strategically sophisticated, to downsize or reengineer. They all emphasized that the way firms manage and develop people has much greater impact on profits and performance. According to Pfeffer (1998), high performance work systems rely on front-line employee skill and initiative to identify and resolve problems, to initiate changes in work methods, and to take responsibility for quality. All of this requires a skilled and motivated work force that has the knowledge and capability to perform the requisite tasks.

However, it should be noted that training was almost 75% higher in commitment management systems as opposed to control-based management systems.

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Also training was significantly higher in flexible or lean compared to mass production systems.

Researchers in Europe and US share the view that too few organisations act on the insight that knowledge and intellectual capital are critical for success (Ulrich, 1998; Pfeffer, 1998; Gratton, Hope-Hailey, Stiles, & Truss, 1997). According to Ulrich (1998), intellectual capital comes from employee's competence and commitment. Both must exist together for intellectual capital to grow. In this framework, training and development are not only viewed as a tool for enhancing competence by investing in employee learning but they are also regarded as an important element of helping employees cope with increased demands through skill acquisition, developmental experience (e.g., job assignments, task forces, job rotation etc.), action learning and teamwork. As knowledge work increases, growth in intellectual capital — the commitment and competence of workers — becomes more critical for success; that is, skilled employees who are committed to business goals are a company's most important asset. If Human Resource Management(HRM) really emphasizes high standards of performance and quality of product/service, individuals' job commitment would seem important, along with their desire to develop their skills and competencies (Legge, 1989). Intellectual capital would be expanded by raising standards, setting high expectations, demanding more of employees and, most importantly, providing resources to help employees meet high demands.

In a recent study, Patterson et al., (1997) showed that HRM practices taken together account for 19% of the variation between companies in the change in profitability and 18% productivity (in comparison, strategy, 2% & 3%; emphasis on quality, less than 1% for both; sophistication of technology, 1% & 1%; emphasis on R&D, 6% & 8%). Among various HRM practices, it was found that acquisition and development of skills (selection, induction, training and appraisal) and

job design (job variety and responsibility, skill flexibility and teamworking) are significant predictors of both change in profitability and change in productivity. This study clearly showed that investment in people is a source of competitive advantage.

As the importance of HRM practices increases, the HRD professionals should also reinvent themselves to incorporate broader performance improvement responsibilities. Performance improvement has increasingly become an explicit goal of organisations. As a result, the roles of HRD professionals or training staffs have been enlarged to include strategic interventionists and change agents in the organisations; these roles are performed in a different context and require different competencies.

In this article we will look at the recent trends in Human Resource Development in Korea and Singapore that have been renouncing the necessity and importance of strategic and holistic in the approaches to HRD and its professionalization of Human Resource Development specialists. Based on recent surveys and policy literature, we will highlight fundamental trends that we believe are here to stay trends which will continue to increase the stature and role of HRD in order to gain and maintain the competitive advantages of each country.

## **II. HRD practices in Korea.**

### **1. Funding for HRD.**

The World Competitiveness Yearbook (IMD, 1997) ranked Korea the 10<sup>th</sup> out of 46 countries in in-company training (UK was ranked the 31<sup>st</sup>). In 1994 data, Korea was ranked the 26<sup>th</sup> in the public expenditure on education (UK was ranked the 17<sup>th</sup>). This indicates that a growing number of companies have tried to do edu-

cational makeovers of their own workforces. As public schools or vocational schools were not able to catch up with their corporate needs, employers have taken the role of educators. Some of them are pouring millions of dollars and thousands of man hours or person days(PD) in high-school or professional college degree equivalency courses as well as basic skills training. And much of it is being taught inside the company, on company time.

A big Business Group spent around 65 billion won (1\$=850 Won; \$765 million) for education and training in 1997. In 1998, due to economic turmoil, this group plans to invest about 55 billion won (1\$=1450 Won; \$380 million) which is 13% decrease from the past year's figure in Korean currency (about 50% decrease in US currency). From this amount, 7-8% was generally spent for the programs run by the Group Learning Center. As the economy moves into the knowledge-based one, people will increasingly rely on the trainings provided by leading companies in the knowledge based industry (Cook, 1996). In US, Motorola spent about \$150 million (\$56 million for Motorola university) to deliver a minimum of 40 hours of training to each of its 132,000 employees. GE spent about a half of its R & D expenditure (\$1.89 billion) for training and development in 1997.

**Table 1 : Implemented/Planned Training of ABC Business Group ('95-'97)**

Classification	1995	1996	1997(Planned)
Total Training Volume(person-hour)	8,261,205	10,553,710	12,346,894
Total Training Cost(hundred million won)	1,086	1,060	1,311
Training Days per Employee(days)	9.7	12.0	13.0
Training Cost per Employee(won)	1,016,000	937,000	1,083,000
Total Training Cost per Total Sales (%)	0.36	0.31	0.32
Total Cost per Payroll (%)	4.57	3.68	3.07

Source: Internal report of 'ABC' Business Group.

Table 1 shows the Training and Development statistics of A Business Group in 1995, 1996 and 1997 (estimated). This business group conducted total 8.3 million, 10.6 million, and 12.3 million person-hour of education and training in 1995, 1996, and 1997, respectively. Training days per employee were 9.7 days, 12 days and 13 days in 1995, 1996, and 1997 while cost of education and training as a percentage of payroll has been decreased from 4.57% in 1995 and 3.68% in 1996 to 3.07% in 1997. And percentages of daily participants in education and training among total employees have been 3.58% in 1995(3,825 persons), 4.32% in 1996(4,886 persons) and 4.72% in 1997(5,716 persons). This data indicate that the business group provides increasingly more extensive training for larger number of employees but with less proportion in employees' payroll, either because of increase in payroll of each employee or because of efficiency in the implementation of education and training or both. But, given more than 10% increase in training and education cost between 1996 and 1997, decrease in the percentage of education and training cost over payroll would be due to the increase in payroll itself, rather than increasing efficiency or productivity associated with corporate education and training.

For the development of skilled production workers, Korean companies are subject to the vocational training law, which demands in-house training (e.g., skill-acquisition training) for unskilled graduates from high- and middle- schools and skill-improvement training of existing workers. Since the law was introduced in 1974, companies with 150-500 employees were obliged to invest certain amount of money for in-house training. After 1995 when Employment Insurance law was in place, only companies with more than 1,000 workers became obliged to conduct in-house training for candidacy as well as existing workers. Otherwise, they are supposed to pay allowance to the government for the amount equivalent to the unfulfilled job training requirements. Table 2 shows the status of in-house

Table 2: Status of In-House Training

(Unit : No. of Companies &amp; %)

	Percentage of Required training with respect to Total Employees (before 1987) & Total Wage	Target companies for In-House Training	No. of com- panies con- ducted In-House Training	No. of Companies Paying Allowances	No. of Participant
1977	-	1,012	673 (66.5)	339 (33.5)	-
1978	-	1,095	774 (70.7)	321 (29.3)	-
1979	-	1,223	723 (59.1)	500 (40.9)	-
1980	3.14% of Total employees	1,103	669 (60.6)	434 (39.4)	66,213
1981	4.13	1,103	485 (43.9)	618 (56.1)	48,406
1982	2.44	1,106	507 (45.8)	599 (54.2)	30,132
1983	1.78	1,183	382 (33.7)	751 (66.3)	20,960
1984	1.82	1,263	266 (21.1)	997 (78.9)	22,011
1985	1.73	1,341	519 (38.7)	822 (61.3)	23,876
1986	1.63	1,398	356 (25.5)	1,042 (74.5)	19,042
1987	0.173% of total wage	1,537	239 (15.5)	1,298 (84.5)	14,774
1988	0.195	1,573	403 (25.6)	1,170 (74.4)	20,560
1989	0.176	1,612	392 (24.3)	1,220 (75.7)	17,570
1990	0.30	2,575	505 (19.6)	2,070 (80.4)	31,363
1991	0.475	2,675	507 (19.0)	2,168 (81.0)	52,602
1992	0.619	3,417	551 (16.1)	2,866 (83.9)	122,457
1993	0.673	3,577	686 (19.2)	2,891 (80.9)	122,151
1994	0.716	3,753	843 (22.5)	2,910 (77.5)	152,030
1995.1~6	0.671	3,776	602 (15.9)	3,174 (84.1)	79,725
1995.7~12	0.831	390	273 (70.0)	117 (30.0)	160,413
1996	0.739	377	284 (75.3)	93 (24.7)	151,303
1997	0.679	373	301(80.7)	72 (19.3)	173,687

Note : Employment Insurance law was introduced since July 1, 1995 and subsequently target company obliged to conduct in-house skill training is reduced because target companies criteria change/ with above 1,000 employees and operating in 6 industries.

Source : The Ministry of Labor, *State of Job Training*.

training since 1977. Dramatic change from middle of 1995 is mainly due to the increase in the number of employees of the target companies which are obliged to conduct in-house training. In fact, most of these companies have generally trained

new graduates for skill acquisition and existing workers for skill improvement to meet their needed skill level and skilled workforce.

Although Employment Insurance law encourages voluntary undertakings of the target companies to develop vocational capability, some in-house trainings are still conducted under the low-efficiency and high-cost training systems. As a result, some companies tend to conduct training just to meet the requirements (up to the amount for paying allowances for uncompleted in-house trainings) rather than investing in skill development needed in the workplaces. Simply committing a certain amount of money to skill development is not enough. What matters is how much skill levels were enhanced as a result; how much new knowledge workforce gain; what new skills workers acquire; and (the critical test) how much more effective employees are in their jobs. In fact, 84% of the target companies responded that government guidelines for vocational training do not represent the reality of companies (Ryu, Kang & Hong, 1998).

A recent study(Korea Labor Insitute) showed that implementation of vocational training and participation in education and training programs varied according to the size of the companies. As of December 31, 1998, small and medium sized companies(lower than 150 employees) conducted in-house training for 2,776 employees (0.1%) out of 3,856,307 persons whose training expenses could be covered by employment insurance account. However, in large companies(more than 150 employees), 149,750 persons(16.3%) out of 919,082 employees participated in in-house training. In the rate of participation in external education and training programs, only 0.9% of insured employees in small and medium sized companies took advantage of the programmes while 10.2% of insured employees in large companies took part in the programmes. These differences in the human resource development among companies with different size indicate that there is a need for an institutional support for small and medium sized companies in order to

assure the sufficient supply of skilled workers and to subsequently enhance the nation-wide competitiveness of manpower. Otherwise, small and medium sized companies would fall into the vicious circle of less development investment — lower-quality human resource — lower payment in comparison with larger companies.

## 2. Types of training offered

Few studies have systematically examined and reported the education and training programs delivered by the Korean companies except for some case presentations on the HRD programs for illustrative purposes. Also, few companies have reported the skill frame work underpinning their training and development programmes despite the popularity in applying competence-based curriculum(CBC). According to the ASTD training data book(1996), US companies define the responsibilities of HRD Departments by the types of training programs they offer and by the roles that they play within their organisation. Training programs are quite varied in nature and number, but US companies typically provide most of the following; (1) management development, (2) supervisory development, (3) technical training, (4) customer service training, (5) sales training, (6) safety training, (7) quality training, (8) career development, (9) literacy programs, (10) organisation development.

Recently, McLean and his colleagues(McLean, 1998; McLean & Ahn, 1995; McLean & Yang, 1994; Yang, 1994) have reported their survey results of the types of training offered by Korean companies. Table 3 shows the types of training programs offered by Korean companies in comparison with US companies. Most of Korean companies offer programs like Newcomer Orientation, Training-the-Trainer, Foreign Language, Document Management, Leadership, Problem Solving, Marketing, Creativity; and issues related to personnel manage-



**Table 3. Percent of Companies Offering Specific Types of Training, United States and Korea**

Types of Training	%U.S.#	%Korea##
New Employee Orientation	85	99
Leadership	75	88
Performance Appraisals	74	84
Interpersonal Skills	70	**
Train-the-Trainer	70	92
Team Building	69	71
Listening Skills	69	63
Personal Computer Applications	68	***
Hiring/Selection Process	67	68
Time Management	67	62
Problem Solving	65	87
Decision Making	64	80
New Equipment Operation	63	77
Conducting Meetings	63	71
Word Processing	63	80
Delegation Skills	63	64
Sexual Harassment	62	*
Managing Change	62	72
Safety	62	84
Product Knowledge	61	74
Quality Improvement	60	65
Public Speaking/Presentation	59	58
Stress Management	59	52
Goal Setting	59	75
Data Processing/MIS	58	63/84
Computer Programming	57	70
Diversity	56	*
Motivation	55	82
Writing Skills	54	90
Negotiating Skills	53	60
Planning	50	73
Strategic Planning	48	73
Marketing	45	87
Creativity	44	87
Finance	44	74
Substance Abuse	43	31
Smoking Cessation	41	36
Ethics	39	58
Foreign Language	*	94
Document Management	*	91
Human Relations	**	84
Data Base	***	79
Spreadsheet	***	79
Graphics	***	71
Purchasing	*	68
Office Supplies Abuse	*	65
Exercises	*	54
Environment Management	*	49
Retirement Planning	*	46
Nutrition	*	37

#(Who' Learning What? 1994, p. 49) ##(McLean & Ahn, 1995) \* Not include in survey

\*\* Korean survey used Human Relations while U.S. survey used Interpersonal Skills

\*\*\* Korean survey listed specific computer skills while U.S. survey used a general category

Source: McLean(1998)

ment issues, motivation, human relations, decision making, and safety are also frequent topics for training. Korean companies also emphasize management skills like planning, conducting meetings, managing change, and goal setting. Moderate number of companies provide training to develop technical skills like new equipment operation, product knowledge, quality improvement, data processing, database, spreadsheet, graphics, and computer programming. Generally, Korean companies have provided training ranging from acquisition of functional/technical knowledge to development of social skills. Also more Korean companies in the survey offered training to their employees on every items surveyed in Korea and US. This result may reflect the tendency of Korean companies to provide more training opportunities to their employees on wide range of issues or subjects.

In addition, Table 4 shows the types of training companies with more than 1,000 employees implement to meet the legal requirements of developing skilled workforce. In-house training conducted by companies became the most important source of skill training(70.6% in 1996). It covers skill acquisition, skill improvement, retraining, and transfer training. Among them, companies tend to put more emphasis on the skill improvement of existing workers.

**Table 4: Weight and Importance of Skill Training (1996/1997)**

	Skill Acquisition	Skill Improvement	Retraining	Transfer Training	Proportion in the Total Training
Total Public Job Training	47.6 / 26.6	52.4 / 64.0	- / 9.1	- / 0.3	
Korea Manpower Agency	31.9 / 30.3	68.1 / 69.7	- / -	- / -	17.1 / 20.1
In-house Job Training	22.0 / 16.3	66.4 / 70.8	11.2 / 12.5	0.4 / 0.4	70.6 / 70.9
Recognized Job-training Institutions	99.7 / 99.8	- / 0.2	- / -	- / -	12.3 / 9.0

Note : Multi-Skill Technician training and Skill master training courses were excluded

Source : The Ministry of Labor, *State of Job Training*.

### 3. Competencies for training and development professionals

In Korean companies, there is little evidence that training and development has become a strategic function. However, there has been a greater awareness of the importance of training and development function in enhancing the competitive capability of organisation.

In UK, scholars have developed a typology to meaningfully describe the roles of HRD professionals in the organisations. It was suggested that the roles of HRD staff included (1) the change agent, (2) the provider, (3) the passive provider, (4) the training manager, (5) the role in transition. This typology was latter expanded to reflect the changing environment and subsequent changes in the spectrum of HRD activities. He proposed a two-fold typology of roles for the HRD professional; (1) the internal consultant and (2) the strategic facilitator. Also, the Employment Occupational Standards Council (EOOSC) published a set of standards that provide the basis for vocational qualifications for all those with a training and development responsibility, ranging from level 3 to level 5; there are no standards for Levels 1 and 2. Level 3, 4, and 5 are described as follows:

**Level 3: Training and Development** — for those who deliver training and development programmes and those who carry the responsibility for their design and evaluation. **Level 4: Human Resource Development** — for those who have management responsibility for training and development, and who are involved in identifying organisational training and development needs and planning the implementation of training and development objectives.

**Level 4A: Learning Development** — for those involved in the delivery of learning programmes and more concerned with the facilitation of a broader range of learning opportunities than the direct instructional training which characterizes Level 3.

**Level 5: Training and Development Strategy** for those with a strategic

responsibility in HRD who may either be employed at a senior level in an organisation or a consultant at the strategic level.

These standards are based on the concept of training and development as a set of functional tasks and skills operating at different organisational levels. Such efforts to develop typology and standards would offer a common and universally recognized basis for training and development activity.

Table 5 shows the results of the studies reporting the perceived current importance of a set of competencies for instructors and managers of training. This may reflect the existing knowledge and expertise. 'Training and development theories & techniques understanding' was ranked #1 by Korean training managers and rated also high by Korean training instructors while US managers and instructors ranked it #18 & #8 respectively. Generally, Korean managers put more emphasis on the conceptual understanding of training and development and organisational development theories and techniques while US managers put more emphasis on understanding of business and organisation for closer link between business and training. These differences clearly reflect differences in perceptions about the roles of HRD professionals and the way training should be conducted.

The other noticeable differences between Korean training managers and US training managers were higher emphasis by US managers on 'relationship building skill' and 'cost-benefit skill analysis.' These differences reflect different approaches to the management of corporate training.

In case of instructors, US instructors appear to pay more attention to group process skill and research skill while Korean instructors put more emphasis on business understanding, information seeking skills and leadership. This indicates different approaches in preparing and delivering training programmes. While US instructors emphasize interactive training based on reality check through research or experience, Korean instructors tends to focus on helping or directing trainees to

**Table 5. Importance of Competencies Needed by HRD Professionals  
Korea and United States, in Rank Order**

Competency	Korean Managers	U.S. Managers	Korean Instructors	U.S. Instructors
T & D Theories & Techniques Understanding	1	18	3	8
OD Theories & Techniques Understanding	2	23	17	26
Adult Learning Understanding	3	26	7	4
Objective Preparation Skill	4	29	16	31
Personal/HR Field Understanding	5	23	20	31
Information Searching Skill	6	32	7	27
Business Understanding	6	1	6	21
Organizational Behavior Understanding	8	5	11	17
Intellectual Versatility	8	3	9	11
CD Theories and Techniques	10	26	32	33
Organization Understanding	11	2	25	18
Presentation Skill	12	13	1	3
Feedback Skill	13	8	4	2
Visioning Skill	14	6	22	24
Project Management Skill	15	16	34	30
Competency Identification Skill	16	22	31	14
Relationship Building Skill	16	4	25	13
Negotiating Skill	18	12	29	19
Coaching Skill	18	15	15	9
Group Process Skill	19	10	18	1
Foreign Language Skill	20	*	13	*
Model Building Skill	21	31	13	16
Observation Skill	22	14	19	9
Delegation Skill	23	11	40	34
Questioning Skill	24	29	5	6
Subject Matter Understanding	25	33	12	7
International T & D Understanding	26	*	*	*
Cost-Benefit Analysis Skill	27	9	36	32
Values and Cultural Differences Understanding	28	*	35	*
28	30	21	10	28
Data Reduction Skill	31	35	23	35
Research Skill	32	20	24	5
Self-Knowledge	33	26	28	12
Performance Observation Skill	33	19	33	20
Writing Skill	33	17	37	22
Computer Use Skill	36	36	27	36
Records Management Skill	37	*	*	*
Finance/Accounting Understanding	39	25	38	23
Industry Understanding	39	25	38	23
Electronic System Skill	40	34	39	29
Facility Skill	40	34	39	29
Quality Management Theory & Techniques	40	*	*	*
Programming/Authoring Language Skill	42	37	41	37
General Work Analysis	*	*	*	* *
Leadership	*	*	2	*
Anxiety Reduction Skill	*	*	21	*
	(Yang, 1994)	(McLagan & Suhadolnik, 1989)	(McLean & Yang, 1994)	(McLagan & Suhadolnik, 1989)

\*Not included in survey

Source: McLean(1998).

solve the real problems that triggered training needs.

Competencies needed to perform roles of HRD professionals as strategic facilitator or change agent (e.g., understanding business and organisation) have rarely been regarded as important by Korean managers. HRD professionals in Korea seem to concentrate on developing their technical expertise with little attention to the management of learning process; HRD professionals could help to improve training and development practices by contributing to our understanding of why and how managers and workers learn or do not learn. For this purpose, their involvement and understanding of strategic imperatives and technological changes would be critical. Although list of competencies are not extensive, the result about the perceived importance of training and development staffs' competencies would be useful for training-the trainer as well as selection and placement of HRD professionals in the companies. Furthermore, comparative analysis of perceived importance of competencies (both experience and expertise) will provide basis for expansion in the roles of HRD from training provider and manager to strategic facilitator and change agent by showing the gap between the current roles and desired roles of the HRD professionals.

### III. HRD practices in Singapore

*The World Competitiveness Yearbook 2000* published by the International Institute of Management Development in Lausanne, Switzerland, ranks Singapore as the second most competitive nation after the United States. Singapore was also listed the second most competitive nation after the United States in *The World Competitiveness Yearbook 1999* though she was top in *Global Competitiveness Report* published by the World Economic Forum the same year.

At a micro level, the proportion of workers earning less than S\$1,000 (\$1= S\$1.74 as at January 2001) continued to decline over the years. For example, the percentage of this group of workers has decreased from 69% in 1988 to 21% in 1998. All these achievements could be contributed to the continuous skills development movements during these past years.

The Committee on Singapore's Competitiveness was formed in May 1997 in respond to a call made in November 1996 to review Singapore's economic competitiveness. Among other things, the Committee anticipated that the Singapore's economy would be knowledge based. It also realized the needs to nurture a labor force with the necessary skills to be globally competitive.

The Skills Development Fund has been playing an important role in enhancing the skills of the Singapore labor force. Not only training grants and places committed have shown healthy increasing trends, it should be mentioned that in spite of the fact that the Singapore economy contracted in 1998, employers continued to support training for their employees resulting a six percent increase in training places as compared to those in 1997.

Employers' commitment and investment for their employees has also been very impressive. In 1986, employers, on the average, invested S\$2 for every dollar grant committed by the Skills Development Fund. They now invest about S\$17 for every dollar grant. As a result, the national training investment as a percent of payroll increased from 1% in 1986 to 3.6% in 1998. Though training places per employee remained unchanged at 0.3 from 1995 to 1998, the training hours per employee increased from 34 in 1995 to 40 in 1998.

### 1. Funding for HRD: Skills Development Fund (SDF)

In Singapore, the single most important element of employer-based training system is the Skills Development Fund. The Fund was set up under the Skills

Development Levy Act, 1979 on October 1, 1979. The purposes of the fund are to promote, develop, and upgrading the skills of worker and to retrain retrenched workers.

The establishment of a Skills Development Fund was proposed on June 12, 1979 when the National Wages Council recommended a two percent levy on monthly wage, or S\$5, whichever is higher, to be paid by all employers for all of their employees, public or private, earning not more than S\$750 per month. The yearly contribution was established to be S\$60 million at that time.

The levy rate, payable by employers, started at four percent of monthly wage (less than S\$750), was reduced to two percent in April 1985, and further reduced to one percent in April 1986. Today, the rate is one percent of the monthly remuneration of workers earning \$1,500 or less a month.

The Fund, in return, provides financial incentives to employers to upgrading the skills of their employees. Only companies incorporated in Singapore are qualified for the grants. The training programs must be fully sponsored by these firms. These grantees must be Singapore citizens or permanent residents, or workers on three-year work permits. In addition, their education attainment should not exceed Singapore-Cambridge General Certificate of Education Advanced-Level (GCE 'A') examination and their earning should be less than S\$1,500 as at September 2000. The GCE 'A' Level is equivalent to have completed a six-year education in secondary schools or grade twelve.

As the main objective of the Fund is to develop and upgrade the skills of workers and to retrain retrenched workers, the Fund defrays and subsidizes the costs incurring by companies in the training, retraining, and upgrading of employees. The training grants are provided on the principle of cost sharing in which the Fund absorbs 30%, 50%, 70%, 90%, or 100% of allowable training costs. It should be noted that the Fund pools together all levy collected and that grants



awarded do not correspond to firm's levy contributions.

In September 1996, the government launched the Back to Work Program. The aim of the Program is to attract the economically inactive persons, such as housewives, retirees, and retrenched workers, back to the labor force. The Skills Development Fund provides 100% funding for the course fees for the core skills training and 80% for the cost of subsequent job skills training.

For local in-house or external training, the rate of subsidy ranges from a flat rate of S\$4 per hour per grantee to a maximum of S\$8 per hour per grantee. For oversea training programs, a flat rate of S\$80 to S\$120 per day per trainee is awarded depending on the location of training is inside of outside Asia, subject to a maximum supportable training periods of six weeks.

In making easier for small firms to secure grants for training programs, the Approved-in-Principle (AIP) system was implemented in 1984. The system compiles a list of courses that are offered by commercial schools and training institutions, consultancy firms, and even by private companies with well-established training facilities and programs. A firm enrolling its workers for any of the identified courses automatically qualifies for grants. By adding courses to the AIP list, the system has been making training programs relevant, simplifying administrative procedure and ensuring automatic success in grant application for these regularly repeated courses.

It should be noted that a significantly higher level of funding by companies on training employees earning more than S\$750 a month (though the levy was on workers earning less than a monthly wage rate of S\$750). In 1983 and 1984, only about 30% of such funding was on workers whose monthly wage rate was less than S\$750. In terms of the number of workers trained, during the period 1983 and 1986, only about 20% of workers trained were those making less than S\$750 per month. The implication was that the large proportion of the lower-level skilled

workers had not benefited from this employer-based training. This seemed to have defeated the main purpose of setting up a skills development fund. The levy is a form of penalty for employing less skilled workers. The levy was intended to finance training and upgrading of skills of lower-paid workers so that employers needed not have to pay the tax for these workers. Through training and upgrading, workers would be able to command higher wages because of higher productivity. The majority of these lower-skilled workers would continue to earn lower income if the levy were not used to upgrading these workers.

To further strengthen the training for workers at the lower end of pay scale, the Skills Development Fund was transferred from the Economic Development Board (EDB) to the National Productivity Board (now Productivity and Standard Board<PSB>) on August 1, 1986. With the new move to uphold the objective of upgrading skills of workers, the Productivity Board would oversee the operation of the Training Grant Scheme, which was the main program for upgrading skills for workers. Other Fund's schemes, namely the Interest Grant for Mechanization Scheme, the Development Consultancy Scheme, and the Initiatives in New Technologies Scheme remained under the administration of the Economic Development Board.

There were further reassignment of Fund's functions between EDB and PSB. Today, the PSB oversees the Training Grant Scheme (including Training Needs Analysis, Consultancy Grant Scheme/People Developer Consultancy Grant Scheme), BEST and WISE Programs, and the Curriculum and Infrastructure Development Grants.

## 2. Main Training Schemes

In this section, we begin with some very broad indicators of the Skills Development Fund, such as the total number of Training Grant Scheme, followed

by more detailed analyses of the indicators at the micro levels. These indicators are sub-tabulated according to, for example, the size of the firms, the educational level of trainees.

The main schemes supported by the Skills Development Fund are the Training Grant Scheme, Basic Education for Skills Training (BEST) scheme, Worker Improvement Through Secondary Education (WISE) scheme, People Developer Consultancy Grant Scheme/Consultancy Grant Scheme, Infrastructure Development, and Past Incentive Schemes (IGM, DCS, INTECH). Below is a brief description of these schemes.

Initially, there were no specific schemes for the training of workers. In 1980, the Fund promoted training awareness and accommodated ad hoc and sporadic training plans. In-house training programs were encouraged later in 1982. Under a very broad name of Training Grant Scheme, training was still not objective specific and was unsystematic. Basically, the training grant scheme provides grants as incentives for firms to encourage off-job training for their workers. This formalized training for acquisition of skills could complement on-the-job training, which has deemed not sufficient in the new economy. In 1983, The Fund identified eight key skills areas for priority development. The eight key skills are the computer-related skills; craft skills; technical skills; management and supervisory skills; research, design and development skills; professional and specialist skills, company-wide productivity improvement programs; and basic education for skills training.

Companies were later advised to design a total training program and to set up permanent training facilities. The Fund also provides grants or loans to companies for the purchase of equipment for training and upgrading and for the establishment, expansion and maintenance of facilities for courses and training programs, through in-house training or engagement of external expertise.

There are two basic schemes to assist lower-wage workers acquiring basic literacy and numeracy levels, the BEST and the WISE programs. The Basic English for Skill Training, later renamed as Basic Education for Skills Training (BEST) program, launched in 1983, is fully funded by the Fund. Under the BEST program, participants will read English/Mathematics Module 1-4, which are equivalent to Primary 3-6 standards in the Singapore educational system. As the follow-up to the BEST program, another fully funded program, the WISE program was piloted in September 1987. English/Mathematics Modules in the WISE program hopes that employees will be able to obtain English/Mathematics proficiency up to an equivalent level of Secondary 1-4.

Since 1982, the Skill Development Fund, through partnership with industries to establish training facilities and to develop curriculum development, the Training Infrastructure Development hopes to achieve training needs that are currently not met and to upgrade existing skills levels. These include the establishment of a Baking Industry Training Center to upgrade skills in baking, a comprehensive program to upgrade the skills of crawler crane operators.

To mechanize and automate production processes, the Interest Grant for Mechanization (IGM) Scheme was initiated (in December 1981) to provide 90% grants for capital expenditure, and grants for some fixed costs and for curriculum development. The grants are also given to industry-based training centers and those established by employers' associations.

The Development Consultancy Scheme (DCS) was also introduced (in August 1981) to encourage local firms seeking expertise from both local and foreign sources in upgrading their business and training plans.

The Initiatives in New Technologies (INTECH) Scheme was implemented (in August 1984) to accelerate the development of a pool of professionals for the growth in new technologies. The Scheme provides grants to defray manpower

training and development costs when firms incur in setting up research-based facilities.

### 3. Training Grant

The training grant scheme is the most important one among all the Fund-supported programs. Cumulative as at March 31, 1995 (from 1979), the scheme received 75.5% or \$883.59 million out of the total grants of S\$1,169.61 million. The second and third most important individual training schemes are the BEST and the WISE. In terms of training places committed, the training grant scheme accounted for 85.5% or 3,312,510 places of a total of 3,874,118 places committed; followed by the BEST and the WISE, 9.8 and 3.9%, respectively.

For the fiscal year 1998, again, training grant scheme stood out as the most prominent training scheme. It received 92.6% of the total grants, translated into 94.0% of the total training places.

For the most recent 12-year period 1987-1998, the training grant scheme received a generally increasing grant from S\$36,960,659 in 1987 to S\$81,883,335 in 1998. The cumulative grant committed was S\$813,162,137, which represented an average annual grant of S\$67,763,511, or an average annual growth rate of 7%.

The only years that had a negative growth rate of grants over the previous years were 1992, 1994, 1995, and 1998, of which the fall in 1994 was most significant. The main reason for the fall in the grants committed in 1994 was many unions and large firms had already proposed long-term training plans in 1993.

The grant contributed 151,509 training places in 1987 to 530,755 in 1998. The cumulative number of places created was 4,843,888, indicating an average of 403,657 places created per year or an average annual growth rate of 10%. Over the same 12-year period, the number of training places also showed an overall increasing trend, with the exception in 1992, 1994, and 1995. Despite the fall in

grants in 1998 over the previous year, training places continued to grow in 1998. In the following section, we give a detailed analysis of the training grant scheme.

#### 4. Type of Training

The Skills Development Fund classifies seven types of training, namely the Technical Service Skills, Computer-related Skills, Productivity and Quality-related Skills, Management and Supervisory Skills, Technical Production and Engineering Skills, Trade and Craft Skills, and Other Skills.

For the period 1987-1998 as a whole, the Technical Service Skills received the most grants amounted to S\$211,691,109 (26% of the total), followed by the Management and Supervisory Skills, Trade and Craft Skills, Technical Production and Engineering Skills, Computer-related Skills, and Productivity and Quality-related Skills, ranging between S\$130,802,460 and S\$81,837,972 (between 16% and 10%).

In terms of training places created, however, the situation is rather different. Although the Technical Service Skills created the largest cumulative figure of 1,229,058 (25% of the total) training places, the second most important places generated was those of the Computer-related Skills of 904,160 (19%), followed by the Technical Production and Engineering Skills. The Trade and Craft Skills was the least significant sub-skills, which occupied a mere 2% of the total training places committed.

#### 5. SDF and training grant scheme by sector, age, remuneration level, education level, and employment size and mode of training.

##### A. By sector

The information on training grant scheme can be classified according to two

main sectors, the service and the manufacturing sector, of which the service sector has always been the main one. In terms of grants committed, the service sector secured 63% of the total grants in 1987, the percent increased to 82% in 1998. Similarly, the training places gained by the service sector increased from 64% in 1987 to 76% in 1998.

#### (1) The Service Sector

The Skill Development Fund classifies the service sector into nine sub-sectors Transportation, Storage and Communication Services; Labor Unions and Associations; Wholesale and Retails; Statutory Boards, Finance and Insurance; Government Departments; Hotel and Catering; Medical and Health Services; and Others, which includes Business, Technical and Other Services, and Construction and Real Estate.

For the 12-year period from 1987 to 1998, the most important sector is the Statutory Boards. In terms of total grants committed, the Statutory Board received a total of S\$128,732,473, followed by the Transportation, Storage and Communication Services of S\$96,797,893. In percentage terms, the respectively figures were 22% and 16%. Nevertheless, the Transportation, Storage and Communication Services produced 734,152 (or 23% of the total) training places, which were larger than the 464,095 (or 15%) places in the Statutory Board.

#### (2) The Manufacturing Sector

The seven sub-sectors in the manufacturing sectors are Computer Manufacturers and Vendors; Electronic Products and Components, Fabricated Metal Products, Machinery and Equipment; Chemical Products, Petroleum and Plastics, and Others (which includes Food and Beverage, Textile, Wearing Apparel and Leather, and Basic Metal Industries).

Over the 1987-1998 period, the Electronic Products and Components received the largest amount of grants of S\$49,845,938, followed by S\$47,549,266

for Fabricated Metal Products, and S\$42,850,514 for Computer Manufacturers and Vendors. The respective percentages were 22%, 21%, and 19%.

In terms of training places, however, the Computer Manufacturers and Vendors benefited most from the program by achieving a total of 575,031 places, followed by Electronic Products and Components and Fabricated Metal Products. In percentage terms, the corresponding numbers were 36%, 31%, and 11%.

### B. By Age

Between 1988 and 1998, the 25-29 age group benefited most from the total number of training places created. The cumulative figure was 4,692,379, of which 1,264,258, or 27% was awarded to the 25-29 age group. The percentages for the 20-24, 30-34, and 40 and above groups were 21, 20, and 13% respectively. The least important age group is below 20, which accounted for 6% of the total.

Today, some 42% of the labor force is at least 40 years of age. The majority of them are relatively less educated and lowly-skilled as compared to those in the younger age groups. Measures have been taken, for example, training for workers 40 of age and old during normal working hours are fully funded, to encourage companies to upgrade skills of the older workers. These resulted a very significant increase in the percentage of training places for this group of workers. In 1988, the percentage was 6%, it increased to 15% in 1996 and reached 25% in 1998, which surpassed 23% of the 25-29 age group.

Another significant sign of providing greater training opportunities for the older workers was noted in 1994 when one out of eight older workers received skills upgrading. The ratio was one to 25 in 1988.

### C. By Remuneration Level

The three remuneration levels of recipients are Below S\$1,000, S\$1,000



S\$1,499, and S\$1,500 and Above. For the recent years from 1992 to 1998, training places committed for the Below S\$,1000 showed a declining trend from 205,710 in 1992 to 134,540 in 1998. The S\$1,500 and Above group had the largest increase in places received. Alternatively, the Below S\$1,000 group saw a decline of the share from 54% in 1992 to 25% in 1998, and the S\$1,500 and Above group share increased from 23% to 44%

The reason for the decline in training places for the lowest wage group was the proportion of workers earning less than S\$1,000 continued to decline over the years. As already mentioned, the proportion of this group of workers has decreased from 69% in 1988 to 21% in 1998. On the other hand, the fraction of workers earning S\$1,500 or more increased, which explained why this age group had benefited most from the training scheme.

#### D. By Education Level

The Skills Development Fund classifies recipients according to six categories of education level, namely, PSLE and Below, Below GCE 'O' Level or Equivalent, GCE 'O' Level or Equivalent, GCE 'A' Level or Equivalent, Diploma or Equivalent, and Degree and Above. The PSLE (Primary School Leaving Examination) is equivalent to have completed a six-year education in primary schools or grade six, GCE 'O' Level (Singapore-Cambridge General Certificate of Education Ordinary-Level) is equivalent to have completed a four-year education in secondary schools.

GCE 'O' Level group had the largest proportion (41%) of grants received over the twelve-year period of 1987-1998, followed by the Below GCE 'O' Level (25%). Among all the six groups of education level, these two groups had relatively erratic changes in proportions. For example, the proportion of GCE 'O' Level group ranges between 30 and 51%, while those from 17 to 36% for the

Below GCE 'O' Level group. In contrast, the remaining four levels exhibited relatively smaller percentage of changes. Also, the percentages for the PSLE and Below, Diploma, and Degree and Above groups were about the same at around 7 and 8%, while the percentage of the GCE 'A' Level group was 11%.

Corresponding to the characteristics in training grants award, the training places for the GCE 'O' Level group had a highest percentage of 37%, followed by the Below GCE 'O' Level group of 22%. The percentages of the PSLE and Below and GCE 'A' Level were about the same at 12%, which was slightly higher than those of Diploma and Degree and Above groups, which was around 8 and 9%.

#### E. By Employment Size

Before we examine total training grants and places by size of employment, it may be useful to analyze the number of Fund applications and approvals by size of employment.

The six categories of employment size are Below 10, 10-49, 50-99, 100-199, 200-499, and 500 and Above.

Over the thirteen-year period from 1986 to 1998, the cumulative total number of applications received was 486,181, which implied an average of 37,400 applications per annum and an average annual growth rate of 11%. Over the same period, the 10-49 and 500 and Above groups filed the most numbers of application. In percentage terms, about 24% of applications came from these two groups. The percentages of the remaining four groups did not vary greater, ranging from 12 to 15%.

The Skills Development Fund had been very generous in approving applications. For the whole thirteen-year period, the over-all approval rate was 89%. The highest approval rate of 91% was secured by the Below 10 and the 10-49 groups,

while the 50-99 group had the lowest percent of 85%. The average for the remaining three groups was 88%.

The 1991-1998 period witnessed a constant increase in percentage for grant commitments of the largest employment sizes of 500 and Above. It was 55% in 1991 and increased to 71% in 1998. The second largest size group was also the second most significant group in terms of grants received. Consequently, the two smallest employment-size groups had secured increasing smaller shares during the same eight-year period.

The patterns of shares in training places followed those of training grants. The largest employment size group gained 71% of the total places cumulated over the eight-year period. The percentage for the second largest group was 13%. The smallest group of Below 10 had the lowest percentage of 2%.

The importance of skills and human resource development can also be viewed from the cumulative percentage of companies reached by the Skills Development Fund. As early as 1984, all companies of employment size of 500 and Above had been reached the Fund. In contrast, the Below 10 group had a mere 2% in 1984. Two years later, the cumulative percentage of the second largest group reached 100%; the next largest group of 100-199 reached 100% in 1987, followed by the 40-99 group in 1988. The 10-49 group only completely reached in 1998, at which year the percentage of the smallest group of Below 10 was 33%.

#### F. By Mode of Training

There are basically two types of training provided under the support of the Skills Development Fund In House and External. Under the In House training mode, companies can either conduct training using own instructors or employ external instructors.

Over the ten-year period of 1986-1995, 65% of total training grants were

granted to external courses while the remaining 35% were utilized for in-house training. However, In House occupied 76% of the total training places provided. One possible explanation is that though firms recognized the benefits of in-house training, some corporations, particularly the small and medium enterprises, nevertheless, do not have the resources to conduct training in house.

## 6. Manpower 21

Due to economic recession in 1998, retrenchments in Singapore reached a record high of 28,300, of which about half were from the manufacturing sector. Not only most of the retrenched workers were the less educated and unskilled, these groups of workers were having greater difficulties finding new jobs. Among other things, these workers were encouraged to be trained or retrained through the Skills Redevelopment Program (SRP) which was initiated in 1996.

However, the long-term problems faced by older and lowly skilled workers originated from the restructuring of the economy, particularly in the disk drive and personal computer industries. Although the electronics industry as a whole continues to grow, structural unemployment still exists in the industry for retrenched workers do not have the right skills to be reemployed in the electronics and other sectors. The government foresees structural unemployment will continue to grow. Foreign investment will continue to flow into Singapore, and new jobs will be created, but the majority of the work force does not the skills needed in these high value-added industries. It is also estimated that about 90% of job position in the IT will need employees with tertiary education.

At present, about one third of the workforce is skilled, one third is semi-skilled, and the one third is unskilled. In June 1998, the Ministry of Manpower worked together with the national trade union, educational institutions, and industries to draw up a comprehensive plan for manpower develop-

ment. The Manpower 21 plan were later drawn up aiming to transform the workforce to meet future manpower needs, enhance international competitiveness and minimize structural unemployment.

One of the plans under Manpower 21 is to provide more opportunities for workers to upgrade themselves at institutes of higher learning. The institutes will customize curricula, in consultation with companies and industry, to provide the necessary training for workers. With the support of the government, the SRP will also further develop. A National Skills Recognition System will be established to identify skills standards in all industries. Major industries are encouraged to establish skills and training needs for their industries. The private sector is also urged to set up new training centers for their employees.

To provide the financial assistance for the training schemes, the Manpower Development Assistance Scheme, or MDAS, was established with an initial funding of \$200 million. Initially, MDAS will focus on supporting strategic workforce development programs. MDAS will also support the SRP, and the establishment of the National Skills Recognition System and industry training centers. MDAS will also provide co-funding support for other initiatives.

The Government will also continue to support worker training and upgrading through the SDF. The Ministry of Trade and Industry is studying how to increase the SDF levy, so that the SDF has adequate funds to help upgrade Singapore's workforce for the 21st Century.

#### **IV. Evaluation of HRD practices in Korea and Singapore**

##### **1. Key Success Factors in HRD common to Korea and Singapore.**

A cynic might be forgiven for describing management development as the

application of inadequate resources to intractable problems in order to produce irrelevant results (Moorby, 1994). Particularly in times of economic stringency, training is often seen as a frill in many companies, something to be reduced to meet cost reduction or profit goals.

Traditionally, Korean companies' corporate training emphasized Management Development and Skill Development. For Management Development, the scope has been defined by organisational levels whereas the scope of skill development has been defined by identifying job requirements to be performed.

In Singapore, emphasis is placed on the role of managers and supervisors to coach and train their subordinates. Recognizing the shortage of trainers, the National Productivity Board, now called Productivity and Standard Board (PSB), initiated the national Trainer-Manager Programme in 1992 to encourage companies to increase the coaching and training skills of their managers and supervisors. Through this programme, it was expected to impact about 200,000 managers and supervisors who in turn can provide effective on-the-job training to their subordinates (Tan & Torrington, 1998).

In any case, specification of future managerial and job requirements is the first essential step for successful acquisition of managerial talents and skilled workforce(Philips, 1999). The specification includes four essential elements;

A. Link with corporate plan: The human resource development strategy needs to be closely integrated with the organisation's strategic plan. This requires the HR director to work with the strategic planners to identify the anticipated growth and future direction of the business.

B. Identifying the critical success factors: To operate the HRD function that adds value to the organisation, it is essential to know the critical success factors for the particular organisation so HRD specialists can determine how the human-per-

formance systems can contribute to them. These constitute the overall success formula of the organisation that must exist before an organisation can perform adequately. Otherwise, the company will lose its competitive strength.

C. Identifying competencies required: This step covers the identification of what the organisation could need managers and employees to be able to do or achieve in the future. It involves the use of data to describe the competence, skills, knowledge, or experience that will be required.

D. Focusing on results and current contribution: A comprehensive performance management system will identify managerial competencies and work skills needed with a specific description of results required such as sales output that is satisfactory, or service levels that should be achieved. The training and development function should measure its value using the same factors the organisation uses to measure its success.

To survive in the today's competitive environment, HRM and HRD practitioners must demonstrate commercial acumen, business alignment, and a value-added contribution.

## 2. Implications for HRD in developing countries

For Korean case, the increasing demand for the very best employees and with limited numbers of hires allowed, it might well expect HRD and HRM in Korea to help the Korean employers identify the most appropriate, systematic approaches to both recruitment and selection of employees that would be both valid and reliable in projecting the performance-based impact of such criteria.

It is also noted that high quality research focused on economic and HR problems within the Korea is needed to address questions of effectiveness and efficiency of expenditures on human resource expanding the existing indigenous research base. Many countries have developed national awards or certification that recog-

nize a commitment to human capital development such as components of the Deming Award in Japan, the Baldrige Award in the USA, People Developer logo in Singapore, Investor in People(IIP) certificate in UK etc.. The Korea may well wish to consider such an award and certification focused solely on human resource development.

With the clear possibility that the ROK may well be facing additional crises, HR may be a catalyst for consultation in the development of policies and reasonable responses to the need for quick downsizing. It appears that there were no fail-safe systems in place to step in when the need came for many companies to close their doors or reduce the number of personnel. While the government has made many changes in this area, it is not clear that enough has been done for future events of this nature, especially those focusing on the provision of training and retraining for those affected and for those continuing in poverty. While Institutions like the Korean Research Institute for Vocational Education and Training (KRIVET) and the Korea Education Development Institute(KEDI) have taken the lead in providing information and support related to efforts in this area, more may yet need to be done for the future.

Leadership is also needed in creating a indigenous community of HRD practitioners and scholars. While some practitioner professional organizations currently exist in Korea, there is a marked lack of focused scholarship and research in the area of Human Resource Development. Perhaps this would emerge not only through strategic alliances with the associations of Human Resource Development professionals of advanced countries, but also undergraduate and graduate programs in HRD need to be established throughout the country that move away from the traditional higher education model of full-time, day-time programs to accommodate workers who need to be developing HRD competence. Such programs also need to have a much broader perspective of HRD than



is possible in those institutions which have simply made slight modification in Industrial Education programs. Only when professionally prepared practitioners are widely available can the Korean expect to see an effective impact on the economy through in-service training, organization development, strategic planning, and other critical HRD activities.

For the Singapore case, the government will continue to play a very active role in identifying new potential area of economic growth and formulating new policy measures for HRD. Recently, the Singapore Government identified the Life Sciences industry as one of the key industries essential for future economic development. First, a S\$1 billion Life Sciences Investment Fund was first established to co-invest in biotech start-ups and joint ventures. Later, another S\$1 billion R&D fund was granted for the development of research centers on Life Sciences in Singapore. The Ministry of Education plans to integrate the Life Sciences as part of the general education so as to equip all students with a base knowledge of the Life Sciences. From year 2001, primary students will be exposed to the concepts as Cells and Biotechnology from Primary Five. At the secondary education levels, topics such as food biotechnology, industrial biotechnology, and genetic engineering will be included in the O-Level examination; biotechnology and environment biology in the A-Level examination.

The two leading universities have also announced plans for the development of Life Sciences education in these institutions. The National University of Singapore plans to offer a degree of Life Sciences in 2001 or 2002. The Nanyang Technological University will set up a S\$465 million College of Life Sciences in around mid-2002. The College will offer a Bachelor of Science (Honours) in its Biological Sciences program which combines biology with physical and engineering science, and information technology. It will have the School of Biological Sciences and a Bioscience Research Center initially, and may also house a gradu-

ate medical school.

The government has put up the IT Masterplan. Under the plan, by 2002, all schools will be completely networked in which teachers and students will have access to courseware, digitized multi-media computer resources, and the Internet. It aims to providing one computer to every two students from primary one to pre-university and that 30 percent of curriculum time will be devoted to IT.

In addition to changes in formal education for future HRM and HRD, the Singapore government also anticipated that the economy would be knowledge based. It also realized the needs to nurture a labor force with the necessary skills to be globally competitive. As mentioned, the Manpower 21 has proposed six strategies to support Singapore into a knowledge-based economy and for the manpower development in the 21st century. It should be mentioned that in Manpower 21, the employment of foreign manpower is a deliberate strategy to fulfill future human resource needs.

Korean and Singaporean experiences in Human Resource Development have implications to other developing asian countries. Reflecting upon the the challenges faced by asian countries in the face of financial crisis, developing asian countries should reevaluate their growth potential. Quibria(1999) pointed out the importance of Human Resource Development in Asian countries as follows;

The main precursor to the financial crisis was the export deceleration of 1996. Much of that deceleration in exports might have been partly caused by the downturn in demand for electronic products. But for some of the Southeast Asian tigers, the lack of an adequate supply of well-trained technicians, engineers, and scientists constrained the ability of these economies to move from simple assembly-line operations in foreign-built plants, toward designing and developing products in the face of competition from lower-wage economies such as the People's Republic of China (PRC) and Viet Nam. For the other more advanced economies

of East Asia, it has been asserted that they are fast approaching the end of growth attainable through input mobilization (Krugman, 1994). Further acceleration of growth would require technological progress attainable through new innovations that stem from a more sophisticated endowment of *human* capital than is available in these economies.

## **V. Conclusions & suggestions.**

Rapid changes in the business environment and subsequent competitive pressures demand companies to implement best practices to gain advantage. This means that companies need to develop adaptability and flexibility (i.e., learning capability) to remain competitive. Furthermore, the efforts to achieve organisational excellence-through a focus on learning, quality, teamwork, and reengineering- are driven by the way organisations get things done and how they treat their people(Ulrich, 1998).

Main theme of this paper was that, through reliance on people, companies can confidently initiate and implement changes needed to economize constructively, innovate and improve quality and productivity. There is no doubt that companies must harness the full potential of their increasingly lean and mean structures if they are to succeed. It may need to invest in structures that enable and facilitate change, such as information technology, research and development, and organisational flexibility. But it should be kept in mind that the knowledge and skill base of its committed employees is key to the success of all these activities, that is, intellectual capital.

From this point of view, followings are suggested on the basis of the discussions of the importance of effective HRD practices and Korean companies' cases

of training and development activities;

1. Need for paradigm shift in the mind set of training and development professionals;

A. Understanding business challenges

B. Developing capability to identify critical success factors of business

C. Collaboration with line managers to identify training needs

D. Developing cost-effective training systems

2. Need for future-oriented skill framework for both white collar and blue collar workers. Identifying future competences and potential for contributing to the enhancement of competitiveness of the company.

3. Enhancing learning capability of an organisation through facilitating the transformation of individual knowledge, skill, ability and behavior into organisational competences.

4. Integration of subject matter experts into the education/development planning and course design/delivery processes. Too much reliance on education technology would end up with polishing and packaging education and training programs with little impact on, or with few achievements in the real business outcomes, particularly in management development. Clusters of competences of HRD professionals include (1) business knowledge, (2) knowing leading edge training and development theories and practices, (3) understanding a change model and applying it to a specific situation, (4) being credible through the accuracy of their work and the intimacy of their relationships.

5. Establishing the continuous learning systems in the workplace to improve individual knowledge/skill base as well as employability of employees.

6. Reawakening management the value of a skilled, motivated and committed workforce so that intellectual capital must become an on-going investment where employees are constantly learning, changing, challenging, and reinventing them-

selves and their organisations.

7. At the highest level, training and development role should involve helping to build and manage the knowledge base of the firm so that the organisation can become a learning system capable of generating new strategic assets and of ensuring people's full contribution to organisational transformation and growth.

8. National level support to boost the market-based forces enhancing security, learning and involvement in the organisation through good people management practices.

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In conclusion, it is a meaningless exercise just to ensure employees are well trained and training programs are well designed and delivered. Employees need to be educated in a broader basis so that they understand the company and its business that they work for, their role in the organisation and the wider environment in which their organisation operates. For this purpose, HRD professionals should be prepared and developed to take roles as business partners more than functional experts. However it is sometimes noted that the training and development professionals may prefer the design and delivery role. He or she may have the luxury of choice; the organisation doesn't. There is a huge empire of trainers operating in isolation. This attitude would not be accepted by most world-class companies.

Passive support roles are no longer enough. Vision and strategy must be developed, then complemented by an effective measurement system and sales campaign if HRM and HRD professionals are to enjoy sustainable credibility and a long-term business partnership within the organization.

**Key Words: Human Resource Development(HRD), Corporate training, Vocational training, Competencies of HRD Professionals.**

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초록

## 한국과 싱가포르에서의 인적자원 개발의 실제

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인적자원관리의 중요성이 증대됨에 따라, 인적자원개발 기능의 성과증진에 대해 보다 광범위한 책임을 지도록 변모해야 한다. 성과개선은 모든 조직들의 목표가 되고 있기 때문에 인적자원개발 전문가 또는 스태프들의 역할도 조직에서 변화선도자와 전략적 기획가와 같은 활동들을 포함하게 될 것이다.

한국기업들에서는 훈련개발 기능이 전략적 기능이 되어 간다는 조짐을 발견하기가 힘들다. 인적자원개발 담당자들의 전략적 기획가 또는 변화선도자로서 역할 수행을 하기 위한 역량들이 한국 경영자들에게 중시되고 있다는 사례를 거의 찾아볼 수가 없다. 한국에서 인적자원개발 전문가들은 주로 훈련개발프로그램 운영을 위한 기술적 역량에 초점을 맞추는 경향을 보이고 있어서 학습과정의 관리와 같은 보다 차원 높은 역할 수행에 주의를 기울이지 못하고 있는 실정이다. 따라서 인적자원개발 전문가들도 왜 경영자와 종업원들이 학습을 해야 하며, 어떻게 해야 할 지에 대한 이해를 높이는데 기여함으로써, 그들의 훈련개발 활동들의 중요성을 증대시키게 될 것이다. 이를 위해선 인적자원개발 전문가들이 전략적으로 중요한 프로젝트와 기술변화에 참여하고 이해하는 것이 매우 중요하게 된다.

한국기업들에서 인적자원개발 기능은 대응적인 역할로 특징지어진다. 대부분의 기업들은 경력개발, 가상훈련, 필수 훈련크레딧제도 등 보다 선도적 인적자원개발 활동들을 채택하고 있지 않다. 이는 많은 기업들이 인적자원개발을 전략적 관점에서 접근하고 있지 않고, 훈련개발을 임기응변식 또는 여유

자원이 가용할 시에 실시하는 정도에 그치고 있음을 나타내는 것이다. 보다 전략적 접근을 위해선, (1) 훈련 니즈(Needs)와 사업계획간의 연계, (2) 핵심 성공요소들의 확인, (3) 요구되는 역량들의 확인, (4) 결과와 현재의 기여에 초점을 맞추는 노력들이 이루어져야 할 것이다.

싱가포르의 경우는 정부가 경제성장의 잠재력이 있는 영역을 확인하고, 그를 뒷받침할 인적자원개발을 위한 정책적 조치들을 설정하는 적극적 역할을 한다. 최근 싱가포르 정부는 미래 경제개발에 필수적인 전략산업들을 지정하고 이를 뒷받침 할 교과 및 학문적 발판을 공교육체계에서 강화하기 위한 일련의 조치들을 취했다.

뿐만 아니라 싱가포르 정부는 향후 경제는 지식기반이 될 것으로 예측하고, 그에 걸맞은 숙련노동력의 개발을 통해 세계적 경쟁력을 유지하려는 조치들을 취했다. 특히 맨파워 21정책에 따르면 21세기 인력개발을 위한 6가지의 전략들이 명시되었다. 그 중 하나가 미래 인적자원 니즈(Needs)를 충족시키기 위해 외국인력의 고용을 전략으로 천명하고 있는 것이다. 한국과 싱가포르의 경험에서 살펴 본 바에 의하면, 훈련개발과 프로그램들이 잘 설계되고 실시된다고 해서 인적자원개발이 궤도에 오른 것이 아니라는 점이다. 중요한 것은 종업원들이 기업과 사업에 대해 보다 포괄적인 이해를 할 수 있게 되고, 그에 입각해서 그들의 역할을 이해하고, 기업이 처해진 환경을 읽어 나감으로서 학습의 필요성과 중요성을 터득해 나가는 역량을 함양해 나가도록 하는 것이다.

**주제어:** 인적자원개발, 기업훈련, 직업훈련, 인적자원개발 전문가의 역량.