

**Survey Research on e-Learning
in Asian Countries - Fiscal Year 2002
(Country Specific Report - Republic of Korea)**

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1. Market: Market Trends of e-Learning

1.1 Status of IT Promotion (Centered on the Internet)

1.1.1 Outline of the Internet

According to the statistics of ITU (2001), the number of the Internet users in Korea is approximately 24.38 million while the user penetration rate is 52.1%. Thus, the Internet is widely utilized in Korea. Steady increase of the users is observed when compared to the number (10.86 million) reported in the ITU survey, 1999.

In Korea, broadband Internet is utilized to a considerable extent. The number of subscribers is approximately 8.79 million, and the penetration rate is about 56.7%, as of March 2002. It is expected that the number of subscribers will reach 10 million, representing a penetration rate of more than 70 % before the end of 2002.

The number of "PC-Bangs (Internet cafe)" has been increasing along with the diffusion of broadband, but recently it became stabilized after the peak of more than 30 thousand in 2002, as more households are getting broadband connection. The electronic commerce market is also expanding to approximately 425.9 billion Japanese Yen (as of FY 2000).

Indicators representing advanced IT promotion includes:

- Hardware infrastructure: 63% of all households own PCs with CPUs of Intel Pentium III or above.
- Network infrastructure: 78% of Internet users access the Internet using broadband connection (mostly by xDSL). The number of Internet cafes "PC Bang" are increasing. 98% of enterprises who list their stocks on the stock exchange have installed LAN.
- Mobile infrastructure: The penetration rate of mobile handsets is third highest in the world, and various content services are provided.

1.1.2 Outline of ISP

According to ITU statistics (2001), Korea has 99 ISPs. They provide many broadband services.

1.2 Status of Education and Training System

1.2.1 Higher Education

Higher education in Korea includes colleges and universities, graduate schools, junior colleges, industrial universities, air and correspondence universities, and cyber universities, as well as other schools. The attendance rate of higher education is high.

The overview of each higher educational institution is described below:

(1) College and University

The course of study generally extends over four years, except for such faculties as medicine which have six-year courses. As of the year 2000, there were 162 universities and 1.16 million students. There are more private universities than national universities, and the characteristics may be expressed in that science universities tend to be governmental institutions and liberal arts universities are private ones.

Many of Korean universities are large, and the average number of students per university is approximately 10,000. Since the 1980s, establishment of a new university or the increase of student quota in Seoul have been restricted as part of a policy to control the population influx to the metropolitan area. As a result, many private universities have campuses in the suburbs of capital city.

(2) Graduate School

Graduate schools and doctoral courses are situated above undergraduate courses. The number of years of attendance is usually two for graduate schools, and three for doctoral courses after obtaining a master's degree.

The rate of students going to graduate schools exceed 10% out of all graduates from four-year universities. This rate increases if students are counted who failed to enter the schools the previous year. Approximately half the students major in natural science, medical, and pharmaceutical fields, while more than 30% of students major in humanities or social science fields. Similar to universities, graduate schools are characterized by a high percentage of private institutions.

(3) Junior College

Junior colleges are two or three year programs, depending on majors. Specialized courses are offered which are directly connected to industries, on the purpose of producing mid-level technicians.

In addition to many science and technology courses, there are various courses including language studies for training interpreters, engeneering focusing on machinery, construction and electricity, agriculture, fisheries, domestic science, medical studies mainly addressing nursing, arts and physical education. One of the characteristics of junior colleges is that there are many courses to meet the specific requirement from industries. Junior colleges in Korea may be equivalent to vocational schools in Japan, rather than two-year colleges. Most of the junior colleges are private, with more than 90% of students attend those private schools.

(4) University of Education

There are 11 universities of education, all of which are national institutions with the main objective of training elementary school teachers. In the early 1980s, the two-year teachers colleges were upgraded to four-year universities.

Secondary school teachers are mainly trained at colleges of education in the universities.

(5) Industrial University

Industrial universities were formerly called open universities, and there are 19 of them. Initially, they were institutions which provide continuing education and training to existing workers in the manufacturing industry. Qualifications for entry are the same as ordinary colleges, but priorities are given to those who have working experiences. An educational system is established to facilitate working students to learn, by providing many evening classes.

(6) Air and Correspondence University

This university was equivalent to a short-term educational institution at the time of establishment in 1972, but re-organized in 1982 into a university granting bachelor's degrees. The number of enrolled students is approximately 300,000. The students learn using TV, satellite broadcasting, radio, cassette tapes, and CD-ROMs. Lectures are also provided by schooling. Approximately 100,000 teachers are attending these courses.

(7) Cyber University

As of 2002, 15 cyber universities have been authorized by the Ministry of Education and Human Resources Development (MOE) in Korea. Approximately 20,000 students are enrolled in 15 Korean cyber universities. The general public can also attend online courses in the fields of English, business management, etc.

1.2.2 Vocational Education

Vocational education is attached great importance as a task of human resources development to be addressed at the national level, since the industrial structure is now changing. The fact that MOE was renamed in 2001 to the Ministry of Education and Human Resources Development (the abbreviation remains as MOE) proves the importance.

Traditional vocational education mainly aimed at supplying human resources required by industrial society. In recent years, however, the "knowledge intensive information society" requires that vocational education provide human resources that have ability, skill, and moral to attain higher national competitiveness and better personal living. As one of the elements to sustain educational system, ICT usage is also promoted in vocational education.

Vocational education is carried out under the control of appropriate governmental departments. Among others, trade high schools and technical colleges are typical cases of vocational education. Trade high schools have been providing high-skilled human resources to the industrial world. However, these schools have problems such as an increasing number of students leaving school before graduation. Therefore the need for reconsidering the curricula is pointed out. The number of schools specializing in design, animation, or information is increasing, and more and more schools have the words "information" or "Internet" added to their names.

Technical colleges have been providing diverse industrial and vocational fields with skilled human resources. Since the contents to be learned are now becoming obsolete, these colleges are also trying to respond to the varying human resource needs, by planning a flexible organization of grades, various courses, curricula to satisfy the current needs, or cooperation with industrial fields. The number of courses has increased for information and communication fields, in order to respond to demands from information industry.

1.3 IT Human Resources Required

1.3.1 Outline of IT Human Resources

Owing to the rapid evolution of the information society and changes in industrial structure, the need for IT experts is increasing. According to statistics by the Ministry of Information and Communication (MIC), the shortage of IT technical experts is approximately 33,000 as of 2001, and it is anticipated that the total shortage will reach 140,000 by the end of 2005.

Table 1-1 Forecasting Shortage of IT Human Resources (Unit: persons)

| Academic Background | 2001 | 2002 | 2003 | 2004 | 2005 | Total |
|------------------------|---------|---------|---------|---------|---------|----------|
| Technical High Schools | -4,018 | -3,578 | -1,179 | -651 | - | -9,425 |
| Colleges | - | - | - | - | - | - |
| Bachelor's Degree | -27,597 | -26,656 | -23,500 | -21,862 | -21,991 | -121,606 |
| Master's Degree | -1,612 | -1,688 | -1,820 | -1,948 | -1,896 | -8,964 |
| Ph.D. | -212 | -289 | -303 | -430 | -542 | -1,777 |
| Total | -33,439 | -32,211 | -26,802 | -24,891 | -24,429 | -141,772 |

Source: MIC Website (December 2001)

1.3.2 Outline of IT Human Resource Education

The government has enforced the following measures to cope with shortages in IT human resources:

- Invest 33.5 billion won for teachers and students in information communication fields, establishment and maintenance of technical high schools specializing in software development, academic research in their related fields, etc.
- Provide study abroad scholarship programs for Java training and support information and communication research centers of universities and colleges.
- Provide IT re-training for unemployed persons who have higher academic background and had worked in traditional type of industry, and support them to start new businesses.
- Promote educations specializing in IT, support cyber universities, and invite foreign IT experts.

Other plans are being developed to support educational institutions allowing them to start new IT courses or cooperate with foreign colleges within the budget of 430 billion won.

1.4 E-Learning Market Trends

1.4.1 Outline of e-Learning Industry

The Korean e-Learning market is expected to grow at an annual rate of 33%, and many players are joining the market from other industries. The broadcast industry is working on educational broadcasts, the game industry on educational games, and universities and colleges on cyber education. Specialized schools that have been providing IT education are actively trying to adopt e-Learning to complement traditional classroom training.

One of the factors for these movements is Korea's particular society which attaches great importance to a person's academic background. For example, it is reported that 50-60% of the total expenditure for a Korean household is paid for education. This figure includes expenses for parents, in addition to those for children. For Koreans who are thus highly concerned with education, e-Learning is very attractive in that it allows them to obtain graduate degrees or certifications through the Internet.

As the government encourages IT usage in schools, e-Learning is more easily accepted by people. Being supported by the government, schools are exempt for 5 years for Internet communication costs, can use up to 256Kbps networks free of charge, and pay only 20% of total charges when using networks which are faster than this speed. Since IT education for teachers is also positively addressed, with more than 25% of all teachers attend IT education courses each year. In 2002, 114,000 teachers, which accounted for 33% of all, attended the courses. As a result of such governmental support, 14,000 schools across the nation were all connected to the Internet in 2001.

Many new cyber universities which give credits for a lecture only over the Internet have been established since 2001. For example, a private university named Kyung Hee University has its own campus, but also operates as a cyber university offering independent faculties. Lecture contents to be delivered over the Web are created in a studio located in the basement of the campus, and all procedures for management of credits, students' applications, and homework submission are processed without person-to-person contacts. The access logs to the Web contents by each student, which are equivalent to classroom attendance records, can be automatically monitored and managed by the university. However, term-end examinations are conducted within the campus, in order to identify each student. The overall cost is approximately three fifths of that of traditional universities. With these advantages of utilizing the Web contents, however, burdens still remain to mark submitted tasks, manage students' progress, and mark examinations. Consequently, it is difficult to admit an unlimited number of students, and a specific quota has to be specified.

In the industry world, e-Learning is used within corporate education in leading companies such as Samsung and LG. After the IMF crisis, personnel management and wage systems in big financial combines seem to have changed their principles to merit-based management. Therefore, an employee's self-education is esteemed, and while the educational environment and programs are provided by the company, a personnel promotion system has been implemented in which employees who do not accept education are not highly evaluated. The qualifications obtained, in addition to employees' job results, are factors of personnel evaluation. Corporate education of Korean companies are characterized by tough tasks and final examinations, and employees must struggle with them in parallel with their jobs, since delay in their completion is regarded as a failure.

Thus, e-Learning that allows learning anytime during the day is positively utilized in corporate education, especially those in leading big companies. At present, there still exist offline corporate education, but most of them are switching to e-Learning. For those employees who cannot learn at home because of slow-speed lines or insufficient environment to learn intensively, companies provide booths exclusively for them in the PC-Bangs. The employees can show their IDs to use these facilities, and use the Internet to access databases maintaining enormous amounts of educational contents.

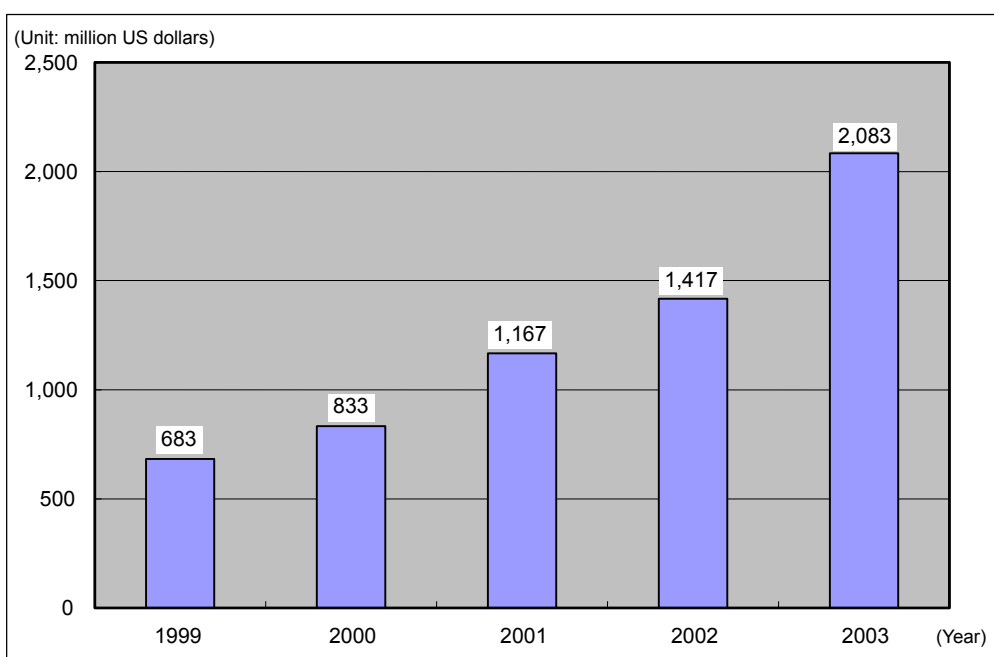
As described above, the e-Learning market in Korea is characterized by its rapid propagation in educational fields, and by corporate education which is only seen in big companies.

While the e-Learning market in Korea keeps growing, some government or industry people express sense of concern as to further growth in the future. So far, the e-Learning market in Korea has been supported by higher education fields, but hard competition is arising due to the rapidly increasing number of cyber universities. On the other hand, though leading financial combines are implementing e-Learning in corporate education, middle or small sized companies are slow to introduce them. For this reason, it is recognized that government, academic and business sectors should jointly promote the diffusion policies of e-Learning to maintain continuous growth of the e-Learning market in future.

1.4.2 Market Size of e-Learning

According to the statistics revealed by the Ministry of Commerce, Industry and Energy (MOCIE), the e-Learning market in Korea is growing by 33% on average each year. It is comprised of fields including contents (48%), solutions (37%), and learning services (11%).

It is estimated that half the Internet users are using e-Learning.



Source: Document released at AEN Conference 2002, by MOCIE

Figure 1-1 Market Size of e-Learning in Korea

2. Technology: Trends of e-Learning System (Synchronous & Asynchronous)

Although there are many examples and vendors for e-Learning implementations in Korea, cyber universities which characterize Korean e-Learning are specifically described here. They were started in 2001, and the number increased to 15 in 2002. They are expected to increase further in the future.

2.1 Cyber Universities

2.1.1 Overview

Cyber universities in Korea started in March 2001. When new students were screened in February 2001, the average acceptance rate was 1 in 2.44. The number of applicants in the first year was 15,166, and the total number of new students who were admitted to the 39 departments in nine universities was 6,220. The number of students finally enrolled was 5,235, which constitutes 84.2% of all admitted students. Three quarters of them were in their late twenties, and more than three quarters of them had occupations. It indicates that cyber universities properly function as continuing education institutions. According to the results of monitoring conducted by professionals, they are functioning without any major problems.

Each student pays 0.8-1.2 million won as a tuition fee. This amount is less than that of ordinary universities. Students are expected to obtain at least 9 or 12 credits per semester, and allowed to obtain up to 18-21 credits per semester. Most students live in Seoul and its neighboring cities, with those living in Seoul accounting for 45% of all.

In a certain cyber university, the average age of students is 28, and 70% of the students are office workers. Thus, attendants of Korean cyber universities in general are mostly office workers living in cities, strongly indicating that they are re-education institutions for adults.

The rate of students moving up to upper grades in cyber universities in Korea is 70%, which is considerably higher than traditional correspondence education.

2.1.2 Learning Method and Environment

Students can create a flexible timetable. Each student can design his/her own timetable, to attend lectures at his/her convenient time and location.

Lectures are offered by combining videoconference systems based on PCs, WBT contents, e-mail, chat, etc. As the number of cyber universities and colleges increases, the curricula and educational services are gradually becoming diversified.

Application for admission can be submitted through the Internet. No entrance examination is obliged, but a quota is set for the number of students, and the universities screen the applicants. When cyber universities began in Korea in 2001, the acceptance rate was nearly 1 in 3, and it increased to 1 in 5 in 2002.

Students consult the table of curricula on the Web to determine the required credits, then select and take the classes. Lectures are delivered through the WBT system. Lecture video is displayed in the upper left corner of the screen, which is synchronized with the lecture data in PPT format that is sequentially displayed in the center of the screen. Many lectures can be attended on demand. This educational system allows for graduation in the third year by skipping grades.

To manage attendance records, a means are devised in which short messages are sent during a lecture to the registered cellular phones of the students, to tell the students to enter keywords from the lecture they are currently attending. In addition, various measures are taken, including those for problem delivery of examinations which is secured enough to prevent students from cheating.

Table 2-1 List of Cyber Universities (2002)

| Cyber University (year of establishment) | Quota | Sponsor | International cooperation |
|--|---------------|--|---|
| 1. Asia Digital University (2001-) (http://www.adu.ac.kr) | 1,000 | NPO | Member of Next Ed Limited in Hong Kong |
| 2. Daegu Cyber University (2001-) (http://www.dcu.ac.kr) | 800 | Daegu University Foundation | – |
| 3. Dongseo Cyber University (2001-) (http://www.ewcu.ac.kr) | 400 | Dongseo University Foundation | – |
| 4. Hanyang Cyber University (2001-) (http://www.hanyangcyber.ac.kr) | 1,000 | Hanyang University Foundation | – |
| 5. Korea Cyber University (2000-) (http://www.kcu.or.kr) | 1,650 | Alliance of 38 universities | – |
| 6. Korea Digital University (2000-) (http://www.koreadu.ac.kr) | 1,800 | Alliance of seven universities | – |
| 7. Kyung Hee Cyber University (2000-) (http://www.khcu.ac.kr) | 1,600 | Kyung Hee University Foundation | – |
| 8. Open Cyber University (2000-) (http://www.ocu.ac.kr) | 1,400 | Alliance of 15 universities | Cooperation with Univ. of Southern Queensland/INDELTA, Australia, Derby Univ., England, and Ohio State Univ., USA |
| 9. Semin Digital College (2000-) (http://www.kcc.ac.kr) | 450 | Kyungbuk Foreign Language Techno College | Cooperation with Liaoning Normal Univ., China, and Irkutsk State Linguistic Univ., Russia |
| 10. Sejong Cyber University (2000-) (http://www.cybersejong.ac.kr) | 1,300 | Sejong University Foundation | – |
| 11. Seoul Cyber University (2000-) (http://www.iscu.ac.kr) | 1,800 | A Non-Profit Corporation | Cooperation with California State Univ., Fresno USA |
| 12. Seoul Digital University (2000-) (http://www.sdu.ac.kr) | 1,600 | – | |
| 13. Wonkwang Digital University (2001-) (http://www.wdu.ac.kr) | 700 | Wonkwang University Foundation | – |
| 14. World Cyber College (2000-) (http://www.world.ac.kr) | 1,300 | 2-year technical college | – |
| 15. Yeungjin Cyber College (2001-) (http://www.ycc.ac.kr) | 400 | Yeungjin College Foundation | – |
| Total | 17,200 | | |

Source: Materials released by Kim, Youngsoo at the NIME Conference "International Symposium 2002" (2002.11)

2.2 Ewha Womans University

<http://www.ewha.ac.kr/ewhaeng/>

<http://icu.ewha.ac.kr/>

2.2.1 Overview

Ewha Womans University is a Christian university for women established in 1887. Courses include a bachelor's degree course, master's course, doctoral course, and language education, to which more than 20,000 students are attending as of 2003.

2.2.2 Activities Related to e-Learning

E-Learning services provided by Ewha Womans University are as follows:

- Ewha Cyber Campus
- International Cyber University (ICU)
- Ewha Cyber Education Institutes (ECEI)
- Cyber Environmental Education Institute
- Information and Telecommunication Cyber University
- Remote Education Training Institute
- E-Learning Specialist Program

From among the activities listed above, an international activity, ICU, is described below:

ICU has been established to contribute to globalization and informatization of higher education, as well as to promote international collaborations. A fund of 3.135 million US dollars was raised by the Ministry of Information and Resources Development, and the Ministry of Education and Human Resources Development is responsible for its operation.

Six different courses of Korean studies and women's studies were offered as of 2003. All courses are given in English, each of which offers three credits.

In addition to Ewha Womans University students, students from abroad can enroll in ICU courses. Students of universities and colleges that ally with Ewha Womans University can attend ICU without paying additional fees, and can obtain credits of ICU as those of the college they belong to. Other students have to pay 150 US dollars per credit, that is 450 US dollars for one course consisting of 3 credits.

ICU delivers on-demand courses based on continuous analysis of requirements, and provides participatory lectures including learning trips to Korea. Support services include large amounts of data or information provided, guidance through online feedback from instructors, and technical support through course sessions.

Many students from abroad are enrolled in ICU. 291 students registered for six courses in the Spring term of 2002, 34 of whom were Japanese and American students.

2.3 Mediopia Technology

<http://www.mediopia.co.kr/>

2.3.1 Overview

Mediopia Technology is an e-Learning vendor established in 1993. In Korea, this company's products occupy more than 60% of the market share. Clients consist of public organizations such as governmental departments, national and private colleges

including cyber colleges, entities, enterprises, educational organizations, etc., and support is provided comprehensively. This vendor is approved by AICC, and conforms to IMS specifications and SCORM. It also provides ASPs.

Major foreign partner organizations include Cisco, Oracle, and Sun Microsystems.

2.3.2 Activities Related to e-Learning

The main service provided by Mediopia Technology is "EduTrack". "EduTrack" has been implemented in more than 500 educational institutions or enterprises, and occupies more than 60% of the e-Learning market share (first place in market share in 2001).

"EduTrack" began to sell in Japan in August 2002 under the Japanese name "GET-LMS" by NTT Data Corporation and NTT Software Corporation.

Mediopia Technology provides the following main products and services in addition to "EduTrack":

- EduWeb (learning management system)
- EduTree (tool to create table of contents)
- EduTutor (authoring tool)
- EduLive (support system for synchronous distance lecture)
- NeoTest (online test module)

2.4 Samsung SDS

<http://www.sds.samsung.com/>

<http://www.e-campus.co.kr/>

2.4.1 Overview

Samsung SDS is the largest IT service enterprise in Korea, which was established in 1985 as an affiliated information system company of Samsung Group.

2.4.2 Activities Related to e-Learning

(1) "e-Campus"

The e-training business of Samsung SDS is also called "Multicampus".

Main activities of "Multicampus" are as follows:

- IT training (group training)
- E-Learning (distance education program)
- Certification (Microsoft, Oracle, Cisco, etc.)
- Consulting

"e-Campus" is a comprehensive service involving e-Learning. Samsung SDS started e-Learning business in 1996.

Main services provided are listed below:

- Consulting
- Contents development
- ASP service
- E-Learning solution
- E-Learning operation system

"e-Campus" provides numerous courses, with more than 250 different courses as of 2003. The courses cover such fields as IT skills, business management, and foreign languages, and hold approximately 120,000 members who pay fees. "e-CampusAmerica" and "e-CampusChina" were opened in 2001.

(2) "eduPort"

"eduPort" is an e-Learning system package independently developed by "Multicampus", and is now implemented by more than 500 enterprises in Korea. The following three different versions are available: "Business Version", "Enterprise Version", and "Academy Version".

"eduPort" consists of the following modules, which enable the effective management of educational operations, system operations, educational courses, reports, statistics, etc.

- eduPort LMS (learning management system)
- eduPort Tutor (authoring tool)
- eduPort Live Class (support system for synchronous distance lecture)

Samsung SDS has started to provide the Japanese version of "eduPort" in cooperation with BizValley Co., Ltd. for the Japanese market. Its major targets are corporate education department staff of enterprises, enterprises engaged in educational business, and educational institutions. The product is provided in both forms of package distribution and ASP services.

2.5 Credu

<http://www.credu.com/>

2.5.1 Overview

Credu is an e-Learning vendor which was established as a spin-out company by ex-staffs of Samsung Corporation in May 2000. It is mainly working on educational services, software development, delivery of online information, etc. Its goal is to be part of the top five companies in e-Learning industry before 2010.

2.5.2 Activities Related to e-Learning

Courses of e-Learning provided by Credu contain general business administration, foreign languages, computers, marketing, etc. They are also provided through ASP.

In addition, the following services are also available.

- Cyber MBA (<http://www.semba.ac.kr/>)
- E-Learning specialized course (<http://ewha.credu.com/>)

Credu is also developing contents in cooperation with an American consulting firm. The contents are localized in accordance with the Korean business environment and culture. Furthermore, the contents are refined by converting offline text to be used online, adding new contents, and adding new elements such as animation, games, etc.

3. Advanced Activities

3.1 Next Generation Learning Infrastructure such as Collaborative Learning

Korean e-Learning vendors include many firms that develop their own LMSs, and presumably they are also developing products for collaborative learning. However, the extent to which the government or e-Learning related organizations are addressing systematically is not known.

3.2 Quality Standard: Quality Standards of Contents and Services

Quality standards of e-Learning contents and services attract high interest, but have not been defined by the government or by any associations/entity. In "Korea e-Learning 2002" which was held jointly by the government, academic and business sector, superior contents were honored with awards. They were, however, evaluated by members of an appraisal committee, not by any specific quality standards.

4. Government Policy and its Vision (the orientation in mid-and-long term)

4.1 Status of IT Policies

4.1.1 Overview

Since the inauguration of President Kim Daejung in 1997, the Republic of Korea has carried out deregulations and promoted new policies to be an advanced IT nation.

The government raised funds of 400 billion won (approximately 37 billion yen) to build infrastructures, as part of the Korean Information Infrastructure (KII) project. As a result, broadband infrastructures have been accomplished by installing 155Mbps-40Gbps high-speed lines and 40Gbps ATM switching networks at 144 locations across the nation.

By the governmental support, all elementary and middle schools in the nation were connected to the Internet free of charge through high-speed lines by December 2002. Human resource education is also actively offered, and annually 25% (approximately 85,000) of all teachers attended computer training courses. Additionally, policies have been enforced to provide free computer education with 500,000 pupils of elementary and middle schools, who are from low income households, and also free Internet services for the next 5 years with 50,000 pupils of elementary and junior high schools, who are from low income households and have good school records.

4.1.2 Policies and its Details

As for IT policies, "Cyber Korea 21 (1999-2002)" has finished, and "The Third Master Plan for Informatization Promotion (e-KOREA VISION 2006) (2002-2006)" is now under way.

(1) "Cyber Korea 21 (1999-2002-finished)"

This is a policy announced in March 1999. Its objective is to construct a knowledge-based nation, through the establishment of a high-speed information infrastructure and through efforts to realize an electronic government, in order to develop the nation to one of top 10 countries advanced in information in terms of national competitiveness and personal living quality,

Main objectives are as follows:

- Establishing high-speed information infrastructure to construct creative knowledge-based nation.
- Improving nation-wide productivity by taking advantages of high-speed infrastructure and intellectual information base.
- Encouraging creation of new businesses and employment opportunities, taking advantage of high-speed information infrastructure.

The results of information promotion plan announced in April 2002 are as follows:

- Information infrastructure of the highest level in the world has been established.
- Information level in general public society has been improved.
- Information communication industry has rapidly evolved and progressed to be a support engine for the economy, establishing itself as a fundamental industry to reinforce competitiveness of all industries.

(2) "The Third Master Plan for Informatization Promotion (e-KOREA VISION 2006) (2002-2006)"

This is a policy which was implemented in April 2002, following the "Cyber Korea 21".

Its focus is placed on the next step to enhance people's awareness in computerization, in accordance with evolving infrastructures such as high-speed communication networks. Its goal is to use the well established high-speed infrastructure as an infrastructure for personal living, and as common foundations for business run by enterprise.

Main objectives are as follows:

- To promote informatization among all people (expand Internet usage to 90% of the overall population by 2006).
- To promote informatization in each industry (online transaction environments will be provided).
- To promote informatization in public service agencies based on electronic government.
- To continuously sophisticate information infrastructure.
- To enhance international competitiveness to cope with the global information society.

4.2 E-Learning Related Measures as Part of IT or Educational Policies

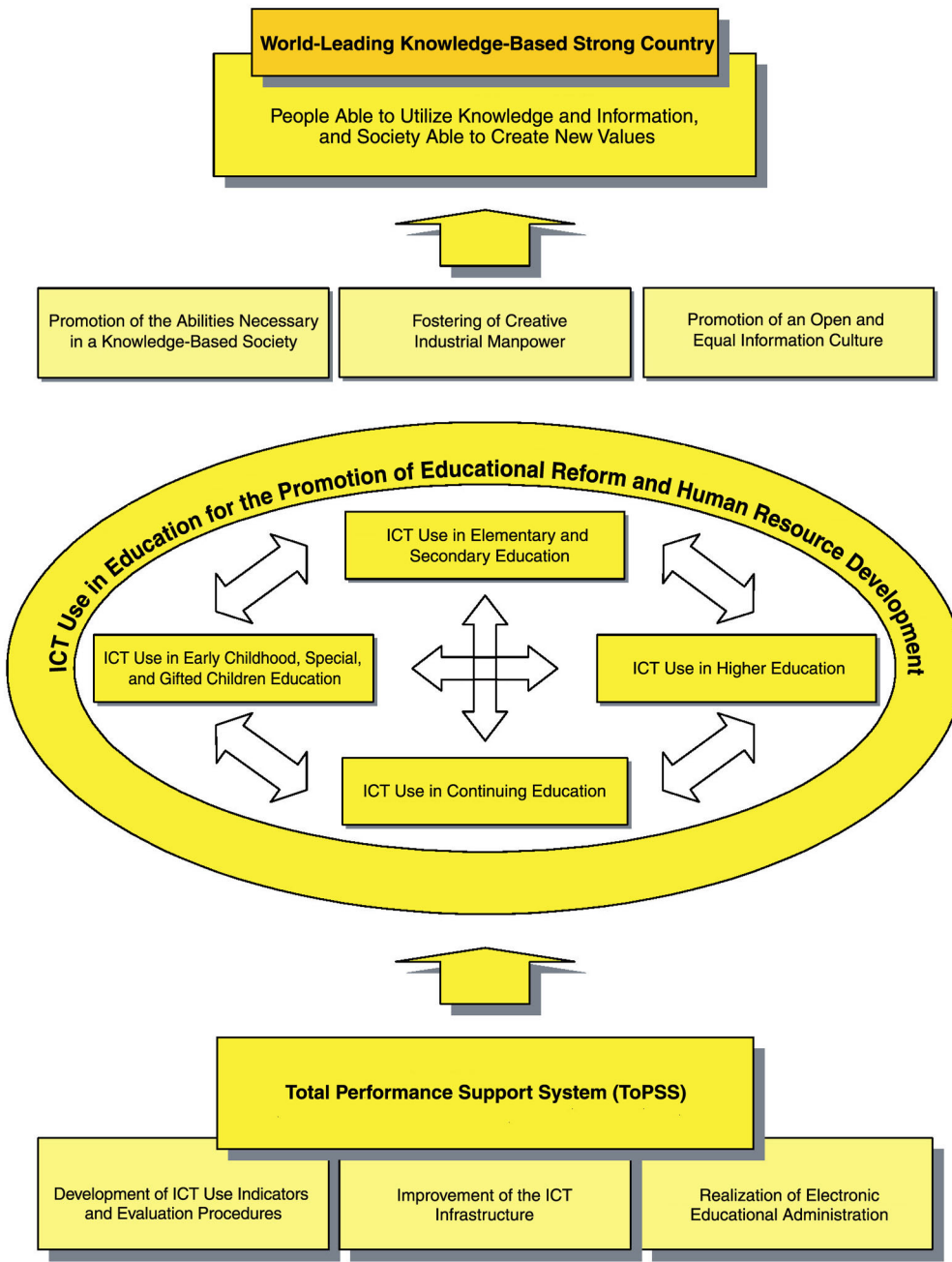
4.2.1 Overview

Plans on computer education in Korea were started in July 1970. In the early 1990s, the main parts of the policy were defined by "outline regulations on promotion of ICT", and in July 1996, "Enforcement Plan for Adapting Education to the Information Age" was implemented. Its objective is to develop creative human resources by establishing open, life-long, cyber educations, as well as to strengthen the national force intellectually based on these educations.

ICT promotions in Korea have been committed in past years as national projects for the future. Promotion of ICT utilization in education has been a major objective of policies in fields of education. It is reported that MOE has been working on phase one of IC utilization in education fields since 1997, and completed infrastructure construction in 2000.

MOE is now developing "Second Stage Comprehensive Plan for Developing ICT Use in Education" which is scheduled for completion in 2005. The goal of this plan is to renew existing education which uses ICT and to promote human resource development in educational fields.

The future prospect held by Korea under the new vision is the "world-leading knowledge-based strong country." Thus, usage of ICT in education has played a critical role. Its objective is to establish a foundation for ToPSS (Total Performance Support System), by developing efficient educational indicators and evaluation procedures, improving ICT infrastructure, and implementing more comprehensive electronic educational organizations.



Source: MOE (2001.12), *2001 Adapting Education to the Information Age: a White Paper*

Figure 4-1 The Vision of the Future in the Second Stage Comprehensive Plan for Developing ICT Use in Education

4.2.2 Policies and its Details

E-Learning promotion involves various governmental departments and agencies.

Each field and main activities assigned to those departments or agencies involved are listed below:

(1) Relationship between department or agency and e-Learning

(a) Major assignments of each department or agency

- MOCIE: Supports e-Learning industry development.
- MOE: Provides informatization for elementary, middle, and high schools, remote education with teachers, cyber universities, etc.
- MIC: Supports and expands IT education, and supports e-Learning technology.
- Ministry of Labor (MOL): Provides Internet correspondence training system (supports worker's education expense).
- Ministry of Culture and Tourism (MCT): Develops culture relating contents, creates DBs, and lectures foreigners on Korean culture.

(b) Classification by each policy

- Standardization and promotion of technical development (MOCIE, MIC).
- Training of specialized human resources (MOE, MOCIE, MIC).
- Construction of statistics and general information networks (MOE, MOCIE, MOL, MIC).

(2) Policies related to e-Learning in each governmental department or agency

(a) Policy to activate market

Following activities are promoted for the benefit of activation policy of e-Learning market:

- Support middle and small size enterprises that have not implemented e-Learning.
- Support contents development.
- Support for business fund to e-Learning industry: support for facilities and operation funds.
- Promote awareness among potential users: publicity through industry exhibition or mass media.

(b) Other governmental activities

Being authorized by MOE, cyber universities and colleges have been operating.

MOCIE started e-Biz Cyber Academy Project for women in June 2002, as a project in cooperation with Ewha Womans University. This is a three year project to train female workers working in e-business sectors. In addition, MOCIE sponsored e-Learning contents contest, e-Learning best practice, seminars, etc. in "Korea e-Learning 2002".

MIC is providing IT training through e-Campus project at Information and Communication University.

MOL has been reimbursing employment insurance to enterprises which apply e-Learning to improve employees' capability, and each enterprise is encouraged to implement e-Learning in relying on this system.

4.2.3 E-Learning Related Organization

The following are e-Learning related organizations in Korea:

- (1) Korea Association of Cyber Education (Lead by Lee Sang Hee, a Congress member)

Its major activities are as follows:

- Survey of e-Learning. Research and determination of policies.
- Standardization and authorization project.
- Training of experienced workers and sponsoring academic seminars.

- (2) Korea University Alliance for Cyber Education

(Presided by In Sung-jung, professor of Ewha Womans University)

Its major activities are as follows:

- Joint research to promote cyber education in colleges.
- Sponsoring seminars and academic conferences.

- (3) Korea e-Learning Industry Association (KELIA)

(Presided by Michael Jang, CEO of Mediopia International Co., Ltd.)

Its major activities are as follows:

- Encouraging e-Learning industry.
- Promoting market.
- Conducting international joint projects.

Among these three organizations, KELIA is the most specific as an industry-oriented organization. KELIA mainly hosted the "Korea e-Learning 2002" held in November 2002 through governmental support including that of MOCIE.

4.3 Laws Regulating Rights for Intellectual Property and Personal Information in e-Learning

The government commits itself to completing legal regulations in order to legally provide for information society. 180 different laws have been enforced or revised up to 2001, in terms of electronic government, electronic commerce, e-testing, etc.

Statutes related to information and information transmission have been valid since enforcement of "Framework Act on Informatization Promotion" in 1995, while Framework Act on E-commerce, Digital Signature Act, etc. were already enforced in 1999. In 2001, such laws as those for electronic commerce including copyrights were further re-considered.

Laws to protect personal information are also under consideration. In April 2002, "Guidance for personal information protection" was enacted and enforced, to regulate information communication service providers such as electric communication companies and electronic commerce enterprises. The "legislations for information communication network utilization promotion" enforced in 2001 contain articles to protect personal information.

4.4 Vision

Regarding the vision for e-Learning, MOCIE announced as follows in AEN Conference 2002:

- (1) Vision: "To be a nation advanced in e-Learning"

- The government supports e-Learning industry with an aim to introduce e-Learning for knowledge and information society to all economic, educational, and social sectors.
- By utilizing ICT, the government is aiming at eliminating digital divide and developing/taking advantage of workforce.

(2) Master plan

- E-Learning infrastructure construction: standardization, training of experienced workers, development of technology, etc.
- Establishing e-Learning network involving Asian and other foreign countries.
- Working out the legal frames to promote e-Learning.
- Expanding demands for e-Learning, and supporting sectors not taking advantage of e-Learning.
- Establishing an e-Learning consortium composed of government, academic and business sectors.

4.5 International and National Conference

The following conferences were held:

(1) Korea e-Learning 2002

- Date: November 2002