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Uses of the Internet in Korea

by *KwanSik Rho*

□ The Internet will influence Korean lifestyle in various ways in the coming years. This paper provides an overview of the current status of Internet use in Korea. In particular, it describes the current status of Internet users, instructional use of the Internet, and social issues.

Current Status of Internet Use in Korea

The number of Internet users in Korea has increased at an explosive rate in the last seven years, multiplying by 152 times from 138,000 users in December 1994 to 20,930,000 users (about half the Korean population) in March 2001 (Korea Network Information Center—KRNIC, 2001b). In terms of wide-area network (WAN) use, Korea was ranked as the highest among the 30 OECD (Organization for Economic Co-operation and Development) countries; 10 out of 100 Internet users were using the WAN (KRNIC, 2001d). In 2000, 25,481 public or private organizations used the information superhighway (Ministry of Information and Communication, 2000). Table 1 shows the sharp increase of Internet access in Korea.

Last year's government survey, with a sample of 30,000 families, showed that 46.4% of families owned computers and that 67.8% of computer-owning families used the Internet. Of these, 44.7% access the Internet via modem and 23.3% use high speed connections such as cable TV or Integrated Services Digital Network. More than half (51.6%) of the population (age above 6 years) were able to use computers, while most 60-plus-year-old people (97.1%), and farmers and fishermen (93.4%) could not. Table 2 provides detailed demographic statistics.

Table 1 □ Trends in Internet access (KRNIC, 2001a)

Year	1992	1997	1998	2000
Number of Internet users	80,000	1,634,000	3,103,000	19,040,000
Number of .kr (Korean) domains	—	8,045	26,166	517,354
Number of Internet service providers	—	23	25	83

Table 2 □ Percentages of computer and Internet use (Ministry of Information and Communication, 2000)

<i>Users</i>	<i>% Computer Use</i>	<i>% Internet Use</i>
K—12 students	88.3	79.5
College students	98.0	85.0
Teachers	96.0	87.7
Desk workers	88.5	66.8
Public service personnel	91.0	77.7
Farmers	4.7	2.2
Self-employed	36.8	25.3
Housewives	28.0	31.8
Disabled	46.5	36.5

Approximately 92% of computer users use the Internet; 84.3% use it quite often. Those in their 20s use the Internet for a weekly average of 12.6 hr those in their 30s for 10.8 hr, and those in their 40s for 9.8 hr (KRNIC, 2001c). Another study (KRNIC, 2001b) also reported that the younger generation uses the Internet most: At the end of 2000, there were 6.04 million users aged 7–19; 3.15 million, 20–29; 1.24 million, 40–49; and .4 million, over 50. Table 3 indicates a sharp increase in weekly hours of Internet use over the last three years.

Table 3 □ Hours of Internet use per week, as a percentage of users (KRNIC, 2001c)

<i>Hours of Use per Week</i>	<i>% in 1997</i>	<i>% in 2000</i>
Less than 7	81.1	42.7
7–14	14.7	33.3
14–21	3.4	15.0
21–28	0.3	2.5
28–35	0.2	3.0
35–70	0.2	3.1
More than 70	0.2	0.4

The main uses of the Internet were getting information (34%), playing Internet games (21.8%), communicating personally (e.g., chatting and e-mail—15.8%), using for educational purposes (9.3%), accessing news (6.1%), conducting electronic commerce (5.0%), and browsing entertainment sites (2.9%)(KRNIC, 2001c).

Instructional Use of the Internet

The current on-line cyber education system in Korea can be categorized into four types: (a) on-line corporate vocational education and training institutes, (b) on-line university courses, (c) on-line lifelong educational institutes, and (d) on-line K–12 classes. The combined market value of these types of on-line education in Korea in 2000 was estimated to be 50 billion won (approximately US\$38.3 million). This amount will be sharply increased (by a factor of 100) to 5 trillion won in 2002 and to 15 trillion won in 2005 (Lee, 2001).

Corporate on-line vocational education and training programs

The major benefit of running an on-line education program for training employees is the savings in cost and time while improving worker performance levels. There are two types of on-line cyber education services provided by corporate organizations in Korea: (a) Internet-based teaching and development (T&D) course for employees, and (b) on-line education programs for the general public. There were 40 on-line educational institutes with 376 programs targeting 45,798 workers in 2000 (Ministry of Education, 2000c).

Several corporations, such as Korea Telecom, Hyundai, and Samsung SDS, offer on-line cyber education programs to their employees as well as to the general public. Samsung SDS, for example, has been offering a variety of cyber education programs such as “An Overindulge” for elementary students, “Cyber Middle Schools” for middle school students, and “Cyber High Schools” and “Multimedia-Campus” for adults. The Unitel Co. Ltd. operates “Cyber Multi-campus,” offering 100 T&D courses in eight different areas and certificate programs to

adults (Ministry of Education, 1999). Table 4 shows the total number of corporate on-line education sites targeting the general public. Educational use of the Internet is increasing in various other sectors of Korean society as well. Figure 1 compares educational use of the Internet in 2000 with expected use in 2002.

On-line Cyber University

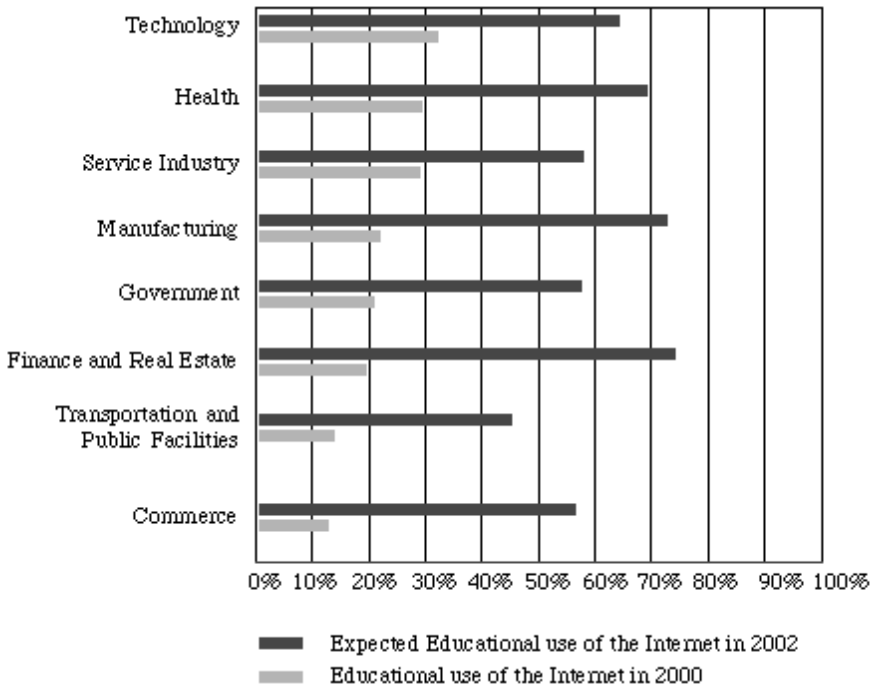
On-line university courses are being offered in three different ways. First, traditional universities offer on-line only courses or on-line courses with off-line components. Second, an existing distance education university, Korea National Open University, uses the Internet as a delivery tool for courses. Third, several traditional universities and independent on-line educational institutes have formed a consortium to build an independent on-line university.

Table 4 □ On-line life long education sites in 2000 (Ministry of Education, 2000c)

Categories of programs	Total #
Comprehensive program	32
Economics-Business Administration	40
Language	152
Courses for Experts	15
Computer	88
Liberal Arts and Science	16
Certificate	84

In 2000, there were 11 on-line cyber universities, with approximately 1,293 second semester courses offering degree programs, certification programs, or training courses in various fields. The universities operated on-line programs to (a) offer students supplementary instructional aids for the traditional teaching-learning process (31-33%), (b) provide students with more course choices by allowing them to take on-line classes from other universities (46-48%), and (c) offer

Figure 1 □ Percentages of educational Internet use in various sectors of Korean society. (Ministry of Education, 2000a)



courses to the general public as a part of lifelong education (20–23%) (Ministry of Education, 2000c).

The number of students enrolled in on-line university courses in 2000 was 5,900, which was 86.7% of the total capacity. Students favored courses related to the following areas: information communication and technology, computer-mediated animation, and certification programs. Student ages ranged widely: 20s (50.2%), 30s (31.7%), 40s (14.6%), and 50+ (3.5%) (Khawk, 2001). In 2002, the Korean Ministry of Education anticipates that there will be a total of 16 cyber universities with annual enrollment of more than 10,000 students ("Ministry of Education Approves" 2001).

On-line classes for K–12 students

The installation of a local-area network (LAN) had been completed for all of the 4,575 public K–12 schools by the end of 2000 (Ministry of Education, 2000a). The Ministry of Education has determined to support all the K–12 public and private schools that use the Internet with 256kbps until 2005 by paying the bills for their Internet use. The government also decided to replace their LAN cables (256kbps) with E-1 (2084 Mbps) by the end of 2005 (Ministry of Education, 2000b).

Although no public investigation has been made regarding on-line education for K–12 students, the Korean Edunet program (www.edunet4u.net), run by the Korea Education and Research Information Service (<http://www.keris.or.kr/>), lists about 141 on-line K–12 educational sites (Edunet, 2001). The educational sites were categorized into six types: (a) cyber lecture using video on demand; (b) Web-based instruction using Web pages; (c) portal site; (d) cyber school; (e) workbook; and (f) question and answer educational resources.

Social Issues of Internet Use

The digital divide is a hot issue with regard to the use of the Internet in Korea. After the "bill for preventing digital division" was passed last year, the government committed to build an "undivided digital society." The first part of the

plan is to establish 2,905 "digital subscribe line access multiplexes" in the suburbs by the end of 2001. Another plan is the assignment of a budget for disabled Internet users. So far, 3 billion Won (US\$ 2.3 million) has been assigned for developing devices, such as automated subtitle generators, speech synthesizers, and the like. The government has established 113 "local information centers" and 202 "Internet plazas" in underprivileged areas. The government also provides free computers with free Internet access to underprivileged students and offers free Internet classes to alienated populations, such as older people and housewives (Cho, 2001). Currently, every public town-block administration office in Korea has an information center equipped with computers and Internet access. Centers are available for local residents free of charge from 9:00 a.m. to 7:00 p.m.

Social problems related to the use of the Internet include unauthorized buying and selling of personal information, illegal distribution of software via the Internet, fraud in e-commerce, pornographic Internet broadcasting sites, Internet banking-related crimes, Internet addiction, and Internet plagiarism. The Korean government and public organizations are addressing these problems, operating "cyber police," making (or amending) laws, holding campaigns, and educating people. The Ministry of Education has a plan to include an "Internet ethics" class stressing responsible use in the current school curriculum.

Closing Remarks

With the advent of Internet technology, the use of the Internet and its application to education have been rapidly spreading for the last few years in Korea. As in other countries, the rapid growth of the Internet did not give Korean people enough time to form healthy Internet cultures. Furthermore, the Internet was introduced to the general public when the Korean government was receiving help from the International Monetary Fund. As a result, the majority of Korean Internet content was produced for commercial purposes, such as advertisements, entertainment, Internet commerce, and so forth, resulting in consumption-oriented cultures.

Koreans are realizing that the Internet is not a passing fad and that it is having a deep impact on their daily activities. They seem to agree that there is an urgent need to produce competitive high-quality Internet content. Productive Internet communities, which can change life styles fundamentally, can be established using wholesome and useful Internet content appropriately. It is, therefore, time for Korean Internet users in various fields to consider seriously how to develop and use positive Internet content to enrich their quality of life. □

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Instructional Use of the Internet in China

by Robert Zheng, John R. Ouyang, and Feng Rui

□ The instructional use of the Internet in China has come a long and difficult way. Its development can be divided into three stages: censorship, half-censorship, and limited self-autonomy. This paper focuses on changes regarding use of the Internet in China and instructional use of the Internet in Chinese schools in light of these stages.

Internet Access: From Censorship to Limited Self-autonomy

When the Internet was first introduced, people in China experienced conflicting feelings: fear, yet with great eagerness to learn. Many people were curious about the Internet and were stunned by the richness of information available. Fearing that the Internet would bring Western ideology that would contaminate its people and society, the government imposed strict censorship on use of and access to it, limiting access to only research institutes and a few higher education institutions. The situation has shifted recently toward more diversified use, particularly in areas of finance, insurance, industry, and entertainment (Table 1).

Starting in 1993, there was a series of changes in government policy regarding the use of technology in education, including the Internet. Realizing that information technology was a key