Korea National Open University (KNOU) opened in 1972 as a correspondence college designed to improve adult learners' preparation for Korea's college examination. KNOU has been redefined as "an institution for adults who are deprived, by various reasons, of higher education opportunities and is now playing a major role in developing lifelong learning in Korea. Although KNOU's enrollment increased from 12,000 in 1972 to 314,438 in 1998, it is struggling with a high dropout rate. Among the immediate challenges facing KNOU are to do the following: (1) develop a new curriculum and more flexible delivery system that will meet the unique needs of its changing student body (which is increasing in age and including increasing numbers of transfers from conventional universities or junior colleges); (2) improve its student assessment system; (3) learn to use technology more cost-effectively; (4) give professors more time for research; (5) improve its tutor and learner support systems; (6) give students more choices in selecting courses; and (7) obtain more funds (either by obtaining more government funding or increasing its student fees). KNOU is continuing to build a foundation for open and lifelong learning through implementation of the Cyber University Trial Project, establishment of the Center for Lifelong Education, and institution of a quality assurance system. (MN)
PRESENT PROBLEMS AND FUTURE CHALLENGES OF THE KOREA NATIONAL OPEN UNIVERSITY

JAE-WOONG KIM

Zentrales Institut für Fernstudienforschung
FernUniversität – Gesamthochschule – Hagen
Juni 1999

BEST COPY AVAILABLE
Address of the author:
E-mail: jngkim@mail.knou.ac.kr
KOREA NATIONAL OPEN UNIVERSITY
CONTENT

I. Brief History

II. Facts, Problems, and Issues
1. Students
2. Academic Programs
3. Teaching Method and Technology
4. Faculty and Staff
5. Student Support System
6. Management and Finance

III. Future Tasks
1. Cyber Education System
2. Lifelong Education System: Center for Lifelong Education
3. Quality Assurance System
Brief History

Korea National Open University (KNOU) was established in 1972, attached to Seoul National University, the most prestigious university in Korea. (KNOU's former English name was Korea Air and Correspondence University.) At first, it offered only 2-year junior college programs in five areas, i.e., Public Administration, Management, Elementary Education, Home Economics, and Agriculture. Printed texts and radio were main methods of instruction.

It was in 1981 that KNOU began to provide bachelor's degree programs. It is important to note that KNOU became an independent institute, separating from Seoul National University in 1982. At this time three more degree programs such as Economics, Law, and English Literature, and a two-year course of Early Childhood Education were added. In 1999, KNOU has 18 departments offering bachelor's degree programs.

Now KNOU is a highly esteemed institute, which is the only open and distance education university in Korea. With regard to the technologies used for instruction, KNOU is said to be one of the most advanced distance education institutes. It has its own satellite TV broadcasting system. The video-conferencing system connecting 14 sites is used for real time interactive instruction. More than 70,000 students are using their ID's for computer mediated instruction. KNOU must be one of the top ten mega-universities in the world with more than 300,000 students.

As the unique university using advanced technologies for education, KNOU has served diverse educational needs of adult learners in Korea. Specifically, KNOU has the following purposes: 1) To raise the people's overall education level by providing opportunities for higher education through distance education methods to adults who, for various reasons, could not receive or continue their college education; 2) To improve the academic or vocational proficiency of people who are already engaged in careers by offering opportunities for continuing education in various fields; and 3) To make major contributions to the welfare of the nation as well as to the development of a society as a whole.
Before moving to the current problems and issues of KNOU, it is interesting to note the background of the birth of KNOU. It might be said that the conception of KNOU was a kind of historical accident. The idea of a correspondence college turned up as one of the solutions to the problems caused by the National Preliminary Examination for College Entrance, which was introduced in 1968. This Examination resulted in many failures, who still wanted to pursue higher education. Mr. Kwon, the then Minister of Education, was asked in the National Parliament to answer about the policy measures against the problems of the increasing number of repeaters in college entrance examination. He replied that he would establish a correspondence college to hold those who failed in the Examination, which was believed to ease the social problems caused by the College Entrance Examination. And then he hurriedly set about to amend the Education Law so that this new type of college could be established.

In sum, in the beginning stage, an idea of correspondence college was adopted as a solution to a kind of social problem of failures in the College Examination, without appropriate preparation period. Fortunately, however, the Task Force for Establishing Correspondence College composed of Seoul National University professors redefined the characteristics of this College as „an institution for adults who are deprived, by various reasons, of higher education opportunities.“ This means that this Correspondence College could play a role not only to mitigate social problem of repeaters in college examination but also to contribute to developing lifelong learning in Korea. It might be said that at this time a seed for lifelong education through distance education was sown. It is true that KNOU has been successful to satisfy the educational needs of people who want to get a degree. It is also the case that KNOU has not felt the need to upgrade the quality of education, because demand for KNOU has exceeded the openings of KNOU. (Korea has maintained the admission quota policy for colleges and universities.) However, KNOU is now faced with new challenges. The number of applicants is decreasing. Technology cannot be monopolized by KNOU, but be actively used by conventional universities for teaching and learning. To make the matters worse, Korean economy was broken down last year and went under the control of International Monetary Fund (IMF). In some sense, KNOU stands at the crossroad of crisis and
opportunity.

In order for KNOU to survive, the following things should be addressed. More efforts should be made for constructing the cyber education system. The concept of life-long learning should be newly interpreted and incorporated in the operation of KNOU. And, the issue of quality of education should be seriously dealt with.

II. Facts, Problems, and Issues

1. Students

With regard to the number of students, KNOU should be among the biggest institutes in the world. More than 300,000 students are enrolled in 1998. This is tantamount to about 11% of the total population of higher education institutes in Korea. (About 2.7 million students are enrolled in 158 junior colleges, 175 universities including KNOU, and 11 teachers' colleges in 1998.)

The growth of KNOU student body has been very fast since its conception in 1972. In the beginning there were only 12,000 students at KNOU. The number of students increased to 32,000 in 1980. And the number jumped to 153,000 in 1985, four years after the introduction of BA programs in 1981. And 1990s witnessed an even greater increase in student numbers as shown in Table 1.

Table 1. Changes in KNOU Students by Year (Degree Programs)

<table>
<thead>
<tr>
<th>Year</th>
<th># of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>12,000</td>
</tr>
<tr>
<td>1980</td>
<td>32,053</td>
</tr>
<tr>
<td>1985</td>
<td>153,215</td>
</tr>
<tr>
<td>1990</td>
<td>148,650</td>
</tr>
<tr>
<td>1995</td>
<td>314,977</td>
</tr>
<tr>
<td>1998</td>
<td>314,438</td>
</tr>
</tbody>
</table>

There were not any students in non-degree programs until 1997 when KNOU launched the Center for Lifelong Education (CLE) as an attachment. Now there are several thousands enrolled in several non-degree programs operated by CLE. (CLE will be discussed in more detail at the final part.)

It should be noted that the following description about the students’ profile is only for degree programs. As seen in Table 2, more female students are entering KNOU. This phenomenon is similar to that of most distance education institutes. Interestingly, however, until the mid-1980’s there were more male students. For instance, 68% of the student body were male in 1983. This might be explained by the fact that male students come first in the shortage of admission quota. That is, when there were not enough openings in the conventional universities during the 1970’s and the early 1980’s, male students came to KNOU as an alternative. Perhaps, this is also linked to the male-dominant Confucian culture. Male first, female second: Conventional universities first, distance university second.

Table 2. KNOU New Students’ Profiles (1994-’98)
The average age of students tends to be increased. Now an age of an average KNOU student is 30, increased from 27 in 1994. On the other hand, a share of housewives among the student body has been increased. It doubled over the last five years, i.e., 7.5% in 1994 to 14.8% in 1998. These changes in student body imply that the function of KNOU has been on the move from a substitute for regular universities to that lifelong education institute.

It should be noted that the number of students transferred from conventional universities or junior colleges is increasing. They want to have another major related to their current job. For instance, about 50% of the new comers in Spring Semester, 1999 were from other junior colleges or universities. This trend is expected to continue in the future. In the near future, the number of transferred students might exceed that of freshmen. About 10,000 to 15,000 students have graduated from KNOU (Table 3). The number has been increasing. However, the number of graduates is still quite low in comparing with that of intake each year. Roughly speaking, the completion rate has remained about 15%, which is low in terms of international data. It is important to note, however, that the ratio of students among the graduates entering graduate school is relatively high. That is, about 20% of the graduates go to various kinds of graduate schools.

<table>
<thead>
<tr>
<th>Year</th>
<th># of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>10,604</td>
</tr>
<tr>
<td>1995</td>
<td>10,036</td>
</tr>
<tr>
<td>1996</td>
<td>13,517</td>
</tr>
<tr>
<td>1997</td>
<td>13,810</td>
</tr>
<tr>
<td>1998</td>
<td>15,463</td>
</tr>
</tbody>
</table>

KNOU students come from all the regions in Korea. But 42% of the students come from Seoul, which is much higher than the percentage of Seoulites among the Korean population, i.e., 25%. Picture 1 shows the distribution of students by region.

Figure 1. KNOU Students by Region
Problems and Issues

First, KNOU has been struggling with the issue of high dropout rate. By and large, distance education institutes have low completion rate. But the case of KNOU is rather serious. Only 15% of the new comers graduate in 10 years. Especially, in the second semester of the first year, about 40% of the freshmen do not register. There might be many reasons for this: discrepancy between learner’s motivation and his or her learning situation, low academic ability of learners, poor quality of learning materials, lack of student support, and rigid management of curriculum (i.e., little choice of courses). Among these, KNOU is paying attention to the last two things. More assistance will be made for student support one the one hand, and curriculum will be revised in order for learners to make a choice according to their needs and academic ability on the other hand.

Second, an increase of the number of transferred should be addressed. Recently, students transferred from other junior colleges and universities are increasingly knocking the door of KNOU. Their needs seem to be different from those of the freshmen in many ways. This changing nature of KNOU’s student body will be challenging the university to develop new curriculum and to provide more flexible system.

2. Academic Programs

There are five Schools, i.e., Liberal Arts, Social Science, Natural Science, Education, and General Education, and 18 Departments under the Schools(See Table 4). Most courses are managed at the level of Department. Students enter the Department and take the courses each semester provided by the Department as a package.
Table 4. Majors and the Number of Courses at KNOU

<table>
<thead>
<tr>
<th>Schools</th>
<th>Majors</th>
<th>Number of courses offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of Liberal Arts</td>
<td>Korean Language and Literature</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>English Language and Literature</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Chinese Language and Literature</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>French Language and Literature</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Japanese Studies</td>
<td>32</td>
</tr>
<tr>
<td>School of Social Science</td>
<td>Law</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Public Administration</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>30</td>
</tr>
<tr>
<td>School of Education</td>
<td>International Trade</td>
<td>29</td>
</tr>
<tr>
<td>School of General Education</td>
<td>Media Arts and Sciences</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Agricultural Science</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Home Economics</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Computer Science</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Applied Statistics</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Environmental Health/Nursing</td>
<td>29/17</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>30</td>
</tr>
<tr>
<td>School of Education</td>
<td>Early Childhood Education</td>
<td>30</td>
</tr>
<tr>
<td>School of General Education</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The curriculum of KNOU, at the moment, consists of general education aiming at providing a broad view of the world and the mankind, and a choice of 18 majors. The general education courses include those in liberal arts, social and natural sciences. 140 or more credits (42 credits in general education and 66 or more credits in one major area) are required for a student to graduate with an undergraduate degree. Normally, one subject consists of three credits.

Problems and Issues

First, KNOU has to solve the problem of the rigidity of curriculum. There has been no formal mechanism to identify specific learning needs of adult students in developing the courses and to create new courses based on those needs. In implementing its curriculum, little choice has been given to the students. For example, the first year students in a department are given 6 or 7 courses to take in their first semester. No one is allowed to take other courses designated by the Department. As a matter of fact, part-time registration is not possible. KNOU has argued that administrative difficulties in handling 1,000 – 5,000 students in a course and more than 280 courses in a semester prevent the university from adopting open curriculum policy. However, KNOU is now pressed by the students to adopt open curriculum. KNOU is now thinking about the introduction of New Curriculum in 2001, which allows students to register on a part-time basis and to have more choice in their course selection.

Second, KNOU need to introduce graduate programs. KNOU offers only bachelor's degree programs in 18 majors and provides lifelong education courses as a non-degree program. So far, unfortunately, KNOU has not been allowed to provide graduate level courses. There are a couple of reasons for this. First, they are suspicious of the quality of distance education at a graduate level in general. Second, there will be strong resistance from other conventional universities in allowing KNOU to offer graduate programs to a large number of students at low cost. As more working adults are seeking more flexible mode of education to continue their study beyond undergraduate degrees, there has been growing social pressure towards the government to allow KNOU to have graduate level programs. KNOU, recognizing this situation, has tried to show its confidence in
developing high quality graduate programs in a proposal presented to the government. A decision about whether to allow KNOU to introduce graduate programs or not is to be made by 2000.

3. Teaching Methods and Technologies

The main method of teaching and learning at KNOU is printed textbook, which is used for all the courses. In addition, one of the three media such as TV, radio, and audiocassettes should be used. About 50% of the courses are produced in audiocassettes, while 35% and 15% are made for radio and TV, respectively. A videoconferencing system, the Internet and PC networks are supplementary methods, along with face-to-face schooling and tutoring. Thirteen regional study centers in big provinces and 31 local study centers in small cities work to provide instruction sessions, individualized tutoring, and other support services such as library, computer lab, and assistance for application.

A typical 3-credit course at KNOU consists of a basic textbook, a series of twenty 30-minute TV, radio, or audiocassette programs. About 40% of the courses require eight hours of face-to-face instruction sessions or lectures via videoconferencing, while the others just provide supplementary reading materials written by the lecturers. Students at KNOU are assessed and given an absolute grade on the basis of their performance in two kinds of tests: one is a final examination with multiple-choice questions consisting of 70% of the grade and the other is an assignment or an essay-type for a mid-term examination. For some courses, practicum and demonstration of certain skills are required. In case of Web-based courses, varieties of assessment methods are applied: multiple choice tests, participation in online discussions, essays, assignments and quizzes.

KNOU has employed various technologies for distance teaching and learning. Some strategies to utilize information technology for its system are as follows. First, KNOU is trying to be a cutting-edge distance education institute in using the advance technologies for open higher education. In so doing, KNOU has invested in a
videoconferencing network system, a satellite TV channel, a multimedia digital library and a computerized administration system earlier than any other higher education institution in Korea.

Second, KNOU has developed an enormous database of online learning materials and a multimedia digital library so that students and others who want to have an access to the university's knowledge base may obtain online information at a distance. These online multimedia materials are electronic forms of printed materials and broadcasting programs produced by KNOU.

Third, KNOU puts an emphasis on interactivity between its instructors and students, or among students using telecommunications technologies such as the Internet, the commercial PC network and the videoconferencing system. The computer-mediated communication system will assist KNOU to improve the quality of its student support by providing interactivity at low cost.

It is important to note that several projects or initiatives were introduced to implement these technology strategies at KNOU in 1990’s. In 1992, KNOU started an initiative to develop and implement text-based database services for its students and to provide the opportunity for two-way interaction through three nationwide PC network systems. As a result, a database with supplementary learning materials for more than 300 courses (60 percent of all courses offered by KNOU) was developed. Using the database services, students could obtain supplementary learning materials for each course, updated news of their departments and other information in the KNOU Weekly News.

A cable TV channel for distance education, called the Open University Network (OUN), was launched in September 1996 to promote open and lifelong education at the higher education level. With modern digital broadcasting facilities and about 80 staff members, OUN has been providing programs of regular degree courses to KNOU students and non-degree lifelong education courses to the general public to meet their needs for higher education and retraining. About 40 percent of OUN’s broadcasting time is allocated to lifelong education programs for adults. This cable TV channel was changed to a satellite TV channel in March 1999 in order to expand distance education services to those who live in remote areas where cables have not been installed.
Problems and Issues

First, KNOU needs to improve student assessment system. Due to the objective test-oriented examination, students learn apart from what professors teach. There is a criticism that while teachers teach this way, students learn that way. It has been suggested to introduce an assessment method to reflect the relevance of education. For instance, requiring more essay-type assignments, providing tutor feedback on the assignments, implementing different assessment methods reflecting the characteristics of courses, and introducing computer-assisted assessment have been discussed. However not much improvement in student assessment has been made not only because the changes in student assessment system means the changes in all aspects of teaching and learning process at KNOU but because there are administrative difficulties. With the introduction of new curriculum and related policies in 2001, this rigid student assessment method is expected to change.

Second, it should be acknowledged that technology does not guarantee quality education. As a matter of fact, even though much investment has been made in computer technology, online interaction has not increased much. This is owing to environmental factors such as the lack of computers in regional study centers, slow access from home computers using standard telephone lines, and high telephone fees. More importantly, however, the slow feedback system is appeared to cause lower interaction rates between instructors and students. In addition, students' culture of passive involvement in discussion is also indicated as an important reason for the inactivity in the online group discussions. Unless the interaction in the online is obligatory to students as well as instructors, interaction in the internet may not improve.

Third, there is an issue of cost-effectiveness in KNOU's technology strategies, as Sir Daniel of the Open University, UK argued. He expressed a doubt about the effect of KNOU's high-cost technology without providing extensive tutoring services. More seriously, the educational programs produced by KNOU are not appropriately utilized by students. Sometimes, it is reported that less than 10% of the students watch TV programs for their study. This is closely linked to the method of student assessment, as mentioned earlier.
Thus, interactivity through advanced technologies has to be combined with more investment in the development of high quality learning materials, extensive individualized learning supports from tutors, more flexible learner-centered curriculum, and improvement in student assessment system.
4. Faculty and Staff

There are 242 full-time academics (including teaching assistants), 5,779 part-time lecturers including tutors, 511 administrative and technical employees (see Table 5), working for KNOU to provide distance education to more than 300,000 students all over the nation. With regard to the number of full-time staff and that of students, KNOU is a very efficient institute.

Professors in the departments are responsible for developing textbooks and participating in the production of programs for TV, Radio or audiocassettes, delivering or supervising schooling sessions, and providing supplementary materials with the help from teaching assistants.

Part-time lecturers take part in schooling sessions in the regional study centers and special lectures following the requests from the students. Tutors are responsible for encouraging students to study through the self-directed learning process. They also help students writing a thesis and preparing for examinations in each regional study center. Tutoring service was introduced in 1997 and currently 128 tutors are available in 11 regional study centers (except two study centers in Seoul) to help students who are taking some subjects in general education. All tutors are hired on the part-time basis, required to hold an MA degree or above and have prior teaching experiences in other schools. KNOU plans to hire more tutors in major subjects.
Table 5. Faculty and Staff in 1998

<table>
<thead>
<tr>
<th>Full-time Academics (242)</th>
<th>President</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professors</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Associate professors</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Assistant professors</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Guest professors</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Research workers</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Teaching assistants</td>
<td>62</td>
</tr>
<tr>
<td>Part-time Academics (5,779)</td>
<td>Part-time lecturers</td>
<td>5,651</td>
</tr>
<tr>
<td></td>
<td>Tutors</td>
<td>128</td>
</tr>
<tr>
<td>Administrative/ Technical staff (511)</td>
<td>Educational officials</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>General administrators</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>Special govt. personnel</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Support associates</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td>Technicians</td>
<td>98</td>
</tr>
</tbody>
</table>

Problems and Issues

First, there is an issue of job descriptions of full-time professors. Normally, full-time academics at distance education institutes are responsible for development of courseware, training of tutors, and research. However, professors at KNOU are asked to participate in schooling session and student assessment. Thus, many professors complain that they do not have enough time for research. If KNOU have more tutors to be responsible for student assessment, then professors at KNOU can enjoy more time for research.

Second, KNOU should improve tutor system. It has to be noted here that tutor system
at KNOU is quite different from those at the distance teaching universities in other countries such as Open University, UK. Unlike those at OUUK, tutors at KNOU do not provide individual feedback on course assignment. As a matter of fact, with only 128 tutors for more than 300,000 students, individualized learning support is impossible. And the courses offered by KNOU require the students to write only one essay-type of assignment as a mid-term paper. Thus, it is the case that KNOU tutors provide special lectures in some courses of general education to help first year students. The university plans to increase the number of tutors, expecting that this would help decrease dropout rate in the first year.

5. Learner Support System

Learner support system is crucial for autonomous learners to survive in the distance education institutes. There are several things for KNOU to support learners at a distance.

First of all, KNOU publishes Weekly News every week and sends it to every student by mail to communicate with students. KNOU Weekly News contains not only academic information but also general information about student activities and campus life. KNOU Weekly News might be said to be a kind of vein to connect between the university and students and among students.

Students can be served through the PC network or the internet when they have some questions about academic affairs or student activities. Interactive technologies can help provide students with opportunities to receive learning support from the university. Even though the interaction between instructors and students or among students themselves are less active than expected, interaction rate has been growing rapidly and now about a quarter of KNOU students use the computer network to communicate with KNOU faculty and staff, and other students.

Student Guidance Center had been working for students who need counseling in terms of academic affairs and personal life. But this center was merged into Institute of Distance Education in June 1999 in the process of restructuring.
One of the important things for student support is regional study center and local study center. There are 13 regional and 31 local study centers all over the nation to provide KNUO students with learning support services such as face-to-face schooling, tutoring, and learning materials services. A regional center, by and large, has only a building with many lecture rooms, a large classroom for an interactive video conferencing, a multimedia lab with 20 – 40 computers connected to information superhighways, a library, and a few administration offices. It has been recognized by the university management that technology facilities and learning materials as well as learning spaces are not adequate to serve about 5,000 - 20,000 students in each region.

Since each regional study center has only 10 to 15 tutors, who are responsible for courses in the field of general education, private tutoring is not enough to meet the learners’ needs. Even though tutors are encouraged to provide one-to-one based interaction with the students, the shortage of tutors has led tutors in the regional centers to provide large-classroom lectures and learning support to limited number of students. Lack of tutoring services is indicated as one of major problems such as high drop-out rates in the first and second years of study at KNUO.

Interestingly enough, due to the lack of student support provided by the university, KNUO students voluntarily operate study groups within their major fields by region. It is reported that there are around 500 study groups in Seoul and more than 700 study groups in the other regions. Each study group consists of between 20 to 100 students. Roughly speaking, about 40% of the KNUO students are participating in the study group activities.

A study group usually meets once or twice a week, for 2 – 3 hours in the evening and studies various learning materials prepared by the group members. Learning materials include the summary of KNUO textbooks, supplementary materials provided through KNUO computer network, explanation of test items, and the summary of broadcasting programs. Sometimes external experts or KNUO graduates are invited to share their experiences. It is reported that the involvement of students in the study group activities is positively related to the course completion rate and GPA.
Problems and Issues

First, learner support needs to be strengthened in a way that individual learners can be served for their unique problems to be solved. In order to do this, the number of tutors should be radically increased on the one hand, and the role of tutors be expanded to student assessment and private consultation on the other hand.

Second, more attention should be paid to students voluntary study groups. For instance, the university may provide various learning materials and study places within the regional study centers to activate the study group activities. Or some assistance can be made for them rent a study room outside of the regional center.

6. Management and Finance

KNOU has invested in an integrated information management system for administration and student services. Handling more than 300,000 students with a small number of staff and implementing various policy measures in the decentralized administration require extensive use of computer network technology in the management of the university. The integrated information management system at KNOU has sub-categories such as general information about KNOU, administration, academic information, schools/departments, digital library, and attached institutes. This system can be accessed from KNOU Homepage (http://www.knou.ac.kr).

With regard to finance, 35% of KNOU’s budget comes from the government and the other 65% from students’ fees. A total budget of KNOU in 1997 was about 50 million US dollars. Cost per student at KNOU has been between US$120 and 150$ since 1993. Compared with other national universities, which get 60 – 70% of their budget from the government, the portion of the government share in KNOU’s budget is too small.

In introducing new technologies such as video conferencing system, satellite TV, and multimedia digital library, KNOU has solicited outside financial support, either from the government or from the private sectors. For example, for the development of the PC network database in 1992, KNOU received $150,000 from a commercial PC network company and invested another $150,000 in matching funds in the first year.
The videoconferencing system was established in 1995 with funds from the Ministry of Information and Communication (MIC), as a part of the national information superhighway project. A total of $1.6 million ($1.2 million from the MIC and $0.4 million from KNOU) was invested in equipment for videoconferencing systems connecting 13 study centers and the KNOU headquarters. During the 3-year experimental phase, no telecommunication fees were charged for the use of the videoconferencing system. Since 1998, however, KNOU has paid about $15,000 a month for tele-communication fees and other operational costs. Most of this amount has been recovered because of costs saved from substituting face-to-face instruction sessions with video-conferencing sessions.

Problems and Issues

First, integrated information system needs to be improved in a way that students can register the courses on line. Now little choice in course taking is given to students. But when New Curriculum, which allows students to select courses, is introduced in 2001, everything will be changed. Unless KNOU prepare for this appropriately, it might be faced with serious problems.

Second, with regard to financial issue, there are two options for KNOU to take: one is to get more subsidies from the government; the other is to increase student fees. The former will be a burden to the government struggling with IMF economy, while the latter will be opposed by students as well as the Ministry of Budget and Planning, which is responsible for controlling the living prices. Notwithstanding, if KNOU fail to get more funds either way, it may be almost impossible to upgrade the quality of education.
III. Future Tasks

Lifelong learning seems to be a major topic in education reform movements in each country. Korea is not an exception. The Korean government’s plans regarding lifelong education have been developed and implemented according to the suggestions made by the Presidential Commission on Education Reform (PCER) since 1995. The Commission, established in February 1994 and effective until February 1998, suggested the long-term vision of Education Reform as an „Edutopia,“ meaning „an education welfare state—a society of open and lifelong education to allow each and every individual equal and easy access to education at any time and place.“

To build the foundation for open and lifelong learning society, several strategies have been implemented. The national credit bank system, which allows people to earn credits through the open educational system outside of regular colleges and universities, was established in 1997. Extension programs of universities have been encouraged in order to make university education available to non-collegiates. The idea of a cyber university and private distance teaching universities was also suggested as a possible means of realizing an Edutopia. In this context, KNOU has been expected to play a key role for the open and distance education system. However, the surrounding socio-economic as well as educational environment of KNOU is not so favorable to it. Here three policy tasks are suggested for KNOU to address in the near future: Cyber Education System, Lifelong Education System, and Quality Assurance System.

1. Cyber Education System

The 1990’s has been witnessing the revolution of information and communication technologies. New jargon of ‘computer literacy’ is becoming more and more popular. Nobody seems to escape from digital learning in the near future. It might be fair to say that we are already living in the digital world. A kind of paradigm shift in distance education is happening here and there.
KNOU has paid much attention to cyber education, as the other distance education institutes have done so. Korea also recognizes the importance of cyber education. Korean government initiated the Cyber University Trial Project in 1998. Before coming into cyber education at KNOU, it might be better to describe briefly this Project at the national level.

**Cyber University Trial Project**

In the Cyber University Trial Project a quarter of higher education institutions in Korea and several private companies have been participated, using advanced technologies to deliver open and distance education to the university students and working adults. This Project, which continues until February, 2000, aims to explore ways to: 1) create a cost-effective cyber education system without deteriorating quality; 2) develop and implement Web-based courses; 3) identify appropriate policies and standards for running a cyber university; and 4) share experiences among the participating institutes.

Universities and companies may form a consortium, or a university can try cyber education independently. KNOU is participating in a consortium, which consists of 9 universities.

All the institutions involved in the project have been taking a role of expanding open and distance education throughout the country using interactive technologies including internet. It is expected that the Cyber University Trial Project would help open and distance education in Korea to be more firmly integrated into the formal higher education system and upgrade the status of open and distance education.

It is reported that in the second semester of 1998, about 45,000 students registered in one or more of 536 courses offered by the institutions participating in the Cyber University Trial Project. More than 80% of these students were those of the participating institutions, while less than 20% were adults on a part-time basis.

Ministry of Education is planning to make some regulations for establishing a cyber university, considering the results of this Project. It seems to me, however, that it is not easy to allow the foundation of a cyber university, which awards degrees mainly through courses on the internet. For in Korea there still exists a strong disbelief in the quality of distance education.
Cyber Education at KNOU

While participating in the Cyber University Trial Project, KNOU has developed 10 courses on the internet, being shared with all the member universities of the consortium. Interestingly enough, however, internet is not a regular teaching medium recognized by KNOU. In other words, during the trial period, an instructor, who is participating in the Project, had not only to develop internet course but also manage the same course through TV, radio or audiocassette. Thus, in order for KNOU to facilitate cyber education in the near future, relevant regulation about teaching and learning should be revised in a way that internet becomes a legally recognized teaching method.

It is very important to note that KNOU could establish a multimedia digital library system on the Web in 1997, with the technical and financial help from IBM. This new initiative could make KNOU digitize TV, radio and audiocassette programs. These digitized programs are integrated in a certain teaching and learning platform so that the students study their courses in a multimedia format on the Web. Now this digital library system is free of charge to anybody. It can be said that KNOU begins to operate a kind of Video-On-Demand (VOD) for not only for KNOU students but also all the people in Korea.

All the TV, radio, and cassette programs, i.e., 760 hours of video and 4,730 hours of audio materials, produced by KNOU were digitized in 1998 and stored in the digital library system. KNOU will add lifelong educational TV programs to the digital library system in 1999, allowing the public to access it and take Web-based lifelong educational courses.

Unfortunately, however, the number of students taking advantage of the digital library system for their courses is not large. This can be explained in two ways: one is technological reason, and the other is educational reason. Technologically, there are not many students who can access freely to the digital library at home or office. Use of modem through telephone line is not appropriate for teaching and learning the multimedia learning materials. The information technology situation is getting better in Korea. In the near future every home will be accessed to information superhighway. In that case, the digital library system of KNOU is going to be more actively utilized by
students.

More importantly, however, unless students are motivated to use the digitized learning materials, the digital library, however fantastic, might be a big waste of money. In this sense, the first thing for KNOU to do is to change the way of teaching and learning. For instance, a regulation can be made that the use of Web-based teaching and learning be required.

2. Lifelong Education System: Center for Lifelong Learning

Background of introduction of Center for Lifelong Education

Korea National Open University (KNOU) has met the needs of people for higher education by providing those who want to have BA with the chance for open and distance education. However, it is increasingly necessary that KNOU meet the demand for continuing education for every walk of life regardless of degree. With the advanced technology, KNOU is in a favorable position to reach out people who want to learn something throughout life. KNOU is now expected to play a key role in realizing the vision of the Education Reform that will establish the Open Learning Society, i.e., Edutopia, in Korea. With a view to achieving this objective, KNOU has been asked to provide non-degree courses. KNOU has conducted a series of studies on the introduction of non-degree courses, with the help of the Institute of Distance Education (IDE), which is an attached research center to KNOU. And then, Center for Lifelong Education (CLE) was launched in 1997, as an attached institute to KNOU. As its first project, CLE planned to operate „Teachers’ In-service Training Program“ and „Program for Small & Medium Industry Managers“.

CLE Programs in 1998-’99

(1) Primary School Teachers’ In-service Training (Topic: Individualized Learning)
(2) Small and Medium Industry Managers
A Case: Primary Teachers’ In-service Training

**The Student Body**

The students for the program came mainly from primary teachers. Now we are running the fourth period. In case of the first period program during the 8th of August to the 1st of November, 1998, there were 1,594 students. About a half of the students were male. This ratio is said to be high, comparing to the ratio (38.2%) of male teachers at primary school in Korea. The students were broken into two groups due to the video-conferencing capacity of KNOU. The completion rate was 92.8%.

For the 2nd period program during the 9th of May to 29th of July, the number of students enrolled was 966. The completion rate was as high as 96.9%. The third period program was delivered from the 10th of October to 26th of December. 943 students were enrolled and among them 941 students passed the final examination. As time passes the completion rate is increasing. About two-thirds of the students were male, which was higher than that in the first period. With regard to age group, 3.3% are in their twenties, 12.5% thirties, 39.8% forties, and 44.3% fifties. And 40.2% of the students came from large cities, 29.2% from mid and small cities, and 30.6% from rural areas.

**Contents and Methods**

A course team for this program was organized to select the most important contents. Twenty-two topics were selected under the four categories. The writers for them were chosen among the most famous experts in each field. As a matter of fact, the text used for the program was so popular that thousands of copies were sold to teachers and professors who were not enrolled in the program.

This program is planned to use a variety of distance education methods. First of all, a printed text written by a group of famous experts is given to the students. Twenty 30-minutes TV programs are aired through KNOU’s own cable TV network. (On March
1st, 1999 this system was changed to Satellite TV.) In addition to these, 30-hours video-conferencing is given to the students. Video-conferencing at KNOU is interconnecting 13 regional centers across the country with two-way audio-video interaction. For assessment of students, an assignment which requires writing a paper about the instructional design and implementation of a specific theme based on the principles of Individualized Learning is given, and final examination which consists of objective items is administered.

**Responses from the Students**

Students were surveyed at the end of the first and third period programs. Generally speaking, the students seemed to like distance education for their in-service training. For the first period program, 50.4% of the students responded "satisfactory" about the program, while 11.2% "unsatisfactory." Interestingly, however, the ratio of "satisfactory" is jumped to 66.1%, while "unsatisfactory" remains 10.7% at the third period program. This might be due to the revision of a part of the program with the feedback from students survey.

The survey for the first period shows that distance education for in-service teacher training can be compatible with face-to-face training in terms of the quality of education. 60.7% of the respondents thought distance training can be more effective than face-to-face training. Especially, they are fond of distance mode training, because they can see the vivid teaching and learning activities through TV at home. Three quarters of the respondents thought the quality of the text was excellent.

At the third period program, more than 90% of the students thought this in-service training at a distance was useful for understanding Individualized Learning as well as for putting the ideas into practices in the classroom. Students thought TV(81.1%) and video-conferencing system(85.0%) were effective for understanding the contents of the program, respectively. Interestingly, however, only 46.3% of the respondents recognized assignment as effective for understanding them.
Problems and Issues

There are some problems, too. First of all, many teachers could not watch cable TV because the technological infrastructure was not so good in their residence. This situation is expected to be better since the introduction of satellite TV in March. Second, this program does not include enough time for practicum of new teaching methods. This might be a common limitation found in other institutes using distance education for teacher training. It could be solved by organizing practical sessions at regional or local centers with the help of other teachers and experts in the region. Thirdly, there is a weakness in the assessment system, which depends on partly multiple-choice tests. This might be inappropriate in terms of the nature of education. Actually, some students were critical of this point at the survey. From the fourth period program, it is planned to increase the weight of subjective tests.

It should be also noted that the fact that there are more male teachers than female counterparts in the program might be related to non-educational reasons. That is, male teachers are nominated for this program because in-service teacher training is not only for improvement of teaching practices but also for being crucial for promotion. This explains the reason why almost the students came from forties and fifties. (Now in order for teachers to get in-service training at the national level, they need to be nominated by the principal. In this process, male teachers are more likely to be selected.)

Prospects

KNOU has a long-term vision about the in-service teacher training at a distance. KNOU is thinking about the permanent teacher in-service training center authorized by the Ministry of Education, which has a plan to use distance education widely for teacher-in-service training. KNOU is planning to begin Web-based programs for teachers. More time of the satellite TV broadcasting will be earmarked for teacher in-service training. It should also be noted that KNOU is preparing for setting up a consortium, which consists of LG Information & Communications, Hanbit Net and KNOU, in order to provide cyber lifelong education to working people, professionals, teachers, and people who are interested in Korea Language and Korean Studies. Partnership with business
sector is expected for KNOU to make a big step in the field of cyber lifelong education. Finally, it should be mentioned that interactive satellite TV technology, which is very promising for lifelong education in the future, is now on the experimental stage with the joint efforts of Electronics and Telecommunications Research Institute(ETRI) in Korea.

3. Quality Assurance System

Why Quality?
As a matter of fact, KNOU did not need to concern the issue of the educational quality for a long time, not because its quality was unquestionably high but because there was always much more demand than the openings of KNOU. However, since the mid-1990's KNOU began to experience sharp decrease of applicants. This is caused by several reasons: 1) admission quota of conventional universities have been expanded; 2) many two-year junior colleges were newly set up; 3) the number of high school graduates has been decreased; 4) many working people could find various ways to get a degree outside of KNOU; 5) communication technology began to be used by conventional universities; and 6) adult learners with diverse educational needs were not satisfied with the quality of KNOU education. The issue of quality assurance is related to the final one. These changes surrounding KNOU are making KNOU rethink what it has been doing in terms of quality of education.

In a sense, the quality of education at KNOU was in the hands of full-time professors, who traditionally enjoy all the power in the institute. A professor is responsible for the whole process of distance education from decision of a course to development of textbook, production of TV, radio or audiocassette program, making examination items, and even assessment of student performance. There was no official mechanism to screen the activities of professors. In this situation, the quality of education totally depends on the quality of professors. But who can tell that the professors at KNOU are the best professors?
Introduction of the Quality Assurance System

A regular system of monitoring and evaluation of educational services provided by KNOU should be established to ensure the quality of the educational services. That is, the effectiveness of open and distance education programs needs to be continually monitored and evaluated. This requires major investments in building research capacity. The quality assurance system can help identify problems with the programs and educational services and suggest possible solutions to those problems. Especially, student survey at the end of semester has to be done and feed back to the revision of the programs and the improvement of services. Also, regular examination by external experts need to be conducted to identify problems in organization, polices and operations. This external evaluation will help KNOU compare their performance with other conventional institutions.

Quality Assurance by Course Evaluation by Students

Once the Textbook Committee authorizes the writers to develop a textbook, there is no official mechanism to review the following steps. All the responsibilities lie in the writers. What the KNOU Publishing Department does is just to publish and deliver the textbooks in time. Of course at the last page of each textbook, a student evaluation sheet is attached for feedback on the textbook from the learner's point of view. But there are few students who send them to the university.

Broadcasting programs including satellite TV, Radio, and audiocassettes are produced by the Education Media Development Center at KNOU. The Committee of Education Media Management decides the type of media for the courses and time schedule for broadcasting. Once the programs are produced, they are to be reviewed by the production team before broadcasting. But few changes can be made during this review process. No formative evaluation by external experts or students is conducted before broadcasting. After a program is delivered, monitoring by a group of students and media specialists is conducted. Suggestions from the monitoring are given to the production team for the improvement in producing next programs.

But it is each individual professor's choice whether or not to take the recommendations from the reviewers. No rigorous system has been set up to evaluate activities of
academic faculty at KNOU. As KNOU faces the challenges to improve its educational quality and provide more flexible services, the university is now going to introduce a course evaluation system which requires every course to be evaluated in various aspects by the students and external experts.

KNOU is planning to introduce course evaluation by students in 2000. This evaluation will be done for each course at the end of semester. This evaluation consists of the items about the textbook, TV, radio or audiocassettes, schooling sessions, final examination itself, and general satisfaction of a course. The results of the course evaluation will be publicized and reflected on course revision. What has to be done before introduction of this evaluation system is to persuade professors to introduce this new evaluation system.

Providing Staff Development Program

By and large, the successful implementation of a distance education program requires each learner’s self-directed learning skills as well as well-organized learning support from the institute. The students who enter the open and distance teaching institutes need to develop self-directed learning skills before they begin to study the open and distance education programs.

More importantly, academic as well as administrative staff working at the open and distance education institute needs to be continuously trained. Continuous staff development programs which emphasize educational effectiveness of open and distance education, design and interaction strategies of the courses, and technical skills need to be integrated into the open and distance education system in order to improve the educational quality. In providing the staff development programs, online technologies might be relatively useful. Especially, for professors, who hate group training, individualized staff development program needs to be introduced.

Concluding Remarks

In Chinese letters crisis has double meanings, i.e., danger and opportunity. A distance education institute such as KNOU has been facing with a kind of crisis. But this crisis always comes with opportunity. We need deep wisdom to change crisis to opportunity.
NOTICE

REPRODUCTION BASIS

☐ This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (9/97)