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### **The Information Literacy of Chinese Citizens and the Development and Utilization of Government Information**

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#### ***Abstract:***

*The connotation of information literacy and main factors affecting the information literacy of the Chinese citizens are analyzed. The main contents of the government information resources are briefly discussed. The development and utilization of government information resources are introduced briefly and precisely. And the future of the Chinese government informationization is forecasted from the perspectives of systematization of making public government information, reducing uneven development among different regions, increasing service items and information contents, strengthening IT application, and increasing the information literacy of public servants.*

*The UNESCO is currently mobilizing all countries' governments with all its strength "to empower anyone to use four kinds of information that belong to the public". Among them, Category 1 is the government information. The information literacy of citizens are closely related with their capability of collecting, organizing, accessing and using the government information. How is the information literacy of the Chinese citizens? What is the situation of the development and utilization of the government information resources? What are the prospects? These are questions that necessitate discussion and consideration by the Chinese library workers for they have a bearing on our government's realization of the informationization and E-government development strategy.*

# 1 The Connotation of Information Literacy of and Analysis of Main Factors Affecting the Information Literacy of the Chinese Citizens

## 1.1 The Connotation of Information Literacy

In my opinion, the information literacy should be people's information knowledge and technical ability in the background of the information culture and information society, namely, people's minimum level of information knowledge and reading and writing ability required for their participation in information exchanges. Information literacy should include information consciousness, information knowledge, information ability and information moral.

**Information consciousness.** Information consciousness is people's awareness of information. It includes their susceptibility to judge the information and acquire useful information in time, and their cognition of the roles of information resources and information technology in the social culture.

**Information knowledge.** It includes the basic knowledge on information theory, information techniques, information systems and the like.

**Information ability.** It includes abilities of judging information requirements, obtaining information, analyzing information contents, choosing useful information, producing and creating information, organizing and storing information, as well as making use of and bringing into play information functions.

**Information morale.** That refers to the logic criteria to be followed by everyone in the process of information collection, utilization, creation and transmission<sup>[1]</sup>.

## 1.2 Analysis of Main Factors Affecting the Information Literacy of the Chinese Citizens

### 1.2.1 Information Infrastructure

Information infrastructure has been developing quickly in China. According to the report published by China Internet Information Center (CIIC), by December 31, 2003, the total number of Internet users in China is 79.5 million, ranking second in the world, next to the United States. As compared with the data published by July 2003, the Internet access number increases 1.15 million during a half year. The growth rate is 16.9%. As compared with the numbers at the end of 2002, it represented a 2.04million increase, up34.5%. The total number of computer hosts in China had already reached to 30.89 million. As compared with the 12th survey, it represented a 5.17million increase, up 20.1%. As compared with the numbers at the same time last year, the growth rate is 48.3%, it represented a 10.06 million increase. The total capacity international gateway bandwidth in China had run up to 27216M. Domain names registered under .CN had numbered 0.34million. "WWW" websites totaled 0.596million. The strong increasing momentum of Netizens in China has attracted worldwide attention. According to the latest statistics released by the Ministry of Information Industry, by the end of October, 2003, fixed telephone subscribers in China had reached 255.139 million. It is an increase of 40.917 million over that at the end of the previous year. The number of mobile telephone users hit 256.938 million, 50.933 million more than the number at the end of the previous year<sup>[2]</sup>. These data show the vigorous development trend of the Chinese information infrastructure. This will be beneficial to the development and use of the government information, as well as the rise of the information literacy of the Chinese citizens.

### 1.2.2 Education Business

The State's investment in education has been increasing steadily. In 2002, the state investment in education undertaking had reached 3.41% of GNP. It will hit 4% of GNP in several years. China's education is developing. The education front in China has carried out in real earnest the spirit of the important speeches made by the State leaders about education, pushing forward quality-oriented education in an all-round way, and accelerating education development. According to "The Official Statistical Gazette on Education Development in China in 2002" published by the Ministry of Education, the number of new students enrolled by general high schools is 22.8182 million. This is largely equal to that of the previous year. The number of new students enrolled by general senior high schools stood at 6.767 million, 1.1872 million more than that of the previous year, the growth rate is 21.28%. The size of enrollment and the number of students studying at colleges and universities continued to increase rapidly. Graduate students enrolled all over the country numbered 0.2026 million, increasing 37.4 thousands compared with the previous year. The total number of students enrolled by colleges and vocational training schools was 5.4282 million, up 0.7861 million than that of the previous year, the increasing rate is 16.93%. According to tidings from the Ministry of Education in December 28, 2003, the number of students recruited in 2004 was expected to reach 4 million, 0.2 million more than that in 2003<sup>[3]</sup>. These students would primarily study at colleges and universities. It can be seen that new achievements and progress have been made in the reform and development of education in China. Increased cultural quality of citizens will be conducive to the development and use of the government information resources.

### 1.2.3 Information Literacy Education

In the 20th century, the information literacy education of the Chinese citizens is primarily conducted through libraries in colleges and universities. It is carried out basically in accordance with "The Basic Requirements of the Documentation Retrieval Course Education" issued by the State Commission of Education in 1992. The target is "to strengthen the information consciousness of the students, and give students basic knowledge and basic skills for information retrieval, the capability to analyze, process, review and use documents, therefore to cultivate the student's self-study ability and creative ability." Entering the new century, "to foster the information literacy of students" has become an important target of popularizing IT education. Information literacy education is no longer restricted to the colleges and universities, but becomes popularized in elementary and junior high schools. The Ministry of Education has specially set two targets for popularizing IT education in elementary and junior high schools: One is to universally offer compulsory IT courses, quickening the integration of IT course with other courses. The other is to carry out "Internet Connection Among Schools" project all-roundly, thereby bringing the training and education of the information literacy of the Chinese citizens into the basic tasks of basic education. As for the teaching method, the traditional teaching mode has been broken. Teacher-oriented has been turned to student-oriented. The students are guided to study learning. The students are let to study with specific problems in mind and to acquire and raise the information literacy during the process of autonomously acquiring, analyzing, creating and using information for solving their problems. The past practice of putting information acquisition above information analysis has been changed and the focal point of teaching has been shifted to information analysis and information innovation to all-roundly improve the cognition ability and information literacy of students. In China, the level of government IT application is getting higher and higher. And sufficient information literacy and information technical ability of Chinese citizens are essential for their efficient utilization of information developed by the

government.

## 2 Main Contents of the Government Information Resources

The formation resources and databases owned by government departments at all levels account for 80% of that owned by the whole society at present. These information resources are more valuable than the general information. Their quality and credibility are even higher. The main contents of the government information resources are as follows:

- ✓ **Government organ information:** including the government department setting-up, responsibilities, functions, management methods of relative department affairs and the like.
- ✓ **E-government information:** including governmental documents, official gazettes, information about important meeting activity, projects furnished by the state, and the like.
- ✓ **Information about policies and laws and regulations:** including the information about policies, laws and regulations, rules and the like issued by the state and the local governments.
- ✓ **Information about social service:** including the news on the developments of all states, domestic and regional governments, economic information, statistical information, the information about scientific research, education, talents, attracting investments from overseas, market supply and demand, and the like.
- ✓ **Feedback information:** government e-mails, municipal administration forum, comments and suggestions from citizens, etc.
- ✓ **Information exchanged among governments:** It refers to information transmitted through the channels established among the governmental departments and between the governmental organs at upper and lower levels. Examples are work requirements of functional departments at all levels, all kinds of official documents, facts about meetings, summary reports, recording data, administrative archives, administration information of the administrative organs, the experience introduction, the work exchange information made by the offices stationed abroad, and the like<sup>[4]</sup>.

## 3 Development and Utilization of the Government Information Resources

With the emergence and development of the market economy in our country, the governmental departments at all levels began in the 1980s to attach importance to the development and utilization of the government information, and developing vigorously government informationization and E-government, improving the quality of the whole nation, thereby promoting the development and utilization of the government information.

### 3.1 Leaders at All Levels Have Paid Great Attention to the Government Informationization and E-government Development

In our country, the development and utilization of the government information resources is primarily a government behavior. In order to enhance the development and usage of the government information resources, the Information Leading Group of the State Council has been established as the highest leading and decision-making organ. Corresponding organs and administrative offices have been set up in the central government and local governments. This makes the development and utilization of our country's government information resources in a planned and step-by-step way.

In 1992, office automation began to appear in all government sectors in China. From 1993,

information projects represented by the “Gold Bridge” Project, the “Gold Custom” Project, the “Gold Card” Project and the “Gold Tax” Project achieved break-through progress. The government Internet access project began to be implemented nationwide in 1999. Now, “the national government official business resources network” has been connected with the governments of thirty-one provinces, municipalities, autonomous regions and the governments of sixteen cities at the deputy ministry level. The central and provincial governments have built their own Intranets. The construction of information networks also has made much headway by part of the governments at prefecture and county levels. The acquisition, exchange and distribution of the government information are becoming digitized and networked. The development and use of the government affairs information, the statistics and the macro economic information have achieved major progress. The quality of the information products provided for government management and decision-making has improved. The information consciousness and information usage techniques of government functionaries have gone up to a new level.

In 2001, the State Council established a 5-year nationwide government affairs informationization program. It calls for making great efforts to promote IT applications in government work, enhancing the government administrative common networks and decision-making systems, making preparations to construct administrative affair resources networks, the public government information networks and government websites, establishing and improving public information resources databases. It also requires working hard to ensure the security of computer networks, strengthening the training of public servants and working well on the laws and regulations related to the system construction and application.

In brief, a government informationization framework will be constructed with "three networks and one database " as a basic framework within 3-5 years. It will be based on the guiding principle of being “demands-oriented, promoting the development with applications, universal planning, coordinated development, information resources sharing, safety and security”. “Three networks” refer to administrative service network in the governmental organs; the administrative affair resources network linking the General Office of the State Council with all regions and all departments and the government public information network based on the Internet. The electronic information resources database is co-constructed and shared by the government departments. “Information resources sharing, safety and security” means that all regions and departments must break barriers between state ministries and local governments. And they must provide relevant information on their own initiative to achieve the information resources sharing according to the requirements of the system construction, from the overall interests of the state during the government informationization construction<sup>[5]</sup>.

### 3.2 The Acquisition and Management of the Government Information Resources will be Standardized Step by Step

The Chinese government has realized that the standardization is the basic guarantee for the scientific management of the government information resources and information resources sharing. Great importance has been attached to the information standardization work in the development and construction of government information resources. Attention has been paid to the scientific index systems in the acquisition and management of the information resources. Technical standards and information codes have been unified, joint construction and sharing of the information networks have also been achieved by using common information techniques and information languages. The division of labour has been done according to the information resources classification, with the information liaison persons of

each government department in charge of collecting the internal information, while the collection of external information and document information is entrusted to social information service organs. Governments at all levels have basically applied international standards and national standards as well as relative national laws and regulations in the standardization management and construction of the government information resources, thus giving it good compatibility of information languages and operability of information techniques, promoting the wide application of the government information resources.

### 3.3 The Ways of Acquiring the Government Information by the Nationals Are Increasing

In the past, Chinese citizens had little access to the government information, which had poor time-effectiveness. Along with the vigorous construction of the national information infrastructure, the development of the government informationization and E-government, the wider opening to the public of the government information and the rise of the educational level, information consciousness and information technical ability of the nationals, the ways of acquiring information by the citizens have been increasing. They can easily acquire the government information through many media such as the Internet, TV receivers, radio receivers, magazines, reports, newspapers and periodicals published by the government.

## 4 Prospects

4.1 Systematization of Making the Government Information Public Developed countries guarantee the knowledge rights of the citizens through legislation, and make it a basic duty of the government. This shows that making the government information public must rely on legal regulatory means. Only by legislatively defining the scope and the grade of making the government information public, and the extent of competence for access to the information, and defining the principle and standard for whether the government information should be made public or not, can it be possible to mine the government public information to the maximum extent to enrich the content of the government websites.

In 2000, the Chinese government organized a large number of experts and scholars to research and draft “The Regulations on Making the Government Information Public”. These regulations are now in the period of soliciting comments from all walks of life. Main provisions in these regulations are as follows:

Government information should be made public in principle, with being not public as an exception, free of charge. Charges, if any, shall be collected for the cost as preset. Government information should be made available to the public in official publications such as bulletins or by putting the information in the offices for access and retrieval by the public, as well as making it public through the government websites on the Internet<sup>[6]</sup>.

This shows that China has followed a systematic way in making government information public.

### 4.2 Reducing development imbalance among different regions

Now, there is a great unevenness in IT application among different regions in China. The ratio of the numbers of domain names registered with the end of “.CN” takes up 76.4% in North China, East China and South China. The ratio of “WWW” websites in these regions accounts for about 85%<sup>[2]</sup>. In the fields of telecommunication traffic and communication capacity, the coastal areas in Southeast China are stronger than the western regions of China. Along with execution of the vigorous exploitation strategy in the western regions of China and the rapid

development of economy in the seven western provinces of China, this regional difference will soon decrease.

#### 4.3 Increasing the Service Items and the Information Contents

According to the data reported by China Internet Information Center, by June 30, 2003, government websites constituted only 1.70% of the total number of websites in China. Most government websites only provide “government functions/service introduction (90.3%)”, “government news(85.9%)”, “administrative affair handling guides/directions(68%)”, “notices/bulletins(67.9%)”, “living, housing and traveling information for the convenience of the people(56.4%)”, “economic information of enterprises and trades(53.6%)<sup>[2]</sup>”. The survey shows that interactive service of government websites are still of a very low level and even websites providing a single service only make up less than 30 percent. In the near future, along with the vigorous construction of information infrastructure and the development of E-government in China, getting government information via Internet will become one of the primary goals for the Chinese Internet users.

#### 4.4 Strengthening Informationization Construction

The Chinese government will strengthen the informationization work mainly in the following three aspects:

**1) Strengthening informationization construction in the rural areas.** By using the opportunity of large-scale development in west China, the central government will energetically promote the informationization in the vast rural areas, especially in the central and western rural areas. It will strengthen the telephone penetration rate in the rural areas, reduce Internet access fees, provide low-priced and practical Internet access equipment, and let the citizens who have low income have network access.

**2) Strengthening the construction of campus informationization.** The State will increase investment in the “Internet Connection Among All Schools” Project officially launched on January 1, 2001. It aims at enabling about 90% of the middle and primary schools to have Internet access in 5 to 10 years, and enabling the teachers and students in the organizationally independent middle and primary schools to enjoy online teaching resources, thus improving the education and teaching quality of all schools. Preferential policies should be adopted towards less-developed areas and middle and primary schools in remote districts. Enabling children in the remote districts to have access to PCs and networks as soon as possible by networking or other forms of PC education is also a goal.

**3 ) Strengthening the construction of the city informationization community.** All communities will be linked with community information networks, and citizens’ lives will be linked with the networks, enabling the citizens to enjoy the superiority of digital life<sup>[7]</sup>.

#### 4.5 Improving Information Literacy of the Public Servants

Public servants are main users of the government information. The State and government departments at all levels have adopted effective measures to raise their information literacy in recent years. Through in-service training or sponsoring training classes, the information usage consciousness of the public servants will increase, and their capability of collecting,

screening, analyzing and reorganizing information with modern information techniques will come up to a new level. The rise of the information literacy of the governmental public servants will produce great effects on the development of the government information resources.

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