

Distance Education in the Statistical Training in China

Jili Wang

Director-General, Statistical Education Center, National Bureau of Statistics

75 Yuetan Nanjie, Sanlihe, Xicheng District

Beijing 100826, People's Republic of China

E-mail: wangjl@king.stats.gov.cn

1. Background

In China there are 80 thousand statisticians working with the statistical offices at the national, provincial, prefectural and county levels and about 3 million full-time and part-time people engaged in statistical work in the entire country. With a huge population and unbalanced social and economic development, China is a developing country under transition from the central planned to market-oriented economy. In order to meet the needs of establishing the socialist market economy, the National Bureau of Statistics (NBS) has been carrying out a series of important reforms. The two most important ones are the transformation of the system of national accounts from MPS to SNA and the change of survey methodology from the comprehensive report system to the one with censuses and sample surveys incorporated. As most of the statisticians were trained in line with the planned economy, their knowledge structure and professional abilities do not meet the needs required by the current development. There is a heavy task in the statistical education and training. Since 1983, NBS has applied distance education in the training of statisticians on a large scale. The practice has shown that using distance education in large-scale training is efficient and cost-effective to improve the overall quality of statistician in a developing country with a large population such as China.

2. Organization and Implementation of Distance Education

With a vast territory and huge number of statisticians to be trained in China, the distance education is conducted with an audio-visual form. NBS produces unified teaching videos and tutorial materials. The teaching stations all over the country organize the participants to watch the videos or the programs broadcast on China Central Television (CCTV) while tutors are available for face-to-face help.

NBS set up the Statistical Education Center in 1986 which is responsible for organizing and coordinating distance education in statistics. Its major responsibilities include working out the national statistical training programs and requirements, setting curricula and syllabus, compiling teaching materials and instruction manuals, producing teaching videos, and organizing examinations and tests.

Statistical education departments established in the provincial statistical bureaus are responsible for formulating their individual training programs as per the requirements of the national programs, and organizing the teaching and tutorials for their statisticians under the arrangements made by the Statistical Education Center of NBS.

The statistical education stations set up in the prefectures are responsible for organizing registration of participants, assigning the participants in different classes and groups on the basis of their abilities, arranging for instructors.

3. Major Contents of the Distance Education

A. Specialized TV lectures. The Statistical Education Center selects some special topics, produces teaching videos and broadcasts them through CCTV for the statisticians all over the country to watch. For examples, 990 thousand statisticians were trained in the course of *Principle of Statistics* in 1983 and 1984. In 1990, 6 million enumerators were trained with the lectures on the *Knowledge of Population Census*, which was produced for the conducting of fourth population census in China.

B. Diploma education. Because of the backward development in education, the educational

level of statisticians in China was low in general. In 1983, only 3% of the statisticians received diplomas of college and above. In order to improve their education levels, the Statistical Education Center offered diploma-oriented training in Statistics, Accounting and Statistics, Economics according to the curricula and syllabus set by the National Instructive Committee for Self-Study and Examination. A total of 500 thousand students participated in the training. Among them, 260 thousand passed the examinations made by the Committee and got the diplomas of college level and above.

C. On-job training of professional knowledge. According to requirements set for Junior Statisticians, Assistant Statisticians and Statisticians, on-job training of professional knowledge of various levels were conducted from 1990 through 1995 with a total of 800 thousand trained.

D. Survey skills training developed jointly with Statistics Canada (STC). In order to support the reform of statistical survey methods, increase the ability of statisticians to efficiently design and carry out sample surveys and improve the quality and range of data produced by the national statistical system, NBS and STC are jointly developing a set of *Survey Skills Video Course*. The course contents are based on the practical survey skills training courses conducted at STC. Experts from both offices will jointly develop the scripts, accompanying manuals and the videos. This course will introduce and illustrate the knowledge and skills directly related to the design, implementation and analysis of results of sample surveys in the context of a market-oriented economy through real-life surveys, mini-drama, animation and cartoon, and classroom discussion. The videos and manuals will be produced and issued in both English and Chinese. Starting from May 2000, NBS will use the videos to carry out large-scale training on survey skills for statisticians all over China. It is estimated that 30 thousand statisticians will receive training in a four-year plan (2000-2003). NBS and STC will issue qualification certificates to those who successfully complete the course.

4. Characteristics of Distance Education

- A. Advanced training means and large participation;
- B. Well-organized training network;
- C. Quality guaranteed by strict examinations;
- D. Job-oriented for practical needs;
- E. On-job training; and
- F. Cost-effective.

Résumé

La Chine est un pays en voie de développement avec une grande population. Pour rendre les statisticiens plus compétents, le Bureau National de la Statistique de la Chine a établi un réseau national de l'éducation statistique à longue distance tout en exploitant la technologie de l'enseignement audio-visuel. Il a élaboré également un programme de formation au niveau national, et a formulé les exigences de formation strictes. Ayant déjà formé de nombreux statisticiens, ce réseau est prouvé un instrument efficace.