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IMPLEMENTATION COMPLETION REPORT

CHINA

**TEACHER TRAINING PROJECT
(CREDIT 1908-CHA)**

MARCH 14, 1995

Poverty, Population and Human Resources
Operations Division
Country Department II (China and Mongolia)
East Asia and Pacific Regional Office

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CURRENCY EQUIVALENTS

Currency Name - Renminbi

Currency Unit - Yuan (Y)

At Appraisal - \$1 = Y 3.7
At Completion - \$1 = Y 8.5

FISCAL YEAR

January 1 - December 31

ACADEMIC YEAR

September 1 - June 30

ABBREVIATIONS AND ACRONYMS

AAPRC	-	Audit Administration of the People's Republic of China
CNTIC	-	China National Technical Import Corporation
ETS	-	Effective Teaching Services Project
ETV	-	Educational Television
FILO	-	Foreign Investment and Loan Office
ICB	-	International Competitive Bidding
ICR	-	Implementation Completion Report
IOE	-	Institute of Education
JUN	-	Junior Normal College
LCB	-	Local Competitive Bidding
MOF	-	Ministry of Finance
NU	-	Normal College
PBOE	-	Provincial Bureau of Education
PIO	-	Project Implementation Office
SEdC	-	State Education Commission
SOE	-	Statement of Expenses
SPC	-	State Planning Commission
TA	-	Technical Assistance
UBE	-	Universal Basic Education

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(CREDIT 1908-CHA)****CONTENTS**

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IMPLEMENTATION COMPLETION REPORT

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**TEACHER TRAINING PROJECT
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PREFACE

This is the Implementation Completion Report (ICR) for the Teacher Training Project for which Credit 1908-CHA in the amount of SDR 36.8 million or \$50.0 million equivalent was approved on May 24, 1988 and closed on December 31, 1993 without any extension of the original closing date. The last disbursement was made on December 15, 1993 and the total disbursements were 100 percent of the credit amount.

The ICR was prepared by Sandra Erb under the supervision of Hena Mukherjee, EA2HR, of the East Asia Region and reviewed by Vinay Bhargava, Division Chief, and Zafar Khan, Acting Project Advisor. The borrower provided comments that are included as an appendix to the ICR.

Preparation of this ICR was begun during the Bank's final supervision/completion mission September 12 through October 14, 1994. It is based on materials in the project files as well as those received during the completion mission. The borrower participated in preparation of the ICR by contributing views reflected in the October 12, 1994 project completion mission Aide Memoire, preparing their own evaluation of the project's execution and preparation and commenting on the draft ICR.

IMPLEMENTATION COMPLETION REPORT

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TEACHER TRAINING PROJECT (CREDIT 1908-CHA)

EVALUATION SUMMARY

1. **Objectives.** In 1984, the Government of China stepped up its 1979 reform agenda by adopting a plan that emphasized systemic reforms of education and training to develop China's human capital potential. This was followed up by a May 1985 "Decision on Reform of the Education Structure," which called for, inter alia, universalizing nine years of basic education and strengthening education management at all levels. In 1986, the Government passed the "Compulsory Education Law" under which nine-year Universal Basic Education (UBE) was to be achieved by the year 2000. While universal schooling at the primary level had already reached 96 percent in 1986, at the lower secondary level (grades 7-9), the gross rate was only 52 percent. Therefore, to achieve UBE the Government planned to increase the number of lower secondary school teachers from 2.2 million in 1985 to 3.1 million in the year 2000. Moreover, to achieve a fully qualified teaching force, the teacher training system was to provide inservice training to massive numbers of unqualified lower secondary school teachers already teaching (and not possessing the required academic qualification of 2-3 years of post-secondary education). The 1.6 million unqualified teachers constituted an overwhelming 73 percent of the lower secondary school teaching force and, therefore, the most urgent task was to provide inservice training for the teachers.

2. The project supported the Government's efforts to achieve UBE by expanding and upgrading inservice training of lower secondary school teachers with an emphasis on improvement in the quality of teachers and on institution building. To achieve this goal, the project sought to: (a) assist 16 provincial and 52 prefectural institutes of education (IOEs) by expanding and improving their capability to meet the urgent demand for qualified lower secondary teachers; (b) assist three municipal IOEs (Beijing, Shanghai, and Tianjin) in becoming information clearinghouses on teacher training curriculum, methodology and materials as well as monitoring and evaluation centers on key issues in teacher training; and (c) improve the capability of the central State Education Commission (SEdC) and the local authorities to manage the teacher training system. Project inputs included construction of facilities and provision of equipment, books, teaching materials and technical assistance (TA) to improve system management.

3. The education objectives to be achieved were to: (a) alleviate the existing inequality of trainee participation among provinces by setting aside 50 to 100 student places each year for

training teachers from disadvantaged provinces in the residential programs of the more developed provincial IOEs; (b) gradually raise the teaching load of IOE faculty members by 50 percent from 4 to 8 hours per week to about 6 to 12 hours; (c) revise the IOE curricula in order to prepare lower secondary school teachers to teach two subjects instead of one; and (d) raise female participation in inservice lower secondary teacher training.

4. **Implementation Experience and Results.** During the five-year project implementation period, overall implementation of the project was satisfactory. The total credit amount of SDR 36.8 million (\$50 million equivalent) was disbursed, and the indicators to monitor overall progress under the project were met or exceeded. Actual enrollments in the IOEs increased 268 percent over the original target at appraisal, although the original target was for residential programs only, while actual enrollments reflected: (a) less residential training; (b) less training for qualification, though this kind of training is still important; (c) more inservice upgrading and continuing education; and (d) more special courses for administrators. While these changes make comparisons difficult, they represent growth in response to the demands placed on the IOEs and their flexibility in dealing with the evolving policy framework within which they operate.

5. The majority of project funds (87 percent) were spent on construction of facilities, equipment and books, and, in general, these items were put to good use. Civil works construction was completed by the end of 1993. While the quality of construction seemed good, some of the facilities are beginning to show signs of wear from normal use. In order to sustain this investment, Provincial Bureaus of Education will need to pay particular attention to the maintenance of facilities constructed under the project. To address this issue, SEdC with the assistance of the Provinces will provide a budget allocation for maintenance of all facilities and equipment as indicated in the Operation Plan outline (Annex C).

6. The equipment and books purchased assisted the IOEs to offer all or almost all SEdC-prescribed science experiments (minimum-level science experiments related to specific grade-level curricula), improve computer literacy and enhance the libraries. The IOEs also achieved somewhat higher levels of utilization of libraries and laboratories, with average weekly library hours increasing from 41 to 56 and laboratory hours from 13 to 30. Despite these improvements, there is still a need to increase utilization of libraries and equipment, particularly those of correspondence IOEs, by, for example, offering day and evening adult training courses in foreign language and computer applications.

7. To improve the quality of faculty, one of the major project goals, more than 6,000 teachers and staff were trained in-country and more than 200 sent abroad. The large numbers of newly trained faculty and staff have undoubtedly contributed to improving faculty qualifications. However, the institutes have not capitalized on the training received by staff members upon their return. Institutional staff development plans should promote the use of all newly trained faculty and staff as resource persons to train other staff. This issue was taken into consideration in the subsequent Bank-supported Effective Teaching Services Project (Cr. 2471-CHA, approved on

March 16, 1993), which established a Chinese experts panel that is working with the teacher training institutes to promote the use of their newly trained faculty as resource persons.

8. Training for students from remote areas was also increased. Twenty-two of the IOEs adopted innovative methods for improving the intake of students from poor and minority areas, and some initiatives have been disseminated throughout China. In addition, experience gained in this area was reflected in the second teacher training project, which has an innovation program to encourage more work in this area.

9. The project also achieved somewhat higher levels of female participation by increasing enrollment in inservice lower secondary teacher training from 27 percent to an average of approximately 42 percent. It will, however, be difficult for IOEs to continue this trend because they draw their trainees from Lower Middle School teachers and, since the percentage of women is still low among that group, there is a built-in upper limit to how many women IOEs will be able to enroll in the future.

10. During the project, IOE and Project Implementation Office (PIO) staff received extensive administrative training in order to improve the management capability of the project implementing units and the teacher training system. Although the training provided was effective, planning capabilities are still weak. The provincial offices need to have a better understanding of and control over the existing teacher stock, the need for new teachers, inflow of teachers from preservice training, newly qualified teachers from inservice training and outflow from the profession. As the teacher information system in the follow-on project becomes operational, the Provinces' staff planning capabilities should improve.

11. Another goal of the project was to create a permanent network of professional support to teacher training by using the advanced Municipal IOEs of Beijing, Shanghai and Tianjin to disseminate information and best practices to other IOEs. The permanent national role of the Municipal IOEs was never realized, probably due to the absence of linkages between the Municipal and other IOEs to encourage communication of new ideas. Lines of institutional interaction are vertical rather than horizontal and, without putting a horizontal mechanism in place, it is difficult for dissemination activities to proceed.

12. As a result, the findings of three studies conducted by the Municipal IOEs under the project were never disseminated. These studies were in the areas of cost effectiveness of alternative delivery systems including residential, commuter and correspondence/television programs; dual subject teachers and the cost effectiveness of such teachers in rural schools; and methods of increasing female participation in the teacher training system. However, activities being financed by the ongoing Effective Teacher Services Project, particularly its innovation program and Chinese Experts Panel, provide opportunities to build an IOE network and improve dissemination through that network.

13. **Summary of Findings, Future Operations and Key Lessons Learned.** The overall Project outcome is rated as satisfactory. Of the three project goals, the first (strengthening IOEs)

was fully met, the second (creating IOE networks) was marginally achieved, and the third (improving management) was satisfactorily met. Many IOEs developed creative mechanisms for dealing with the issue of inequality, they introduced dual subject teaching, raised female participation, and improved efficiencies in some areas. Since experiences gained under this first teacher training project were reflected in the follow-up projects, the results have been positive. The second project is building on these experiences by providing funds through an innovation program to encourage colleges and institutes to continue their creative approaches to dealing with difficult issues such as female participation, dual subject teaching, etc.

14. The main lessons learned from the project experience are: (a) horizontal dissemination of good practices even within the same type of institutional structure (IOE network) is very difficult and future projects need to incorporate design improvements recognizing structural compartmentalization within the system and dealing with the problem; (b) likewise, future projects need to be better designed to facilitate the dissemination of new ideas and practice within institutions, taking advantage of the rich experience of returning (project-supported) faculty from abroad. To enhance and sustain the project's development impact, it is recommended that the implementing agencies incorporate the following suggested actions in their Operation Plan:

- develop a plan for further increases in utilization of libraries and equipment. For instance, IOEs could offer day and evening adult training courses in foreign languages and computer applications;
- design institutional staff development plans that promote the use of newly trained faculty and staff as resource persons to train other staff;
- develop a plan to train provincial education staff in the area of teacher demand and supply so as to improve management of the teacher training process;
- design an information or education network for dissemination of new ideas and materials; and
- develop regular maintenance programs for facilities constructed and equipment procured under the project.

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PART I. PROJECT IMPLEMENTATION ASSESSMENT

Project Identity

Project name	:	Teacher Training Project
Credit No.	:	1908-CHA
Country	:	China
Sector	:	Education
Subsector	:	Teacher Education

A. PROJECT OBJECTIVES

1. **Project Objectives and Scope.** The project sought to support the Government's efforts to achieve Universal Basic Education (UBE) by expanding and upgrading inservice training of lower secondary school teachers with an emphasis on improvement in the quality of teachers and on institution building. To achieve this goal, the project set out to: (a) assist 16 provincial and 52 prefectural institutes of education (IOEs) by expanding and improving their capability to meet the urgent demand for qualified lower secondary teachers; (b) assist three municipal IOEs (Beijing, Shanghai, and Tianjin) in becoming information clearinghouses on teacher training curriculum, methodology and materials as well as monitoring and evaluation centers on key issues in teacher training; and (c) improve the capability of the State Education Commission (SEdC) and local authorities to manage the teacher training system. Project inputs included construction of facilities and provision of equipment, books, teaching materials and technical assistance (TA) to improve system management.

2. The project development impact indicators¹ were to: (a) alleviate the existing inequality of trainee participation among provinces by setting aside each year 50 to 100 student places for

¹ Project development indicators have been extracted from the text of the Staff Appraisal Report and reviewed during the ICR mission.

training teachers from disadvantaged provinces in the residential programs of the more developed provincial IOEs; (b) gradually raise the teaching load of IOE faculty members by 50 percent from 4 to 8 hours per week to about 6 to 12 hours; (c) revise the IOE curricula in order to prepare lower secondary school teachers to teach two subjects instead of one; and (d) raise female participation in inservice lower secondary teacher training.

3. **Sector Development Objectives.** At the time of appraisal, the Bank Group's lending strategy consisted of three lines of action: (a) develop technical and vocational education to increase the supply of technicians and skilled workers; (b) strengthen the education of teachers and administrators and improve the quality of teaching materials and management in basic education; and (c) expand higher education, aiming to improve both quality and management to provide more high level manpower.

4. In early projects, the Bank Group focused on the development of higher education, in accordance with the Government's priorities. In addition, the Bank completed sector work in support of the Government's policy to expand the vocational and technical education systems to meet the growing needs for skilled manpower and technical assistance in management education. The teacher training project was the first Bank effort to assist the Government in their efforts to strengthen the education of teachers and administrators and improve the quality of teaching materials and management in teacher training institutions. This was done in conjunction with the Government's desire to achieve UBE through financial support directed at the expansion and improvement of inservice training of lower secondary school teachers, the provision of textbooks and other learning materials and relevant technical assistance.

5. **Policy Context.** To address problems of economic inefficiency and structural imbalance, the Government initiated a program of reform and adjustment in 1979 that focused primarily on invigorating China's rural economy. In 1984 the Government reaffirmed and consolidated the positive results of the earlier reform and adjustment program and adopted a reform plan that emphasized the needs for breakthroughs in areas such as: (a) upgrading managerial personnel to meet the new demands in a reformed economy; (b) extending utilization of foreign capital, advanced technology and scientific research; and (c) carrying out systemic reforms of education and training to develop China's human capital potential.

6. In May 1985 the Central Committee of the Communist Party announced its "Decision on Reform of the Education Structure." The reform called for universalizing nine years of basic education, expanding vocational and technical education at secondary levels, increasing enrollment and autonomy of higher education institutions, and strengthening education management at all levels. On the basis of the decision to reform the education structure, the Government passed the "Compulsory Education Law" in 1986, under which nine-year UBE was to be achieved in stages: (a) in the cities and coastal areas by 1990; (b) in towns and villages with a medium level of development by 1995; (c) in the more remote areas, at rates commensurate with the economic development of each area. This policy was reconfirmed in the outline for

“Reform and Development of Education in China” issued by the Central Committee of the Communist Party of China and the State Council in February 13, 1993.

7. The Government felt that achieving universal schooling at the primary level would not be extremely difficult because the net reported enrollment rate in primary schooling was already 96 percent. However, at the lower secondary level (grades 7-9) it foresaw great difficulty because, at the time of Appraisal, the gross lower secondary enrollment rate was 52 percent. Therefore, to achieve UBE the Government recognized that the number of lower secondary school teachers would have to increase from 2.2 million in 1985 to 3.1 million in the year 2000. Moreover, if a fully qualified teaching force was to be achieved, the teacher training system would have to provide inservice training to massive numbers of unqualified lower secondary school teachers already in the system (and not possessing the required academic qualification of 2-3 years of post-secondary education). The 1.6 million unqualified teachers constituted an overwhelming 73 percent of the lower secondary school teaching force and, therefore, the most urgent task was to provide training for the teachers.

8. **Linkages between Project, Sector and Policy Objectives.** In order to address both the sectoral and policy consideration outlined above, the Association and the Government developed a project which laid out the following objectives: (a) improve the quality of and the output from the inservice training of lower secondary school teachers; (b) improve the management capability of SEdC, provincial and municipal education administrators in the teacher training system; (c) help resolve participation rate inequalities among provinces; (d) raise female participation in inservice training programs for unqualified lower secondary teachers; and (e) increase the efficiency and cost-effectiveness of the lower secondary school teacher training system.

9. The major risk perceived at the time of appraisal was the inexperience of and variation in the ability of provincial, municipal and prefecture officials in the implementation of an IDA-financed project. However because of the excellent experience gained by the Government during the implementation of previous education projects, the risks were seen to be manageable. The SEdC, working with the Provinces and Municipalities, established Project Implementation Offices (PIOs) headed by the Deputy Directors of the Provincial/Municipal Education Bureau, who functioned as liaisons between the Province/Municipality and the SEdC. In addition, the PIOs maintained close working relations with the responsible units at the prefectural level. Each Project institution also established a PIO and appointed either the President or Vice President of the IOE as the Director. The PIOs operated throughout the life of the Project and were responsible for implementation activities associated with each institute such as construction, installation and maintenance of project equipment and training.

10. Although the SEdC was the focal point of project implementation and responsible for maintaining national standards of education including teacher training, considerable responsibility was devolved to the Provinces and Municipalities included in the Project. This mechanism for implementation gave the Provinces, Municipalities and Institutions much greater flexibility in implementing the Project according to individual institutional needs.

B. ACHIEVEMENT OF PROJECT OBJECTIVES

11. **Project Development Indicators.** Achievements of project objectives can be partially measured by reviewing the development impact indicators found in paragraph 2. Briefly, (a) more than the targeted number of positions for students from disadvantaged provinces were set aside in more developed provincial IOEs. Additionally, during the life of the project, (b) faculty teaching hours increased moderately to approximately 8 hours a week; (c) the percentage of IOEs which now prepare students to teach two subjects rather than one has grown substantially from zero to 86 percent; and (d) female enrollment has increased significantly from 27 to 42 percent. Further details and additional evaluative materials can be found in the following paragraphs and Table 5: Key Indicators of Project Implementation.

12. **Enrollment.** By the end of the Project, enrollments in the IOEs increased 2.6 times greater than the SAR targets. However, a comparison of the target and actual has limited meaning in view of reforms in the methods of delivery of the teacher training courses, including: (a) less residential training; (b) less training to achieve teacher qualification; (c) more inservice upgrading and continuing education; and (d) more special courses for administrators. These changes represent creative responses to the changing demands placed on the IOEs and their ability to adapt to the evolving policy framework within which they operate.

13. **Civil Works, Equipment and Books.** The majority of project funds (87 percent) were spent on construction of facilities, equipment and books. Civil works construction was completed by the end of 1993. The quality of construction seemed good. Now, however, after a few years some of the facilities are beginning to show signs of wear from normal use. In order to sustain this investment Provincial Bureaus of Education will need to pay particular attention to the maintenance of facilities constructed under the project. In an effort to address this issue the SEdC with the assistance of the Provinces will provide a budget allocation for maintenance of all facilities and equipment as indicated in the Operation Plan outline, Annex C.

14. The equipment and books purchased assisted the IOEs in their ability to offer all or almost all of the SEdC prescribed experiments (minimum level science experiments which are related to specific grade level curricula taught in secondary and post-secondary educational institutions), improve computer literacy and enhance the libraries.

15. **Technical Assistance.** Improving the quality of IOE faculty was one of the major project goals. The project sought to achieve this goal by supporting in-service training for existing teachers at home and abroad. The project also supported both short- and long-term local training in China. The normal universities did good work in training IOE faculty and staff in the areas of course content, teaching methodologies, and management, and over the life of the project training more than 6,000 teachers. IOE faculty members were also sent abroad as short-term visiting scholars and long-term degree seeking students. The implementation of the fellowship program went smoothly and by 1993 more than 200 faculty members had been sent abroad. As was the case with the in-country training, large numbers of newly trained faculty have undoubtedly

contributed to improving faculty qualifications, although the institutes have not fully capitalized on the training received by individual staff members. This issue should have been the focus of more attention during the project design. Institutional staff development plans should promote the use of all newly trained faculty and staff, both at home and abroad, as resource persons to train other staff.

16. **Management of the Teacher Training System.** The project was to improve the management capability of the teacher training system by providing training in planning and statistical data processing, management systems, testing and evaluation and facility planning. IOE and PIO staff received extensive training in administrative matters; however, in the area of planning there are still many improvements that need to be made to the system. For instance, the provincial offices need to have a better understanding of and control over the existing teacher stock, the need for new teachers, inflow of teachers from preservice training, newly qualified teachers from inservice training and outflow from the profession. There is much that could be achieved in this area, and as the teacher information system in the follow-on project becomes operational this should improve the Provinces' capabilities. The follow-on operation, the Effective Teaching Services Project (Cr. 2471-CHA), was approved on March 16, 1993.

17. **Improvements of the Teacher Training System.** Training for students from remote areas was increased over the five-year implementation period (see Table 5). Prior to the teacher training project, there were no special programs within IOEs to assist teachers from the remote and rural areas in their efforts to receive training. During the implementation period, twenty-two of the IOEs experimented with programs for training teachers from the rural areas by adopting a number of innovative methods for improving the intake of students from poor and minority areas. Some institutions reduced the fees for disadvantaged students, some prepared special correspondence, summer and winter vacation courses, special coaching centers in remote counties were setup, and mobile teams of teachers were sent to the remote areas to provide training. These were all useful changes that occurred within the IOEs and the results of these programs should be studied and positive experiences disseminated throughout China.

18. The project was able to achieve a somewhat higher level of female participation by increasing enrollment in inservice lower secondary teacher training from 27 percent to an average of approximately 42 percent. This was achieved by increasing the number of full-time students, commuting students and correspondence students. It will however, be difficult for IOEs to continue this trend because they draw their trainees from Lower Middle School teachers, and since the percentage of women currently in the system at that level is low there is a built-in upper limit to how many women IOEs will be able to enroll.

19. The project supported the revision of the curriculum by introducing dual subject training. By the end of the project, 86 percent of the Project IOEs were offering dual subject training which has been an important element in improving the rural schools. This has been catalytic in improving the quality of teaching as well as efficiency of the lower secondary schools, particularly in rural schools where they cannot afford to hire single subject teachers.

20. The project was also able to achieve somewhat higher levels of utilization of libraries and laboratories. The average weekly library hours increased from 41 to 56 and the laboratory hours from 13 to 30. Despite these improvements there is still a need to focus on increasing utilization of all equipment. In order to further improve equipment utilization, IOEs, especially those providing correspondence courses, could offer day and evening adult training courses in areas such as foreign language and computer applications. This could also assist in further improvements in IOE efficiencies by increasing teaching hours of faculty and greater utilization of all IOE facilities. Each institution should also have a professional development plan and systems should be set up to enable staff to share their expertise and to utilize equipment cross-departmentally.

21. **Studies.** During the project the three Municipal IOEs conducted studies on: (a) the cost effectiveness of alternative delivery systems including residential, commuter and correspondence/television programs; (b) the training of dual subject teachers, investigating the appropriate combination of subjects and the cost effectiveness of dual subject teachers in rural schools; and (c) methods of increasing female participation in the teacher training system. The findings of the studies were to be sent to the Association as well as disseminated through an information network of IOEs, with the three municipal IOEs acting as the focal point for dissemination. The studies were received and reviewed by the Association. However, the dissemination activities within China have not occurred (see para. 23).

C. IMPLEMENTATION RECORD AND MAJOR FACTORS AFFECTING THE PROJECT

22. **Implementation Record.** During the five-year project implementation period, the overall implementation of the project went well. The total credit amount of SDR 36.8 million (\$50 million equivalent) was disbursed and the indicators to monitor overall progress under the project (Table 5) were met or exceeded. The PIOs operated throughout the life of the Project and provided the necessary oversight required for smooth implementation activities associated with each institute such as civil works, installation and maintenance of project equipment, purchase of books and training.

23. **Major Factors Affecting the Project.** One of the major goals of the project was to create Municipal IOEs that would: (a) become clearinghouses for gathering, evaluating and disseminating information on teacher training curriculum and methodology, (b) become research, evaluation and monitoring centers on key issues in teacher training, and (c) undertake the three studies discussed above. A permanent network of professional support in teacher training was also to be established by using the three advanced municipalities, Beijing, Shanghai and Tianjin, to assist other IOEs. The permanent national network role of the Municipal IOEs with institutions at the provincial level was never realized, and this was one of the major weaknesses of the project design. Bank missions noted this problem during implementation, highlighting the issue as one for improvement. However, the ICR mission found little improvement in the implementation of this component of the project. One reason for the weakness of this component could be the absence

of linkages between IOEs in different provinces and municipalities; lines of interaction are vertical rather than horizontal and without putting a horizontal mechanism in place, dissemination activities cannot proceed.

24. **Consulting Services.** The services of one US and one UK institution were contracted to assist the Government of China in implementation of the TA component. The contracts were negotiated and signed by the Government of China with the assistance of the Bank. Each organization successfully completed the implementation of its contract and has submitted a final report to the Government of China and the Association. The use of international institutions to successfully facilitate the placement and carefully monitor the progress of Chinese scholars who went abroad under the project can be seen as further evidence of the utility of international advisory mechanisms and training facilities in Bank-supported Chinese education projects.

D. PROJECT SUSTAINABILITY

25. Measures of project sustainability are faculty training and development, enrollment levels, and adequate provision for operation and maintenance of facilities and equipment.

26. More than 6,000 IOE faculty and staff were trained during project implementation which, no doubt, contributed to improvements in faculty qualifications. However, to sustain the investment, each institution will need to allocate much more importance to "in-house" recurrent training. They will need overall professional development strategies that are continuously updated.

27. All of the civil works construction was completed by 1993. The quality of the construction seemed good, with facilities only starting to show signs of wear from normal use. The SEDC and the Provincial Bureaus of Education will need to pay particular attention to the maintenance of the facilities constructed under the project and start a regular maintenance program.

28. For project institutions to continue to obtain value from their project-supported investments, they will need to ensure efficient use of the equipment, books and materials. Project institutions need to provide adequate provision for storage, inventory, maintenance and servicing. The best way to sustain the physical plant investment will be for municipal, provincial and prefectural authorities to systematically provide necessary recurrent funding annually for the maintenance.

29. Enrollments increased over the life of the project. Although, as stated above, the changes in the structure of the clientele present difficulties for assessing the actual increases in enrollment, these structural changes suggest a growing response to the demands of the market, thereby implying that sustainability is more likely.

E. BANK GROUP PERFORMANCE

30. The project was designed based on close cooperation between IDA and the Chinese Government. The previous Bank Group projects in education had established good communication channels with the Chinese Government and this assisted the IDA preparation teams in developing the first IDA assisted teacher training project. The Bank Group mobilized a team of qualified experts to work with SEdC as well as provincial and municipal education commissions so that the provinces and municipalities could participate on a larger scale in the preparation of future projects. IDA supervision missions visited the IOEs and continuously monitored the implementation of the Project.

31. The Association conducted a mid-term review of the project in January 1992, using its sector work on Provincial Education Planning and Finance to focus more attention on teacher planning and statistical data processing aspects of the project. The mid-term review attempted to strengthen the IOE's focus and role in addressing these issues by encouraging more training as well as an improved system for gathering the data required for such planning, but with limited success. The delay in the mid-term review can be seen as partially responsible for such limited success.

32. SEdC, working with IDA, contracted two internationally recognized organizations to provide TA. IDA also frequently communicated with the TA implementing units to ensure that the TA was being implemented smoothly. The overall assessment of IDA's performance would be satisfactory.

F. BORROWER PERFORMANCE

33. In line with a good record in designing, preparing and implementing the IDA assisted education projects, the Chinese team demonstrated satisfactory performance in preparing and implementing this project.

34. The Foreign Investment and Loan Office (FILO) of SEdC coordinated with the Provincial and Municipal Education Bureaus to carefully develop proposals and collect the necessary data and information for project preparation. Officials from the SEdC and provinces also attended an Economic Development Institute (EDI) seminar on the techniques of facility planning during the preparation phase.

35. During implementation the SEdC also coordinated with the Provinces and Municipalities in procurement of equipment and books, technical assistance, and preparation of annual progress reports and audit reports sent to the Association. The Borrower also provided the necessary counterpart funds to complete the civil works in time to install the imported and locally procured equipment as well as house the books purchased in conjunction with the project.

36. The national level IOE network and dissemination system was not implemented as expected at appraisal. However, with the current follow-on teacher training project there is an opportunity to build the network and improve the dissemination capacity of the IOEs through the later project's innovation program and the work of a Chinese Experts Panel. In addition, the SEdC can continue to focus attention on teacher demand and supply by using the management information system component of the second teacher training project to enhance the capacity of the provinces and the IOEs.

G. ASSESSMENT OF OUTCOME

37. The Project outcome is rated as satisfactory. Many IOEs developed creative mechanisms for dealing with the issue of inequality, introduced dual subject teaching, raised female participation, and improved efficiencies. Since experiences gained under this project were reflected in its follow-on operation, the overall project impact has been positive. In particular, the second project includes an Innovation Program which provides funds to encourage colleges and institutes to continue their creative approaches to dealing with difficult issues such as female participation, dual subject teaching, etc.

H. FUTURE OPERATION

38. The Government and the Association discussed an outline for the attached Operation Plan (Annex C) during the October 1994 implementation completion report mission. The report reflects the decision of the Government as to how to sustain the project for a five-year period as well as ways to promote the development of the IOE network and the dissemination of information. The Operation Plan provides estimated levels of support for maintaining facilities, faculty development, and increasing enrollments. In addition, it addresses ways in which the Government will continue to promote female participation in IOEs and improvement in efficiencies.

39. As mentioned above, the Government of China and the Association have negotiated a second teacher training project which builds on the experiences of the first project and through this project the Government and the Association will be able to monitor the progress of IOEs as they begin to work toward sustaining the benefits of this project.

I. LESSONS LEARNED

40. The main lessons learned from the project experience are: (a) horizontal dissemination of good practices even within the same type of institutional structure (IOE network) is very difficult and future projects need to incorporate design improvements, recognizing structural compartmentalization within the system and dealing with the problem; (b) likewise, future projects need to be better designed to facilitate the dissemination of new ideas and practices within institutions taking advantage of the rich experience of returning (project-supported) faculty from

abroad. To enhance and sustain the project's development impact, it is recommended that the implementing agencies incorporate the following suggested actions in their Operation Plan:

- develop a plan for further improvements in the utilization of libraries and equipment. For instance, IOEs could offer day and evening adult training courses in foreign language and computer applications;
- design institutional staff development plans that promote the use of newly trained faculty and staff as resource persons to train other staff;
- develop a plan to train provincial education staff in the area of teacher demand and supply so as to improve management of the teacher training process;
- design an information or education network for dissemination of new ideas and materials; and
- develop regular maintenance programs for facilities constructed and equipment procured under the project.

Table 1: SUMMARY OF ASSESSMENTS

A. <u>Achievement of Objectives</u>	<u>Substantial</u>	<u>Partial</u>	<u>Negligible</u>	<u>Not Applicable</u>
Macro policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sector policies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial objectives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional development	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical objectives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poverty reduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gender issues	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other social objectives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public sector management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Private sector development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B. <u>Project sustainability</u>	<u>Likely</u>		<u>Unlikely</u>	<u>Uncertain</u>
	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
C. <u>Bank performance</u>	<u>Highly Satisfactory</u>		<u>Satisfactory</u>	<u>Deficient</u>
Identification	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preparation assistance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Appraisal	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supervision	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. <u>Borrower performance</u>	<u>Highly Satisfactory</u>		<u>Satisfactory</u>	<u>Deficient</u>
Preparation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Implementation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Covenant compliance	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Operation (if applicable)	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
E. <u>Assessment of outcome</u>	<u>Highly Satisfactory</u>		<u>Satisfactory</u>	<u>Deficient</u>
	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Table 2: RELATED BANK LOANS/CREDITS

LOAN/CREDIT	PURPOSE	YEAR OF APPROVAL	STATUS
PRECEDING OPERATIONS: UNIVERSITY DEVELOPMENT PROJECT - (LN 2021-CHA, CR. 1167-CHA)	To strengthen science & engineering in 28 leading Chinese Universities. Objectives were to increase the quality & quantity of graduates & research, to strengthen the planning & management capabilities & to prepare investments in the education sector.	1981	Completed 1986
AGRICULTURE EDUCATION AND RESEARCH PROJECT - (CR. 1297-CHA)	To assist agriculture higher education and research in 11 agricultural colleges and 7 institutions.	1982	Completed 1989
POLYTECHNIC/TELEVISION UNIVERSITY PROJECT - (CR. 1411-CHA)	To increase the number of students & to improve the quality of instruction in China's 17 polytechnic institutions & 28 television universities.	1983	Completed 1992
RURAL HEALTH MEDICAL EDUCATION PROJECT - (CR. 1472-CHA)	The educational component of this project was designed to enhance the quality of education, training & curriculum.	1984	Completed 1991
SECOND AGRICULTURAL EDUCATION PROJECT - (LN. 2444-CHA)	To improve & assist agriculture education in 23 agricultural colleges, 12 agricultural technical schools.	1984	Completed 1992
SECOND UNIVERSITY DEVELOPMENT PROJECT - (CR. 1551-CHA)	To increase technical & managerial personnel through policy & institutional changes related to the engineering and economic/finance education subsector.	1985	Completed 1992
PROVINCIAL UNIVERSITY PROJECT - (CR. 1671-CHA)	To provide direct assistance to 60 provincial universities in 28 provinces and planning assistance for the higher education subsector.	1986	Completed 1992
GANSU PROVINCIAL DEVELOPMENT PROJECT - (LN. 2812-CHA) EDUCATION COMPONENT - (CR. 1793-CHA)	Part of a comprehensive plan to attain universal nine-year basic education and to improve the quality of instruction in primary and lower secondary schools in Gansu Province.	1987	To be completed 6/30/95
FOLLOWING OPERATIONS: TEXTBOOK DEVELOPMENT PROJECT - (CR. 2006-CHA)	To support the textbooks upgrading program by the Chinese Government. Objectives are to improve the educational quality of textbooks at all levels of schooling, to increase the variety of available textbooks & to improve the efficiency of textbook production.	1989	To be completed 6/30/95
VOCATIONAL & TECHNICAL EDUCATION PROJECT - (CR. 2114-CHA)	To improve the quality of technical & vocational training in China through supporting 59 secondary vocational/technical schools in 10 provinces and 3 municipalities.	1990	To be completed 12/31/95
MEDIUM-SIZED CITIES DEVELOPMENT PROJECT - (LN. 3286-CHA)	To assist Changzhou, Luoyang and Shashi cities to improve overall and sector planning and management, including education.	1991	To be completed 6/30/97
KEY STUDIES DEVELOPMENT PROJECT - (CR. 2210-CHA)	To support the government's plan to reform the management of science and technology programs. It consists of support for research and graduate training in 133 State Key Laboratories and Special Labs affiliated with Universities and with the Chinese Academy of Sciences.	1991	To be completed 6/30/96
EDUCATION DEVELOPMENT IN POOR PROVINCES - (CR. 2339-CHA)	To supports three main goals for the development of education in relatively poor provinces - Shanxi, Shaanxi, Hubei, Hunan, Guizhou and Yunnan.	1992	To be completed 12/31/98
EFFECTIVE TEACHING SERVICE PROJECT - (CR.2471-CHA)	To contribute to improved learning at the lower middle school level by providing teaching services, including instructional methodology, teacher training and management of teachers training and assignment.	1993	To be completed 12/31/98
BASIC EDUCATION IN POOR AND MINORITY AREAS PROJECT - (CR. 2651-CHA)	To support the attainment of universal primary education and expansion of coverage of lower secondary education in poor and minority areas in 6 provinces: Xinjiang, Sichuan, Inner Mongolia, Ningxia, Guangxi, and Jiangxi.	1994	To be completed 12/31/2000

Table 3: PROJECT TIMETABLE

Steps in project cycle	Date planned	Date actual/ latest estimate
Identification (Executive Project Summary)	12/23/86	12/23/86
Preparation	3/19/97	3/19/87
Appraisal	10/87	1/8/88
Negotiations	2/88	3/28/88
Letter of development policy (if applicable)	N/A	N/A
Board presentation	5/88	5/24/88
Signing	8/11/88	8/11/88
Effectiveness	1/9/89	1/9/89
First tranche release (if applicable)	N/A	N/A
Midterm review (if applicable)	-	5/12/92
Second (and third) tranche release (if applicable)	N/A	N/A
Project completion	12/31/92	12/31/93
Loan closing	12/31/93	12/31/93

Table 4: LOAN/CREDIT DISBURSEMENTS: CUMULATIVE ESTIMATED AND ACTUAL

	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
Appraisal estimate	11.0	32.0	42.5	47.0	49.5	50.0
Actual	4.7	18.4	34.7	41.0	47.1	49.1 /a
Actual as % of estimate	43.0	57.2	81.4	87.2	95.1	98.0
Date of Final disbursement						12/15/93

/a Differences in Appraisal disbursements and actual disbursements is due to change in US dollar value of SDR.

Table 5: KEY INDICATORS FOR PROJECT IMPLEMENTATION

Index	Baseline Data 1987	SAR Target 1992	Project Completion Data 1993
Enrollment	111,547	171,916	462,224 / <u>a</u>
Teaching Hours Per Week	4-8	6-12	8 / <u>b</u>
Two-Subject Training Programs	--	50% of project IOEs would introduce two- subject training programs	86% of project IOEs have two subject training programs / <u>c</u>
% of Female Enrollment -full-time students -commuting students -correspondence students	27	40	42 47 42
Library - Average Weekly Hours Open	41.4	48-56	56
Laboratory - Average Weekly Hours Open	13.7	--	29.5
Number of Teachers trained for Rural and Minority Areas / <u>d</u>	--	50-100 per school	567 per school

/a 1993 enrollment of 72 project IOEs of which 51,192 are full-time, 118,695 are commuting, and 292,337 are correspondence.

/b Average teaching hours per week for project IOEs.

/c 62 project IOEs from a total of 72 IOEs offer two-subject training programs.

/d 22 IOEs participated in the program of setting aside 50-100 student places each year to train teachers from rural and minority areas.

Table 6: STUDIES INCLUDED IN PROJECT

Study	Purpose as defined at appraisal/redefined	Status	Impact of study
<p>Cost Benefit Comparison of Different Training Methods for Middle School In-service Teachers</p>	<p>Conduct a cost benefit analysis of the various inservice teacher training methods for use by the Government in defining policies for training teachers in the most cost-effective way.</p>	<p>Completed January 1994 by the Research Group of Tianjin Institute of Education and submitted to the Association.</p>	<p>The findings for the study were reviewed by the Government. As a result, the SEdC, IOEs, Normal Schools and Colleges and county and township training facilities have adopted a policy of increased correspondence training, supplemented with personal instruction or satellite TV education.</p>
<p>Study on In-service Training in Dual-Subject Teaching for Secondary School Teachers</p>	<p>To investigate and analyze the dual-subject training programs with special focus given to lower-secondary teacher training programs in rural areas. The study was to be used by the Government when making policy decisions regarding future teacher training programs. (The purpose did not change from Appraisal.)</p>	<p>Completed January 1994 by the Beijing Institute of Education and submitted to the Association.</p>	<p>The study found that dual-subject training could be particularly effective in lower-middle schools in the rural areas. It was recommended that SEdC adopt regulations that would allow dual-subject teachers to enjoy the same treatment for promotion and salary increase as well as define the different specialties and their relationship to each other. SEdC reviewed the findings and is presently considering ways of increasing the practice of dual-subject training in programs nationwide.</p>
<p>Study on Methods for Increasing Female Participation in Lower-Middle School Teacher Training Programs</p>	<p>To determine the various reasons for the low female participation in lower-middle school teacher training programs and to make recommendations on ways to address and improve the problems. (The purpose did not change from Appraisal.)</p>	<p>Completed January 1994 by the Shanghai Institute of Education and submitted to the Association.</p>	<p>The study reported that for social and historical reasons, women were prevented from pursuing higher levels of education. The research group made several recommendations to SEdC on mechanisms to use to assist women and improve their personal situations. SEdC is still reviewing the findings; however, they have adopted some methods such as reducing education fees, providing tutoring programs and lowering entrance examination requirements, especially for women in rural areas.</p>

Table 7A: PROJECT COSTS

Item	Appraisal estimate (\$M)			Actual/latest estimate (\$M)		
	Local costs	Foreign costs	Total	Local costs	Foreign costs	Total
Civil Works	37.3	4.6	41.9	48.1	0	48.1
Furniture	4.6	0.6	5.2	3.3	0	3.3
Equipment	27.2	6.5	33.7	4.2	41.5	45.7
Books and materials	2.5	0.6	3.1	0	3.9	3.9
Overseas training	0.1	2.5	2.6	0	2.0	2.0
Local training	1.9	0.0	1.9	0.5	1.2	1.7
Specialists Services	0.1	0.8	0.9	0.1	2.2	2.3
Total Base Costs	<u>73.7</u>	<u>15.6</u>	<u>89.3</u>	<u>56.2</u>	<u>50.8</u>	<u>107.0</u>
Contingencies	12.9	2.6	15.5	5.0	0.	5.0
Total Project Costs	<u>86.6</u>	<u>18.2</u>	<u>104.8</u>	<u>61.2</u>	<u>50.8</u>	<u>112.0</u>

Table 7B: PROJECT FINANCING

Item	Appraisal estimate (\$M)			Actual/latest estimate (\$M)		
	Local costs	Foreign costs	Total	Local costs	Foreign costs	Total
IBRD/IDA	37.8	12.2	50.0	0	49.1	49.1
Government	48.8	6.0	54.8	61.2	1.7	62.9
Total	<u>86.6</u>	<u>18.2</u>	<u>104.8</u>	<u>61.2</u>	<u>50.8</u>	<u>112.0</u>

Table 8: STATUS OF LEGAL COVENANTS

Agreement Section	Covenant Type	Present Status	Original Fulfillment Date	Revised Fulfillment Date	Description of Covenant	Comments
3.01.b	11	C			Terms and conditions for onlending acceptable to IDA	Complied
4.01.b	3, 11	C			FIL0 and PIO maintaining project accounts	Complied
4.01.b	1, 9	C	08/31/90		Submit annual audit report together with separate opinion on SOE	Complied
Sch. 3.2	10	C	12/31/93		Carry out TA programs	Complied Northridge University submitted final implementation report
Sch. 4.A (1)	9	C		7/1/91	Three Studies to be carried out by Municipal IOEs	Studies completed and submitted to Association
Sch. 4.A (3)	10	C			PIOs to function throughout project period	Complied
Sch. 4 A (4)	12, 5, 9	C	12/31/88		Establish a Coordinating Committee in SEdC to coordinate the three studies and other research activities of Municipal IOEs	Complied
Article 4, Sec. 4.02	9, 10	C	04/01/90		Send annual report to IDA on Implementation of the project-supported improvement measures and hold a mid-term review	Final report submitted to the Association; mid-term review conducted 5/92

Table 9: BANK RESOURCES: STAFF INPUTS

Stage of Project Cycle	Planned		Revised		Actual	
	Weeks	\$	Weeks	\$	Weeks	\$
Through appraisal	not available				100	300,000
Appraisal-Board	not available				4	12,000
Board-effectiveness	not available				8	24,000
Supervision	not available				50	150,000
Completion	not available				8	24,000
<u>Total</u>					<u>170</u>	<u>\$510,000</u>

Table 10: BANK RESOURCES: MISSIONS

Stage of project cycle	Month/year	Number of persons	Days in field	Specialized staff skills represented	Performance rating	Types of problems
Through appraisal	11/86-1/88	18	90	Sr. Ed., Gen. Ed., Sr. Econ. Sci. Ed.		No major problems
Appraisal through Board approval	1/88-5/88	3				No major problems
Board approval through effectiveness	5/88-8/88	1				No major problems
Supervision	5/89	2	15	Ed. Econ., Gen. Ed.	1	No major problems
	11/89	1	5	Ed. Econ.	1	No major problems
	10/90	1	3	Gen. Ed.		Mission was not a full supervision for this project
	1/91	1	29	Gen. Ed.	1	No major problems
	11/91	1	3	Gen. Ed.		Not a full supervision, a review of the TA
	1/92	2	10	Sr. Gen. Edu., Gen. Ed.		Not a full supervision, review of project while on preparation mission
	5/92	2	7	Sr. Gen. Ed., Proj. Officer	1	Mid-term review
Completion	9/94	5	13	Gen. Ed., OA, Sr. Econ., Gen. Ed.,	Satisfactory	ICR mission

**IMPLEMENTATION COMPLETION REPORT
CHINA
TEACHER TRAINING PROJECT
(Cr. 1980-CHA)**

Aide-Memoire

September 12 - October 8, 1994

1. A World Bank mission comprising Ms. Hena Mukherjee (mission leader), Mmes. Sandra Erb and Kathy Ogawa and Messrs. James Lynch and Leon Miller visited Beijing, Changsha and Harbin to review the status and make preparations for the Implementation Completion Report (ICR) of the above Project. In Beijing the mission met with the State Education Commission (SEdC) Foreign Investment Loan Office (FILO) and received a full briefing on the status of the Project. The mission also reviewed the new ICR guidelines with FILO. In Changsha the mission visited Zuzhou Institute of Education and the Hunan Normal College and in Harbin the Heilongjiang College of Education. The mission would like to express its appreciation to the SEdC, Hunan and Heilongjiang Provincial Education Commissions for the arrangements made and the hospitality extended during the mission. Unless indicated in a follow up letter from Bank management, these agreements recorded in the Aide-Memoire are final with the signature of the task manager.
2. Overall implementation status. The mission was pleased to learn that the implementation of the project was completed by the closing date of December 31, 1993. As of the closing date, the total credit amount SDR 36.8 million (\$50.0) had been disbursed. Indicators to monitor overall progress under the project have been met or exceeded. However, there are some project IOEs that have not been able to meet the target indicators. The SEdC has indicated that they will continue to work with those project institutions in order to assist them in improving efficiency.
3. In overall terms the implementation of the project by the SEdC and the provincial levels went well with the Provincial Education Commissions providing good guidance and advice to project institutions. The project has also stimulated the municipal governments to put money into developing education programs and facilities and the mission considers this to be a good indication of the likely sustainability of the project.
4. Civil Works. All civil works construction had been completed by the end of 1993. The quality of the construction at the Institutes of Education (IOEs) visited seemed very good. Now however, after a few years the facilities are beginning to show signs of wear from the normal use. The mission would urge the SEdC and the Provincial Education Bureaus to pay particular attention to the maintenance of the facilities constructed under the project and to start a regular maintenance program.

5. Equipment and Books. All of the equipment and books have been procured under the project and are now in operation and use. The mission feels that it is very important for institutions that have participated in the project to continue to obtain value for money from the investment which they have made in equipment, books and materials. To ensure efficient use of the equipment and books, project institutions need to make adequate provision for storage, inventory, maintenance and servicing. Considerable attention and financial resources must also be provided to maintain the equipment and provide consumables and replacement parts. Otherwise, the effectiveness of the equipment will deteriorate rapidly and could become a total loss in a short period—perhaps as short as 3-4 years. It is estimated that each school requires about Y 850 per year for the consumable and the mission would encourage the municipal, provincial and prefectural authorities to systematically provide adequate funding for the maintenance of school equipment.

6. Equipment Utilization and Training. There needs to be a continued focus on increased utilization. Utilization of language laboratory facilities could be further improved, if greater access for individual study were given under the supervision of professional/technical staff. Colleges should begin to collect a library of materials for such study and staff from appropriate departments should receive training in the use of language laboratories. In this respect, colleagues could share their expertise and skill with each other, as a good form of inexpensive in-service training.

7. Institutions should allocate much more importance to "in-house" recurrent training within their overall professional development strategies. Each institution should have a professional development plan and systems should be set up to enable staff to share their expertise and to utilize equipment cross-departmentally. For example, colleagues in departments receiving computers, could be asked to provide in-house, inservice training for colleagues in other departments e.g. instruction in word processing for English staff. Departments with a language laboratory could provide intensive English for science staff, wishing to improve their English.

8. Municipal Institutes of Education. Under the project, the Municipal IOEs were to improve inservice teacher training for unqualified lower secondary teachers and develop a permanent network of professional support in teacher training by becoming a clearinghouse for gathering, evaluating and disseminating information. The Municipal IOEs were also to conduct three studies that would then be used by the SEdC for revisions to SEdC guidelines on dual subject teachers, methods of increasing female participation and the cost effectiveness of alternative delivery systems.

9. The mission found that the Municipal IOEs had been able to increase their enrollments of lower secondary school teachers and improve their overall institutional efficiency. They also reported that their role within the municipalities had become one of a resource center for professional support, including information dissemination, research and evaluation, and management training. On the other hand, the permanent national network role of the Municipal IOEs in Beijing, Shanghai and Tianjin with institutions at the provincial level was never realized

and this is therefore, one of the weaknesses of the project design or implementation. Most of the provincial IOEs visited reported that they rarely receive information from the municipal IOEs on new materials and research and development related to teacher training curriculum and methodology.

10. The mission would strongly recommend that the Municipal IOEs use the opportunities available and their greater access to information to expand their role and to become resource centers for professional support and the dissemination network that was originally envisioned during the preparation of the project.

11. Studies. During the project the three Municipal IOEs conducted studies on: (a) the cost effectiveness of alternative delivery systems including residential, commuter and correspondence/ETV programs etc., (b) the training of dual subject teachers investigating the appropriate combination of subjects, and the cost effectiveness of dual subject teachers in rural schools and, (c) methods of increasing female participation in the teacher training system. The results of these studies were expected to lead to revisions in the SEdC guidelines. These studies have been received and reviewed by the Bank. The findings were to be disseminated through the information network established between the Municipal and Provincial IOEs.

12. The SEdC is still in the process of reviewing the results of the studies and informed the mission that they would follow up on the studies during their field review of the project.

13. The mission recommends that the SEdC publish the findings and results of the studies and make them available to the Municipal and Provincial IOEs for further dissemination. The mission feels that this is one of the major ways in which the impact of the project can be measured. The mission indicated that they would like to receive copies of any reports that are produced which may elaborate on the studies findings as well as information on any policies resulting from the SEdC's review of the studies.

14. Training. The training was well organized and completed on time. The mission however, would have been interested in receiving information on the impact of training for administrators and teachers. The mission would encourage the SEdC and IOEs to provide this information in their completion report materials.

15. The mission would also like to stress that in the future institutions should be encouraged to capitalize on the training received by individual members of staff by using them as resource persons to train other staff. This kind of training can be very effective and an inexpensive means of in-service training. This type of training must be built into institutional staff development plans and the specific responsibilities of those trained needs to be made clear. Every school and college should have its own staff development plan, which should be continuously updated.

16. Overseas Training. Experience in this project indicates that the criteria for sending staff for overseas training and the procedures for the maximizing of that experience on the staff

member's return need to be further considered. Such criteria might include the obtaining of a specific expertise or set of skills not available in China and a requirement that, on return, the staff undertake seminars in their own and other neighboring institutions.

17. Improvements in Teacher Training System. The mission learned that there had been an increased intake of students from disadvantaged provinces. We heard about a number of innovative steps taken in correspondence courses, summer and winter vacation courses, special coaching centers in remote counties, and setting up of mobile teams of teachers. The mission also noted increases in teaching hours, training in double majors, female enrollments in annual intakes which, for the most part, meet the project targets. In one case the mission learned that the Institute of Education has adopted one poor county as their target to work with and were enrolling an average of 100 students per year in the Institute. The mission feels that these are exciting changes and commend the institutes in their initiative and would recommend that these experiences be shared with other IOEs and Normal Colleges.

18. During visits to IOEs the mission noted that some project institutions, such as correspondence IOEs with no full-time students, could improve efficiency to meet project goals if they would adopt alternative approaches to utilization of faculty and equipment. These IOEs could offer day and evening courses in areas such as language training and computer applications to the local residents. The mission strongly recommends that the SEDC and the provincial bureaus of education work with the correspondence IOEs to develop alternative education delivery mechanisms so as to increase utilization of faculty and facilities.

19. Transition from PCR to ICR Preparation. The Bank mission discussed the new Bank procedures for ICR preparation with FILO. The mission explained that the Borrower is now required to prepare an Operation Plan for submission to the Bank along with Part II. The mission provided FILO with the new set of guidelines for implementation and informed them that the Operation Plan should focus on the sustainability of project after completion. During the discussions, the mission provided FILO with ideas on the type of information that should be included in the Operation Plan. It was agreed that the Borrower would prepare and submit an Operation Plan and Part II to the Bank by January 25, 1995. It was also agreed that the Bank would provide a draft copy of Parts I and III to the Borrower by December 31, 1994 so that FILO could review and comment. The deadline for submission of the final report to the World Bank Board of Directors is March 31, 1995.

Hena Mukherjee
Task Manager, EA2HR
October 14, 1994

IMPLEMENTATION COMPLETION REPORT

CHINA

TEACHER TRAINING PROJECT (Credit 1908-CHA)

Borrower Contribution to the ICR

1. Introductory remark. This appendix was prepared in accordance with the new Bank procedures for ICR preparation replacing the original guidelines for PCR preparation.
2. Comments on the Two Parts of ICR prepared by the Bank. The Borrower acknowledges that, on the whole, the brief descriptions of the project objectives, implementation and outcomes contained in Part I of the ICR are conform to reality, and recognizes that the tables of statistical information given in Part II are sufficient for illustrating the key factors relating to the project implementation. The Borrower agrees in general with the analysis and comments of the Bank on the project execution.
3. Project Background. It has been unanimously recognized since long in China that education is the foundations of achievement of the national goal of economic development. When China resumed its legal seat and rights in the World Bank in 1980, the Chinese Government decided to give the priority for projects to education, and early projects, both the Bank Group and the Government focused much of their attention in education sector on the development of higher education. In May 1985, the Central Committee of the Communist Party announced its "Decision on Reform of the Education Structure." Next year in 1986, the Government passed the "Compulsory Education Law" on the basis of the above mentioned decision. Under this law, the nine-year universalization of basic education (UBE) was to be achieved in stages. The Government, however, felt that though achievement of universal schooling at the primary level would be difficult, UBE would be achieved with greater difficulty at the lower secondary level, because of the low enrollment rate and shortage of qualified teachers.
4. Project Objective. To address problems of the above mentioned consideration, the Borrower, working with the IDA, developed the Teacher Training Project which laid out the following objectives: (a) to improved the quality of and the output from the in-service training of lower secondary school teachers; (b) to improve the management capability of administrators in different levels of the teacher training system; (c) to help resolving participation rate inequalities among provinces; (d) to raise female participation in-service training program for unqualified lower secondary teachers; and (e) to increase the efficiency and cost-effectiveness of the lower secondary school teacher training system.

5. Project Implementation. In order to ensure the smooth implementation of the project, a series of implementing units were closely organized at various levels, and a number of appointments were assigned to take responsibility for the implementation. During the five year of the project life, the overall implementation went well and was completed by the closing date of the project without significant extension. The total credit amount was disbursed and the total local counterpart fund was expended. In another aspect, most of the key indicators for monitoring the overall progress of the project development was met or exceeded. Quite a lot of items illustrating the achievement of project objectives has been listed and analyzed in Part I of the ICR in detail. The Borrower agrees in general with the comments and will not make any further review in detail.

6. About the Three Studies. As an important component of the project, the three municipal IOEs (in Beijing, Tianjin and Shanghai) were assisted with credit fund to conduct studies, each on one different subject. The findings for the studies had been sent to the IDA for review. For reference of the relevant Bank officials, a set of copy will be enclosed with the ICR and submitted for further review.

7. About the Operational Plan. On the discussion with the Bank ICR mission in September through October 1994, the Borrower was informed about the new Bank procedures for ICR preparation and the Operation Plan for submission to the Bank. The Plan has been prepared and attached (Annex C) to this Annex B for Bank review.

8. Bank's Performance. The Bank officials and staff participating the project's preparation, appraisal and initial operation were highly professional and qualified with the task. Moreover, having been involved in the work of the previous education projects, most of them had established close and efficient working relationship with the relevant Chinese staff and were familiar with the working situation of the Chinese projects. In the later period of the project's life, however, quite a number of Bank officials were transferred to new positions in the Bank, and some were retired. It had affected, to certain extent, the understanding of each other and weakened the familiarity with the project.

9. Borrower's Performance. It was the first time for all the project institutions to deal with the World Bank financed project. Hence most of them need indeed, time to familiarize themselves with the situation of their task. In addition, the evolution and implementation of the project were almost simultaneous with adjustment of the economic and education conditions in China and hence affected by the frequent changes of conditions and policies. These difficulties, on the other hand, turned into an active force to the enthusiastic and diligent staff of the project participants. The impressive achievement of the project is a conclusive evidence of the performance and quality of the participating institutions of the Borrower.

IMPLEMENTATION COMPLETION REPORT

CHINA

TEACHER TRAINING PROJECT (Credit 1908-CHA)

Borrower's Operation Plan

1. The current situation and development plan:
 - (a) The current situation of lower secondary school teachers. The percentage of lower secondary school teachers with required degree qualifications has increased to 59.5 percent in 1993 from 35.6 percent in 1988.
 - (b) The main training approaches:
 - (i) full-time
 - (ii) inservice training: correspondence and long-distance training courses
 - (iii) various short-term training courses
 - (c) Target by the end of the century—80 percent of the lower secondary school teachers will meet degree qualification requirements.
2. Systematic development:
 - (a) The nationwide network for training lower secondary school teachers has been established.
 - (b) The network for the three municipal institutes will be more functional.
 - (i) To provide more information for the nationwide institutes of education.
 - (ii) To strengthen scientific research on teacher training and disseminate the results.
 - (iii) To produce audio/visual materials for teaching reference for the whole country.
3. Efficiency indicators:
 - (a) In order to achieve the target, the enrollments of project IOEs will be further expanded.
 - (b) The dual-subject training program will be continued in the institutes of this project and will be introduced to other possible educational and training schools including

the colleges included in the Effective Teaching Services Project (Cr. 2471-CHA) approved on March 16, 1993.

- (c) To further readjust the structure of the faculty and increase the teaching load.
- (d) To further increase the utilization rate of facilities and equipment.
- (e) To organize staff who have received local and/or overseas training to give lectures, thus sharing benefits with staff inside and/or outside the department/school.

4. Sustainability:

- (a) After the project is closed, the project schools will continue to handle the issues concerned with the project.
- (b) Besides the financial allocation for the recurrent expenses of the schools, the authorities are asked to provide no less than the equivalent of 5 percent of the total price of the project-purchased equipment for maintenance.

