

USAID CONTRIBUTION TO DEVELOPMENT  
OF  
EDUCATION IN INDIA

A REPORT OF EDUCATION DIVISION ACTIVITIES  
1952 — 1972

By  
Baldev Singh Vij  
Program Analyst (Edu)

United States Agency for International Development  
West Building, American Embassy, New Delhi.

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## P R E F A C E

Over a long period of time, a need has been felt for a comprehensive and consolidated report which can provide information on the contribution of USAID and its predecessor agencies to India's development in the field of education. This report has been compiled in order to meet that need. The report gives a rationale for assistance in the field of education and a broad perspective of the programs and projects monitored by the Education Division since 1952, when the technical assistance program started, through March 1972. Major objectives for launching various projects, the plans and the extent of the contribution of U.S. Contractors in achieving project objectives are outlined in the project descriptions. No effort has been made in this report to measure the results and the impact of the assistance program.

The report has three parts: Part I deals with the activities/projects in which the Education Division is currently involved; Part II provides information on the projects and activities which are completed and terminated. Part III is comprised of Appendices listing the names of experts and consultants who served in India under various projects and the participants who received training in the United States.

short-term consultants who served in the Summer Institutes from 1963 to 1970 are not included in this report because of the large number involved (approximately 1100). Part III also contains a statement showing the financial assistance provided under each project. Charts showing the pattern of education in India, total student enrolment in schools and colleges and the percentage of enrolment to population in corresponding age group, and the summer science institutes/ consultants are also included in this part.

My thanks are due to my predecessor Mr. K. L. Khetarpal who had compiled in 1967 a Report on Education Division activities, which has been very helpful in providing background material. I owe my thanks to my colleagues in the Division who helped me in bringing this report out. I owe special thanks to Dr. G.S. Hammond, Mr. Joseph M. Loudis and Miss Hazel Olson from the Education Division and Mr. James Clinton from the Program Division who encouraged me in writing this report.

B.S. VIJ

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1. RATIONALE

A. INTRODUCTION:

The rationale for the program of the Education Division of U. S. Agency for International Development Mission, which is set forth below; pertains to the program implemented prior to March 31, 1972. The activities included in this document were jointly planned and carried out by the Government of India and the United States Government within the theoretical framework presented herein.

B. BASIC ASSUMPTIONS:

The program of the Education Division:

1. should be directly related to the educational needs and problems of India as outlined in its Five-Year Plans;
2. should be an integrated group of carefully selected key projects covering priority educational problems;
3. should be focused upon leadership training in education--teachers, specialists, and administrators;
4. should provide assistance to Indian education at the Center, State and Institutional levels; and,
5. should be in line with the objectives of USAID program in India.

C. THE ASSUMPTIONS INTERPRETED:

1. The resources available to any country for national development are both human and material. Of these two types of resources, the human resources are developed basically through educational processes whereby changes are brought about in the knowledge, skills, attitudes, and behaviour of the individual. Economic development will take place primarily as the people of a nation acquire additional knowledge and skills and new attitudes in order to make the most effective use of material resources available to the country. Political development will take place primarily as the citizens of a nation learn the meaning of the concept of individual freedom with social responsibility.

2. Related to education needs of India, the Fourth Five-Year Plan stated the following:

"Education as an investment in human resources, plays an important role among the factors which contribute to economic growth. It secures returns in the form of skilled manpower geared to the needs of development and also creates the right attitudes and climate for development. It exposes the farmers and workers to new ideas, stirs their ambition and bends them to change. It seeks to create an environment of discipline, harmony, understanding and team work which is conducive to the implementation of production plans....."

Accordingly, the basic education problems of India arise out of the demand from her people that the education system be expanded and redirected in the interest of achieving the plans for the economic development of the nation. More specifically, the Fourth Five-Year Plan provides:

"Priority will be given to the expansion of elementary education and the emphasis will be on the provision of facilities for backward areas and communities and for girls.... Other programmes of importance will be: improvement of teacher education; expansion and improvement of science education; raising standards of post-graduate education and research; development of Indian languages and book production, especially text books, and the consolidation of technical education including reorganisation of polytechnic education and its closer linking with the needs of industry and its orientation towards self-employment.... It is proposed to effect economies by utilisation of existing facilities to the maximum possible extent, streamlining of the planning, implementing and evaluating machinery, increasing the use of educational technologies...."

It is reasonable, therefore, that the program of Education Division should be directly related to the broad areas of educational endeavor in the host country. The

description of the projects reflects the project elements as agreed with the Ministry of Education and appropriately signed by the "Agency for International Development--an Agency of the Government of the United States of America-- and the Ministry of Finance--an Agency of the Government of India."

MASTER LIST OF PROJECTS

The organization of the Education Division is geared to the execution of the projects which make up its program. Thirty-five projects have been assigned to the ED Division through FY-71 (June 30, 1971). This total includes both active and completed projects which involve cooperative projects with the Central Government of India, Ministry of Education; National Council of Educational Research and Training; University Grants Commission; the National Council for Science Education; and the Ministry of Labour and Employment.

In the master list of projects which follows, each project has a number made of four segments, such as 386-11-660-027. The first segment "386" identifies the country, i. e. India. The second segment identifies whether the project is under Grant or Loan (11 and 15 identify Grant). The third segment identifies the "Functional Field of Project": 100-190 Agriculture and Natural Resources; 200-290 Industry and Mining; 300-390 Transportation; 400-490 Labor; 500-590 Health and Sanitation; 600-690 Education; 700-790 Public Admn; 800-890 Community Development, Social Welfare & Housing; 900-950 Private Enterprise; 960-990 General and Misc. The fourth segment identifies the number allotted to the project. This number is used throughout the life of the project and is not reused.

P R O J E C T S

<u>S.No.</u>	<u>Project No.</u>	<u>Project Agreement No.</u>	<u>Project Title</u>
1.	386-15-999-000	138	Technical Support (Support to Edu. Comm. 1965)
2.	386-11-660-027	27	Technical Education Institutes
3.	386-11-110-028	28	Agriculture Education and Research (Highway Engg. Section)
4.	386-11-680-050	--	Education Adviser, Ministry of Edu.
5.	386-15-820-058	44	Social Welfare Education
6.	386-11-630-060	41	Home Science Edu. and Research
7.	386-11750-062	-	Economic Planning
8.	386-11-650-063	47	Multipurpose Secondary Education
9.	386-11-610-065	59	Foundry Training
10.	386-11-690-066	-	Education Program Direction and Development
11.	386-11-680-073	50	Educational Administration
12.	386-11-690-074	65	School Building Improvement
13.	386-11-780-078	63	Indian Statistical Institute
14.	386-11-790-080	-	Trng. in Public Administration
15.	386-11-690-107	67	Rural Institutes
16.	386-15-410-109	110 Sup. 5 Amdt. 3	Bombay Central Training Institute (Trade Union Development)
17.	386-11-640-114	70	National Inst. of Basic Education
18.	386-11-670-118	68	Training in Adult Education
19.	386-11-660-119	66	Central Institute of Education
20.	386-11-690-120	69	Teacher Trng. in Audiovisual Edu.

21.	386-11-660-146	74	National Professional Edu. Center
22.	386-11-660-150	87	Indian Inst. of Technology/Kanpur
23.	386-15-660-154	-	Teacher Trng. in Engg. Education
24.	386-11-720-170	98	Govt. Operns. (Orgn. & Mgt.)
25.	386-11-660-184	99	National Institute of Education
26.	386-31-660-213	116	Higher Tech. Edu. (PL-480 Proj.)
27.	386-31-640-218	120	Elem. Education (PL-480 Project)
28.	386-11-660-226	131	Science Education Improvement
29.	386-21-660-228	AID Loan # 164	Higher Education Loan
30.	386-33-670-232	136	Assistance to Expansion of Literacy
31.	386-11-640-385	155	Improved Teaching Techniques (Elementary Education)
32.	386-11-690-392	152	Teacher Training in English
33.	386-15-690-393	Letter signed with DEA	Science Textbooks Program
34.	386-11-699-395	-	Technical Support--Education Education Commission 1964-66 Indo-US Science Workshops (NAS-INSA) Student Services Course of USEFI National Convention of Indian Inst. of Indust. Engineers AACTE Internship in Higher Edu. National Seminar on Mass Media in Education Seminar on Open University Programmed Learning Activities Management Education Recon- naissance
35.	386-11-660-422	-	Regional Technical Teacher Training Institute, Calcutta (RTTTI/Calcutta)

PART I - ACTIVE/PROPOSED PROJECTS

150 - INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

The IIT/Kanpur is one of the five engineering institutes established by the Government of India to provide engineering and technological education of internationally recognized excellence.

The objective of this Project is to help India develop the IIT/Kanpur into a modern institute of technology which will produce highly trained engineers and technologists for industry and for other educational institutions.

The largest USAID educational assistance project in the world, IIT/Kanpur is being assisted through a consortium of nine U.S. universities (California Institute of Technology; Carnegie Mellon University; Case-Western Reserve University; Massachusetts Institute of Technology; the Ohio State University; Princeton University; Purdue University; University of California; and University of Michigan) with a title of Kanpur Indo-American Program (KIAP) under a contract with Education Development Center, Inc. (formerly Education Services Inc.) Newton, Mass.

The project was launched in 1962. During the earlier years heavy emphasis was laid on support for developing academic programs in engineering and science and equipping IIT/K laboratories and workshops. The emphasis shifted in recent years

to assistance at middle management levels and to operations which relate to the Institute's program of instruction, research and service to the needs of other educational institutions and Indian industry. The project is scheduled to terminate in June 1972. Considerable thought is being given to the plans to establish "bridges" between IIT/Kanpur and other institutions in India and abroad.

During the life of the project, the development and the construction of the school plant included: lecture halls; 10 laboratories; 1 faculty building; 1 library building; 1 computer center; 5 student hostels; 819 staff quarters including the Director's and faculty quarters; 1 visitors hostel; boiler house, auditorium; library; and the aircraft hangar and airstrip. In addition, community services, such as elementary and secondary schools, hospital, post office, bank, shopping center, electric sub-stations, central airconditioning, airconditioning of library and additional lecture halls, etc. have also been completed.

The Indian faculty members number over 250 of which 174 have been repatriated from the U.S. and other countries. Forty-eight Indian faculty and administrative staff members have been sent for specialized training in the U.S. Of these, thirty-seven have returned upon

completion of their training program, and the remaining eleven will return in the next few months. Performance in the production of research papers has been outstanding with over 1600 papers produced to date.

The use of the computer center for technical and scientific purposes is increasing rapidly. Many IIT/K administrative operations are being developed for computer programming. In addition, most of the detailed administrative operation of the U.S. contract team are also performed effectively by the computer. The demand from industry and government for computation and for training in computer use is growing rapidly.

The output of graduates from IIT/Kanpur is as follows:

<u>Year</u>	<u>B. Tech.</u>	<u>M. Tech.</u>	<u>M. Sc.</u>	<u>Ph. D.</u>
1965	66	-	-	5
1966	85	18	13	12
1967	83	24	17	22
1968	164	71	28	16
1969	197	120	26	37
1970	234	92	30	42
1971	232	145	30	45

The library is the most modern of its kind in India.

Presently, it has about 85,000 titles and subscribes to about 1200 periodicals.

Since inception, 102 U. S. staff members including 4 program leaders, 4 administrative officers, plus about 24 short-term consultants have completed their assignments.

Laboratory and workshop equipment and books worth \$7.4 million have been provided. Some of the major items of equipment are: Piper PA-18-151 airplane, Cessna airplane, television equipment for a closed circuit TV Center, IBM Computer No. 1620, Spectrophotometer, Mass Spectrometer, X-Ray diffraction unit and booth equipment system for language lab. IIT/Kanpur purchased from their own resources, IBM Computers No. 7044, 1800 and 1401.

In addition to having provided the land, the GOI contributed an average Rs.20 million each year for development and recurring expenditures of IIT/Kanpur. The U.S. contribution through June 1972 will be \$14,928,000 and Rs.23,478,000.

226 - SCIENCE EDUCATION IMPROVEMENT' PROJECT

The purpose of the Science Education Improvement Project is to assist the GOI agencies of the Ministry of Education to institute programs of curriculum reform in schools and colleges in the physical sciences, life sciences and mathematics. Beginning 1963, an Indo-American Summer Institute Program was developed to acquaint Indian teachers of science and technology with modern instructional approaches in their fields. The "Summer Institute" concept, similar to the summer teacher training activities sponsored by the National Science Foundation (NSF) in the United States, started with four institutes for secondary school teachers. In the succeeding six summers, the program was extended to cover engineering, polytechnic education, mathematics and sciences both at the college and the school levels and the number of institutes was increased gradually to 195 by 1970 with more than 300 additional institutes directly operated by the various states.

Four U.S. universities--Ohio State, Wisconsin, Houston and Teachers College Columbia--assisted the Government of India in conducting summer programs through 1966. Through 1970, these four universities and the NSF assisted the GOI in mounting 890 institutes in

sciences, mathematics, engineering and polytechnic education. Approximately 30,000 higher secondary and college teachers have been trained in these institutes.

The Government of India plans to continue the summer science institutes as a permanent feature of Indian education but direct U.S. assistance for summer institutes has been phased out.

The emphasis now focuses on the following school and college/university level activities.

Revision of syllabi

Preparation of teachers' guides, textbooks and enrichment materials

Design of laboratory experiments and the requisite equipment

Preparation of other teaching aids including charts, film strips, films, etc.

Orientation of teachers in the use of new materials through workshops and institutes.

In this endeavor the NSF/USAID coordinates its efforts through the Ministry of Education of the Government of India and works directly in various phases of the program with the following agencies:

National Council for Science Education (NCSE)  
Advisory and consultatory to all programs with some authority to engage in innovative programs not specifically falling within the jurisdiction of other agencies.

The University Grants Commission (UGC)  
College and University Improvement programs

National Council of Educational Research & Training (NCERT)  
School improvement programs.

In addition to the above mentioned agencies, which represent the Central Government, collaboration with State and Municipal Governments is contemplated subject to the approval of the GOI Ministry of Education.

USAID shall continue to provide assistance to the Bombay School Science Improvement Project as a pilot activity to prepare science syllabus, teachers' handbooks, reference materials and other teaching aids. In its present stage, assistance activities are concentrated upon the development of textbooks, teachers' manuals, laboratory guides and equipment at all levels. Consultant services are provided to the Regional College of Education, Mysore, to prepare resource materials for secondary school physics teachers. Assistance will be provided to the efforts of State Institutes in Mysore, and Rajasthan and the Central Schools Commission, New Delhi, as individual activities are identified and approved. USAID is providing assistance to the University Grants Commission for administration and evaluation of University Leadership and College Science Improvement Project (COSIP) programs for

contemporizing math/science curricula in selected colleges and universities throughout India. These developmental activities essentially are the follow-up of Summer Science Institutes which contributed to the ferment for curricular reform.

USAID obligations through March 1972 total \$6.5 million and Rs. 30.4 million to meet the cost of American consultants, commodities and participant training.

Participant training has been provided for 75 Indian educators. Services of 26 regular staff members were provided for 46 man years. Besides, approx. 1150 short-term consultants served for approx. 2310 man-months in summer institutes, workshops and seminars in specialized fields.

385 - IMPROVED TEACHING TECHNIQUES (ELEMENTARY EDUCATION)

One of the most important problems confronting elementary education in India is that of providing a minimally adequate schooling to pupils in the face of a large expansion of both the student population and the number of schools. The problem is enormous. Primary and middle school enrollments have grown from 23.5 million pupils in 1950-51 to 88.5 million in the 1969-70 school year; and by 1969 there were over 2 million teachers in the schools.

The objective of this proposed project is to develop an Indian capacity to apply innovative educational technology, as represented by programmed and individualized instruction techniques, which may minimize Indian educational problems and maximize teacher effectiveness. The project goals are:

1. to establish a pilot institutional framework which possesses the technical and organizational capacity to produce materials, train personnel and supervise the use of programmed instruction in selected schools;
2. to improve the quality of primary school instruction; and,
3. to raise the achievement level of primary school children.

By the development of a systematic presentation of curricular material which allows self-instruction by the learner, teachers with minimal training can direct the learning more effectively. They can teach a wider range of subjects at more levels. USAID visualizes this technique being most useful to India initially at the two extremes, its crowded urban schools and its one and two-teacher schools.

With the concurrence of the MOE and NCERT, USAID has cooperated with the State Institute of Education, Maharashtra, and the Municipal Corporation Education Department of Bombay to carry out a feasibility study involving teacher training and

programmed learning materials. Since the findings of the feasibility study were highly favourable, a pilot training activity was initiated. Mr. Paul V. Robinson spent approx. four months (Nov. 1971-March 1972) in India orienting administrators, teacher trainers and teachers of the Bombay Municipal School system in programmed teaching techniques and in developing and evaluating programmed instruction materials. Negotiations are in process with the Ministry of Education for finalizing the Operational Work Plan to launch a full scale project.

The life of the proposed project would be five or six years so that by 1978 India would have experienced personnel, programmed materials developed, validated, tested and in use in selected areas and an on-going program on various education levels is established.

393 - SCIENCE TEXTBOOK DEVELOPMENT - INDIA

One of the major problems confronting the development of higher education in India is the non-availability of reasonably priced textbooks and reference books.

Since 1961, the United States Information Service has provided subsidy for reprint of American University Textbooks in India under the program known as the Joint Indian-American Textbook Program.

Since two of the major USAID technical assistance projects in India are aimed at improving science and technical education, USAID entered into the reprint program to provide assistance to alleviate the demand for books in the fields of mathematics, physical and life sciences, and engineering and technology.

The principal objective of the USAID assistance was to help the Indian higher education students obtain suitable science and technical textbooks through reprints of American textbooks. The longer-range goal is to stimulate indigenous book authorship, publishing and distribution in an effort to eliminate dependency on basic foreign texts.

As the reprint program operates, titles are submitted by Indian publishers, screened initially by USIS, reviewed by USAID American personnel, and submitted to the MOE

or University Grants Commission for final approval. The title may be eliminated at any of the above points. When published the books are sold commercially at approximately twenty percent of their U.S. cost, the average price being between Rs. 8 and Rs. 15.

With the agreement for expenditure of first tranche of Rs. 15,000,000 of the three tranches of similar amount, signed by the GOI in 1969, 275 titles were printed. The Operational Work Plan signed with the Ministry of Education in June 1971 for allocation of the second tranche includes besides reprint of American University textbooks, the following innovative activities:

- (i) encouragement of Indian writing;
- (ii) development and publication of good text materials authored jointly by Indian and American science and technical writers;
- (iii) translation of American science and technology texts into Indian languages;
- (iv) organization of exhibits and displays related to the science and technology textbook field;
- (v) promotion of research activities related to the publication, promotion and use of texts.

With the assistance provided under the first and second tranches, 412 American textbooks in science, mathematics, engineering and technology have been reprinted and twenty titles are expected to be reprinted in the next few months. In addition, three books in the fields of agriculture and nutrition, written jointly by Indian and American authors, have been published and three more will be out of the press within the next three months. The National Book Trust, India, has been provided Rs. 2.5 million for the publication of Indian-authored texts and publication of translations. Twenty books are already in the press and should be available to the students before the academic session starts in July 16, 1972. Under a grant to the Federation of Publishers and Booksellers Associations in India, six representatives visited U.S. to present exhibits of Indian publishing capacity. Another grant has been given to the Federation to prepare a Directory of Indian Book Industry which will contain comprehensive information on Indian publishers, printers, binders, paper manufacturers, important libraries and information on training facilities in publishing and printing. Negotiations are underway with

the Ministry of Education and Social Welfare for a grant to the National Council of Applied Economic Research to conduct a survey of the problems of the Indian book industry and trade.

The last instalment of Rs. 15 million has been approved by AID/W and GOI. Negotiations for the preparation of an Operational Work Plan are in progress with the Ministry of Education and Social Welfare.

109 - BOMBAY CENTRAL TRAINING INSTITUTE

The objective of this activity was to provide assistance to the Bombay Central Training Institute for Instructors and Craftsmen (BCTI) to further strengthen its departments of Electronics and Instrumentation. The William Hood Dunwoody Industrial Institute, Minneapolis provided from 1964-1969, the services of fifteen advisors for approximately thirty man-years, and training in the U.S. of twenty faculty members of the BCTI for institutional building program of the institute. Government of India requested additional technical assistance to strengthen the departments of Electronics and Instrumentation. Two consultants worked at the Institute for approximately one year each in 1971-72.

Specific assistance was provided for the development and expansion of instructional materials and teaching aids, demonstration of advanced training skills, upgrading of the counterpart staff on latest technological developments, and establishment of contacts with the industry for support of the institute and placement of graduates. Commodities worth approximately \$2,300 and Rs. 34,000 were provided to the departments. Total assistance provided under this activity amounts to approximately \$75,000 and Rs. 380,000.

228 - HIGHER EDUCATION LOAN

To provide much needed modern demonstrational equipment, teaching aids, books and supplies for the development of science and technical education, a loan agreement was signed between the U.S. Government and the Government of India on June 2, 1967. Under the agreement an amount of \$12 million was allocated. This was subsequently reduced to \$7.3 million after a detailed analysis of the requirements of each institution's request was made.

In order to provide in-service training to teachers, four institutes were held in the summer of 1963 on an experimental basis on the lines of summer schools conducted by National Science Foundation in the U.S. This program proved so successful that the Government of India wanted to continue it with U.S. assistance for several years to come and a Science Education Improvement project was started. By 1967, approximately 14,000 Indian teachers had been trained in the Summer Institute program.

The impact of Summer Science Institutes created a great awareness and need for the use of modern types of equipment in the teaching of science subjects. The purpose of the loan was to equip laboratories and workshops of the following types of institutions to ensure effective application of the new techniques and developments including those being taught at the Summer Science Institutes.

- a. Science departments of approx. 55 universities and 44 colleges providing training and research in science at the degree and post-graduate level as administered by the University Grants Commission;
- b. certain of the approx. 135 engineering and technological institutions/colleges and certain of the approx. 283 polytechnics, whose development programs are being administered by the All-India Council of Technical Education.

Shipments of all equipment under Higher Education Loan have been made.

The National Science Foundation collaborated with the National Council for Science Education in conducting workshops closely related to the utilization for teaching purposes of the equipment purchased under Higher Education Loan. The NSF provided short-term consultants for such workshops. It is expected that similar workshops will be sponsored in future also.

LITERACY HOUSE, LUCKNOW

Widespread illiteracy in India is impeding economic and social development. The problem is further aggravated because of continuous increase in population. Though literacy increased from 17 per cent in 1951 to 24 per cent in 1961, the number of illiterates also increased within this period from 298 million to 334 million due to increase in population.

Inspired by Mahatma Gandhi's view, to work for the Indian villagers, Mrs. Welthy Fisher, President, World Education Inc., New Yor, opened an adult education center in an effort to combat illiteracy. Originally opened at Allahabad, the adult education center was later shifted to the outskirts of Lucknow on the main Lucknow-Kanpur road. World Education Inc., New York, World Literacy, Canada, Union and State Governments, and some philanthropic and voluntary organizations contribute towards building up the Literacy Village.

In order to supplement efforts of the World Education Inc., and strengthen programs at Literacy House, USAID provided a grant of Rs. 7.9 million over a seven-year period from 1964 to 1971. The objectives of USAID assistance were to:

1. provide training in literacy work, produce follow-up materials and devise effective means of distribution;

2. provide training in communication skills and develop materials;
3. stimulate and guide other centers to undertake literacy work; and,
4. conduct field work and testing of programs.

During this period the Literacy House developed a comprehensive program of education, training, publication, extension and research. It owns a 120 acre farm land in nearby two villages to make young farmers and their wives functionally literate and demonstrate modern agricultural practices. It has begun to integrate family planning education into all aspects of its programs and a Family Life Center is functioning.

In order to continue building the Literacy House and strengthen its various programs, introduce innovative techniques and develop new methods of training, the Ministry of Education has requested the USAID to provide an interim grant of Rs. 1.68 million for a two-year period from 1971 through 1973. An agreement for providing this grant is under negotiation with the India Literacy Board. In the meantime, the Ministry of Education is giving careful consideration to a long-term plan of the India Literacy Board.

422 - REGIONAL TECHNICAL TEACHER TRAINING  
INSTITUTE, C A L C U T T A.

The Ministry of Education, Government of India has started four Regional Technical Teacher Training Institutes to train teachers for the 277 polytechnics in the country. The RTTTIs at Chandigarh and Madras are being assisted by Netherlands and the U.K. Governments respectively. The Ministry of Education has requested USAID to provide technical assistance for the development of RTTTI, Calcutta. The fourth institute is located at Bhopal. A feasibility study is planned to develop the parameters of this technical assistance project.

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205 - TECHNICAL SUPPORT (EDUCATION)  
395

The Education Division part of the Technical Support project provides for the U. S. and local staff of the Education Division. Presently, three American and seven local staff members comprise Education Division. Additional nine local staff members are supporting the National Science Foundation SEI program. Requests for experts in specialised areas which cannot be covered under existing Education Division projects, are implemented under the Technical Support (Education) program. Given below are the activities which were implemented during the last few years under this program.

Education Commission - 1964-66

Government of India had appointed an Education Commission by Resolution dated July 14, 1964 to advise Government on the national pattern of education and on the general principles and policies for the development of education at all stages and in all aspects. Dr. Roger Revelle, Director, Center for Population Studies, Harvard School of Public Health, Harvard University, Cambridge, was associated with the Education Commission. In addition short-term expert consultancy services were provided to the Commission by eight consultants in specialized areas.

NAS - INSA Workshops

1122,

Under contract No. AID/csd/Task Order No. 12, the National Academy of Sciences, Washington, D.C. collaborated with the Indian National Science Academy, New Delhi in conducting workshops in India. The objective of the NAS-INSA program is to bring distinguished U.S. specialists in various fields together with their Indian counterparts, joined by senior government officials from planning and technical departments as well as leaders from the scientific, educational, industrial and other interested communities, for the purpose of discussing significant problem areas in the relationship of science and technology to economic development.

Under this program, two workshops were held in India. The theme of the first workshop, held in Baroda from 2 to 6 March 1970, was "The Management and Organization of Industrial Research". Ten NAS panel members-- all R&D Vice-Presidents of major industries and contract research organizations--and about forty Indians, all senior research administrators of private and public sector industries and national laboratories, participated in the workshop.

The second workshop "Water in Man's Life in India" was held in New Delhi 13-18 September, 1971. Twelve NAS specialists in water resources planning, sanitary and environmental engineering, hydrology, ecology and other related fields participated in the workshop which considered various interrelated problems with water resources and environmental factors, such as sewage disposal, disposal of industrial effluents, use of fertilizers and pesticides and their bearing on water pollution.

Students Services Course of USEFI

Each year since 1968, the United States Educational Foundation in India has held 30-day courses for university and college teachers concerned with improving pupil personnel services. Deans of students, principals and other senior faculty members have participated in this program. At the request of the USEFI, USAID invited two U.S. experts to participate in the program. Drs. Marvin M. Cole and Jack Graham visited India in May-June 1971 to participate in the program as resource persons.

Annual Convention of Indian Institute of Industrial Engineers

Dr. Frank E. Cotton, President of the American Institute for Training in Industrial Engineering (AITE) visited India during February 1971 to participate in a seminar on "Industrial Engineering for Economic Development" at the Annual Convention of Industrial Engineers in India. Dr. Cotton was invited at the request of Dr. N.S. Ramaswamy, President Indian Institute of Industrial Engineers. During his approx. one-month stay in India, Dr. Cotton also participated in a summary session of a Management Education seminar at Madras, and conferred with National Productivity Council, New Delhi and other educators and industrialists on various professional and educational aspects of industrial engineering.

AACTE Internship in Higher Education

The American Association of Colleges for Teacher Education conducts an Administrative Internship Program for Higher Education and Teacher Education under a contract with AID/W. The program is open to the university and training college administrators and to selected members of ministries of education from LDCs, who are able to spend three to nine months in an American institutional setting, in observing and participating in management and decision

making process of educational institutions. India participated in this program by sending three persons to the U.S.: J. C. Parikh, Feb. 69-Oct. 69; R. N. Mehrotra, Aug. 69-March 70; and Mrs. Hem Lata Swarup, Sep. 71-March 72. Representatives of the AACTE have visited India to acquaint themselves with the country's educational system, goals and needs, and participate in selection of interns.

National Seminar on Mass Media in Education - March 23-25, 1971

The Ministry of Education and the National Council of Educational Research and Training organized a three-day seminar on the use of mass media in education in New Delhi from March 23 to 25, 1971. The objectives of the seminar were to identify current practices and problems and develop plans for effective utilisation of mass media in different aspects of school education. USAID provided services of two consultants for the seminar, Mr. James A. Fellows, National Association of Educational Broadcasters, Washington, D.C. and Dr. Charles M. Woodliff, Western Mich University, Kalamazoo.

Seminar on Open University - December 16-18, 1970

The concept of a University of the AIR to make higher education available to a large number of students is one solution to the problem of overcrowding and pressure on the facilities of

existing institutions of higher education. The Ministry of Education organized a seminar in December 1970 to solicit opinion and ideas on establishing an Open University somewhat similar to the United Kingdom "Open University". USAID provided two consultants (Dr. Leslie Sargent, Ohio University, Athens, Ohio, and Dr. Arthur S. Krival, the University of Wisconsin) who presented papers and participated in the deliberations of the seminar.

#### Programmed Learning Activities

Professor Douglas C. Ellson of Indiana University visited India in 1967. During his visits to the various parts of the country, he found a very strong need and potential for introduction in India of the "programmed learning" method in improving the quality of teaching and learning, and recommended to the USAID that a project should be started in Programmed Teaching/Learning. Dr. Cole S. Brembeck, Director of the Institute for International Studies in Education, Michigan State University, visited India in June 1968 and held consultations with the USAID and NCERT officials about feasibility of starting the project in Programmed Teaching.

Before launching a regular project, a feasibility study was conducted. Besides, limited assistance in the field of programmed learning was provided from 1967 to 1971 to various organizations and institutions in India as follows:

Dr. Paul I. Jacobs, (PSC No. AID/Nesa-421) assisted NCERT Department of Psychological Foundations in conducting four zonal workshops in programmed instruction, and the All-India Conference on Programmed Learning, from May 21, 1969 through July 4, 1969.

Two consultants (Dr. Howard N. Sloan, PSC No. AID/Nesa-463 and Mr. Gabriel M. Della-Piana, PSC No. AID/Nesa-464) provided assistance in child development and programmed learning to the National Science Congress, from 12/31/69 to 1/28/70.

Under an AID/W contract No. AID/csd-1150 with the National Education Association, task orders were issued to conduct a feasibility study in programmed instruction, and provide assistance in the development and testing of programmed learning materials as follows:

Task Order No. 36: A team of ten experts headed by Dr. Desmond P. Wedberg, Director Educational Technology Center, University of Maryland, College Park, Maryland,

and Dr. Phil C. Lange, Director of Student Teaching, Teachers College, Columbia University, New York, conducted a feasibility study in India from Sept. 1969 through April 1970. The members of the team worked at the State Institute of Education, Poona and Bombay Municipal School system in development and evaluation of programmed learning materials. The team discovered that a substantial amount of interest and receptivity existed in India in trying innovative methods and techniques and recommended that a regular project should be started. (Negotiations are underway with the Government of India for signing an Operational Workplan for the project "Improved Teaching Techniques" - No. 386-11-640-385).

Task Order No. 45: Two consultants visited India to provide assistance to National Council of Educational Research and Training and Indian Association of Programmed Learning in improving programmed learning techniques and educational technology among Indian educators with a view to improved instruction in educational system. Dr. F.A. Cartier, expert in languages spent approximately fifteen days (Nov. 2-17, 1970) and Dr. Leroy West, expert in elementary education spent approximately one month (Nov. 2 to Dec. 1, 1970). Dr. Cartier and Dr. West actively participated in the Fourth Annual Conference of the IAPL held in Bombay.

Task Order No. 50: Under this task order, Dr. Paul Robinson spent approximately four months in India (Nov. 17, 1971 to March 18, 1972) to assist Bombay Municipal Corporation School system in carrying out pilot activities in the development of and use of programmed learning materials. Nomination of another consultant (Lloyd) to assist the State Institute of Education, Poona, was not approved by the GOI.

These earlier programmed learning activities have led to the consideration of a full fledged project--Improved Teaching Techniques--which is presently under negotiation. This project is further described under Part I- Active Projects on page 15.

Management Education Reconnaissance :

1. A Management Education Reconnaissance team headed by Dr. William Siffin, visited India in March 1971 to study the feasibility of introducing a management concept in the syllabi of agriculture and engineering institutions which are receiving technical assistance from AID. (Other members of the team were: Joe Ahern NESAB Bureau, AID/W; Dr. Paul Gordon, Professor of Management, Indian Univ; and Dr. William Thompson, Professor of Agriculture Economics, Univ. of Illinois.) The team recommended provision of (a) assistance to the National Institute of Training in Industrial Engg., Bombay to acquire a computer, (b) support to upgrade B. Com Courses at Chetna College, Bombay University, and (c) support to the development of industrial management program at IIT/K. In agriculture education, the team proposed the emphasis of management concepts as a part of the area of agriculture economics to be followed by an interdisciplinary approach in other appropriate areas of the undergraduate curricula.

2. Prof. A. Turner, Harvard Univ., visited India in Oct. - Nov. 1971 to determine the feasibility of a program for top level managers. He proposed formulation of a Committee of Directors of the existing Management Trng. Institutions in India to select faculty to design and conduct the program. His report has been widely distributed in India.

PART II - COMPLETED PROJECTS

027 - TECHNICAL EDUCATION INSTITUTES

As is apparent from its title, the Technical Education Institutes project was started with a view to providing advice and assistance to the technical institutions in India. This activity which lasted for twelve years was implemented in two phases.

Under the first phase from 1953 to 1957, technical assistance was provided by three U.S. Universities and one Polytechnic Institution to the following institutions in order to strengthen their existing programs largely at undergraduate level.

<u>Name of the U. S. Institution</u>	<u>Name of Indian Institution</u>
University of Illinois	Indian Inst. of Tech., Kharagpur
Rensselaer Polytechnic	Roorkee University, Roorkee
Tennessee University	Madras Inst. of Tech., Madras
Wisconsin University	Bengal Engg. College, Sibpur Indian Inst. of Science, Bangalore Roorkee University, Roorkee Indian School of Mines & Applied Geology, Dhanbad. College of Engg. & Tech., Jadavpur Bihar Inst. of Tech., Sindri Birla College of Engg., Pilani

Under their institutional arrangements approximately sixty-three man-years of service were provided by about forty-six U.S. faculty members. The Indian Institute had freedom to identify areas which needed special emphasis.

During the same period, training at U.S. universities was provided to approximately fifty-eight Indian faculty members in the particular types of experience required, without regard to completion of degree requirements.

Such faculty members were selected by the assisted institutions in consultation with the visiting professors with the idea of enabling the faculty members to replace the visiting professors upon completion of the training period.

Because of a phenomenal increase in the number of technical institutions which created a strong demand for qualified teachers, the Government of India introduced special fellowship programs at five engineering institutions for the training of teachers and in the 1959-65 period put major emphasis on developing a teacher training program of graduate courses.

Three U.S. universities provided assistance to the Government of India in a "postgraduate-cum-teacher training program" at five pilot/demonstration engineering colleges as follows:

Wisconsin University	-	Bengal Engg. College, Sibpur University of Roorkee, Roorkee
University of Illinois	-	Indian Inst. of Tech., Kharagpur
Michigan University	-	College of Engg., Guindy Poona College of Engg., Poona

The American faculty numbering 90 worked very closely with the Indian faculty for approximately 127 man-years, in (a) developing graduate curricula and research programs; and (b) guiding the training in teaching. At the same time, the American faculty assisted their host institutions in carrying out their functions as demonstration centers with respect to the teacher training programs and establishing research facilities where techniques for the training of Indian teachers could be developed.

In response to the changing needs for building up and strengthening the pilot/demonstrational centers for teacher training, various types of training programs were arranged in the U.S. for the Indian faculty, as follows:

A. Special Education Methods Program

This program was arranged for a group of teachers who were also administrators or shared administrative potential. Approximately, thirty-three teachers received specialized training in the U. S. arranged by Wisconsin University in current philosophy of engineering education, teaching methods and research practices in the U. S.

These participants were placed in residence on one American campus for an initial period and then sent to other colleges to make comparisons. Opportunities were provided to the participants to acquaint themselves with idea-generating and decision making processes in a democratically run institution. The men attended faculty meetings, course curriculum revision exercises, and research committees' deliberations.

B. Academic Degree Programs

This program was designed for the Indian faculty to provide advanced instruction in various disciplines of individual's pursuit leading to M. S. or Ph. D. The participants took regular academic courses and participated in research work.

C. Leadership Tours

Carefully planned programs of visits were arranged for the Department Heads, Rectors and Principals and Directors of the institutions. These leader tours which consisted of visits to a variety of engineering colleges, as well as government and private research laboratories to study the systems of teaching, research and public service, lasted from one month to approximately five months. Opportunities were provided to them to meet with college administrators to discuss mutual problems.

D. Research Scholar Program

The primary objectives of this program were as follows:

1. To enable participants to take advance courses in subject matter related to their research interest and teaching leading to a Ph. D. thesis.
2. To allow research in the United States university-industry climate.
3. To provide an opportunity to work with the latest equipment necessary to conduct research.
4. To provide an opportunity to the students to work toward the Ph. D. by meeting requirements of an Indian institution rather than a U. S. institution.
5. To keep the attention of the participant focused on his home institution while in the U. S.

6. To decrease the amount of time the participants were required to be away from their duties.

Experience had shown that a full Ph. D. program in the United States for a student in engineering was requiring considerably longer time than he could be spared. This program was designed to considerably reduce the period of stay in the U. S. of an Indian scholar. Moreover, it provided an opportunity to the participant to relate his study in the U. S. directly to his work in the host institution. Eighteen men were selected who had registered themselves for a degree at Indian universities or institute of technology and worked at least six months toward that objective. Placement and guidance of these men in the U. S. was effected by the University of Wisconsin.

Total USAID assistance under this project since its inception amounted to \$4,481,000 and Sec. 402 Rs. 3,886,000 plus Rs. 1,200,000 in P1-480 grant.

028 - AGRICULTURAL EDUCATION AND RESEARCH

The Government of India requested (1956) the services of a Professor of Highway Engineering to help develop graduate curricula in this field at Punjab Engineering College, Chandigarh. Under a USAID Mission Contract with Ohio State University for Agricultural Education Professor Mintzer served in India for two years (1956-58). The third year of this activity though transferred to a new project--155 -- Highway Engineering Education--was not implemented.

050 - EDUCATION ADVISOR, MINISTRY OF EDUCATION

Under this activity, Dr. J. G. Fowlkes served in India from 1954 to 1956 for approx. 1-1/2 yrs. as Education Advisor to the Ministry of Education. His services were provided under the Wisconsin Univ. Contract # SCC-21715, Am. 2. During his stay in India. Dr. Fowlkes aided several seminars for Indian teachers and administrators. He also cooperated in a project for extension service for secondary school teachers and engaged in the development of trng. programs for the teachers and principals of secondary schools.

Total assistance provided amounts to \$58,000.

058 - SOCIAL WELFARE EDUCATION

The Social Welfare Education project was initiated to provide advisory assistance to selected schools offering post-graduate degree or diploma in social work, labour welfare and personnel management. Technical assistance and advice was provided through the Council on Social Work, New York City, to the following six selected schools in writing of syllabi and curricula, teaching methods, development of field work programs, admission practices, and instructional materials. Limited advice was provided to seven other schools on request.

1. Delhi School of Social Work, Delhi.
2. Faculty of Social Work, Baroda Univ.
3. J.K. Inst. Lucknow University.
4. Tata Institute of Social Science, Bombay
5. Madras School of Social Work, Madras
6. Kashi Vidyapith, Banaras.

From 1955 through 1962 when the project was in operation, ten American professors served in India for approx. 17-1/2 man-years. In addition, nine Indian instructors and directors visited the U.S. for advanced study of social work practices. Five All-India workshops in improvement of curriculum and instruction work were held with representatives from eighteen post-graduate schools of social work. Assistance under this activity amounts to \$581,000 including \$23,550 of technician support and \$3,605 as grant-in-aid commodities plus Rs.224,000.

060 - HOME SCIENCE EDUCATION & RESEARCH

In order to train teachers in home science and provide vocational education to the girls, several home science colleges were started in India. Through a Contract with the University of Tennessee, from 1953 to 1962, assistance in the development of graduate and post-graduate curricula and syllabi in food and nutrition; textiles and clothing, home management, child development, teacher training and related areas was provided to the following selected home science colleges:

1. Home Science Faculty, Baroda Univ.
2. Lady Irwin College, Delhi
3. Maharani's College, Bangalore
4. Queen Mary's College, Madras
5. Women's Christian College, Madras
6. LW & St. Christopher Trng. College, Madras
7. SNDT Women's University, Bombay
8. South-India Education Trust, Madras
9. Viharilal Mitra Institute, Calcutta
10. Ministry of Education, New Delhi

Twenty-one U. S. professors served on an average three years in Indian Home Science Institutions. They helped in training teachers, planning and development of research programs as integral parts of post-graduate activities and upgrading of physical facilities. In addition, twenty-three Indian faculty members & four administrators received training in teaching methods. Total assistance amounts to \$1,045,000 including \$188,000 in commodities, + Rs. 224,000 in Sec. 402 Rs.

062 - ECONOMIC PLANNING

In March 1950, the Government of India established Planning Commission to promote a rapid rise in the standards of living of the people by efficient exploitation of the resources of the country, increasing production and offering opportunities to all for employment in the service of the community. The GOI requested in 1955, the short-term services of some Economists from the U.S. to provide consultation to the Planning Commission and the Ministry of Finance in the general field of economic planning.

During the period when this project was in operation from 1955 to 1959, three consultants spent approx. seven months in India providing consultation to various department heads in the Planning Commission, Ministry of Finance and Cabinet Secretariate in economic planning and organization and management. At the same time, three Indian economists received advanced training in the U.S. --two participants received training in economic development at Vanderbilt University and one in mineral economics.

063 - MULTIPURPOSE SECONDARY EDUCATION

The Government of India, Ministry of Education established an Extension Department under the All-India Council for Secondary Education. This department's responsibilities called for planning, coordination and implementation of the projects designed by MOE to provide in-service training to the secondary school teachers. The Extension Service Centers, set up in the post-graduate teacher training colleges, helped to run (week-end, short-term, vacation, etc.) courses and helped the teachers by organizing demonstration lessons to illustrate new classroom methods, by arranging lectures, conferences, seminars, and workshops and study groups and various courses for training the teachers in new methods.

Under a contract(No. ICA/W/186) with the Ohio State University, assistance was provided to these Extension Service Institutes. Four consultants in the fields of Science, Social Studies, Curriculum and Evaluation, operating mainly in their respective subject fields, helped in planning and operation of workshops, seminars and conferences. Commodities --approximately 1,566 books and

audio-visual equipment were provided to the Extension Service Centers. Orientation sessions on the operation, maintenance and use of the audio-visual equipment were also conducted.

The Secondary Education Commission set up by the Ministry of Education after independence, started establishing in 1954, multipurpose higher secondary schools with a variety of diversified courses to suit the different abilities and interests of an ever increasing student population. Since a majority of the student population terminate their studies after high school, the objective of multipurpose schools was to provide opportunity for maximum development of an individual and train him for potential employment.

Under the second phase, U.S. assistance was provided to help develop and strengthen the multipurpose school system.

The objectives of the assistance program were:

1. improving the competence of teachers of vocational subjects;
2. developing the curriculum in secondary school vocational education;
3. producing curriculum materials and teaching aids for vocational education; and,
4. improving the evaluation in vocational education.

Initially the O.S.U. team assisted the All-India Council for Secondary Education in identifying for concentrated development twenty-six multipurpose high schools located throughout India. During the period 1958-61, the OSU provided a team of six consultants in the fields of Evaluation, Agriculture, Technical and Commercial Education and Guidance--areas which needed major emphasis. The consultants worked with the teachers of these multipurpose schools in organizing seminars and conferences on teaching methods, development of curricula and syllabi, writing of materials and evaluation procedures, and demonstration of the use of commodities purchased for the Multipurpose Schools. The consultants also helped in conducting surveys of employment opportunities available for the graduates of these schools.

By early 1960, it was realized that the success of the multipurpose school system depended largely on availability of trained teachers in the vocational stream. Ministry of Education decided to establish four Regional Colleges of Education to provide pre-service degree and diploma programs

in teacher education, inservice training of teachers, preparation of instructional materials, and educational research. The work of these regional colleges was entrusted to the NCERT for coordination.

Since OSU had already provided assistance to the Multipurpose Schools, MOE requested OSU assistance to strengthen programs of the Regional Colleges of Education also. During the period 1962 to 1969, the Ohio State University provided consultants in the fields of Agriculture, Commerce, Technical and Science Education and in the selected aspects of professional teacher education and secondary education. Equipment and books worth \$275,000 were provided to the four Regional Colleges. Under this phase, forty-one Indian educators received advanced training in the U.S. for three to six months each.

065 - FOUNDRY TRAINING

Indian Institute of Technology, Kharagpur, established in 1953, requested U.S. assistance to strengthen their Foundry Training Center. The IIT/Kharagpur is one of the five centers of excellence providing post-graduate education in the field of engineering. Originally, this activity was assigned to the Industry Division of USAID, but later transferred to the Education Division.

Under this activity, Prof. J.H. Schnur, Foundry Training Specialist from Armour Research Foundation spent about two and a half years through February 1954 to Nov. 1956 at Kharagpur in building up and developing programs at the Foundry Training Center. Foundry equipment worth approx. \$171,000 were provided to build the teaching and training facilities at the center.

066 - EDUCATION PROGRAM DIRECTION & DEVELOPMENT

The objectives of this activity were to coordinate assistance plans with the Ministry of Education and develop and implement activities in the areas requested by the Government of India. This project remained in operation from 1952 to 1957. During this period, services of 10 experts for approx. 14-1/2 man-years were utilized. Forty-six participants received training in the U.S. Total assistance was provided in the amount of \$189,000.

073 - EDUCATIONAL ADMINISTRATION

The purpose of this activity was to provide technical assistance to a program for the improvement of educational administration in India. GOI requests were for one U.S. technician for two years, ten Indian participants and technician support commodities. Under this activity, only commodities worth \$59,449 (books and periodicals) were provided. The technician and participant elements were transferred to Project 146--National Professional Education Center-- for implementation.

074 - SCHOOL BUILDING IMPROVEMENT

The purpose of this activity was to provide advice and assistance to the Ministry of Education in developing a design for a school building with maximum utilization of indigenous school building materials. One U.S. technician (Schroeter) served for two years in India. Technician support commodities (books and periodicals) worth \$6,946 and a grant of \$5,000 for within-India production of informational materials were furnished.

078 - INDIAN STATISTICAL INSTITUTE, CALCUTTA

This project was designed to provide assistance to the Indian Statistical Institute in Calcutta in order to help improve certain specialized fields in statistical education and research directly related to the India's national economic planning and development. Under this project, assistance was provided in operations research, sample surveys, statistical quality control, and efficient use of electronics equipment for statistical data collection and analysis. Four U.S. technicians served at ISI, Calcutta, for approx. 15 months each. One Indian participant from Indian Statistical Institute, Coimbatore, received advanced training at Bureau of Census in the U.S. for approximately nine months in statistical quality control systems.

The project was in operation from 1959 to 1961. Of the total amount of \$127,500 expended for this project \$2,500 were spent for books and periodicals.

080 - PUBLIC ADMINISTRATION

The purpose of this activity was to provide technical assistance to the Institute of Public Administration, Lucknow University, for development of public administration programs. One short-term consultant (Hecock) spent approximately three months in 1955, at the Institute of Public Administration, Lucknow University. Four Indian faculty members from Lucknow University received training in the United States for approximately twelve months each in the development of programs for public administration.

107 - RURAL INSTITUTES

The National Council on Rural Higher Education, an agency set up by the Ministry of Education, established rural institutes in India to provide leaders for rural oriented higher education. This activity was designed to provide technical and advisory assistance and participant training through a college contract and instructional materials and equipment to the following twelve rural institutes:

1. Rural Institute, Sanosara
2. Rural Institute, Srineketan
3. Rural Institute, Amravati
4. Vidya Bhavan Rural Institute, Udaipur
5. Rama Krishna Mission Rural Inst. Coimbatore
6. Rural Institute, Gargoti
7. Jamia Rural Institute, Delhi
8. Rural Institute, Gandhigram
9. B.V. Rural Institute, Agra
10. Rural Institute, Kohlapur
11. Rural Institute, Birorli

The objectives of this activity were to develop rural oriented curricula and syllabi in rural services, agriculture, and civil and rural engineering; to orient and train instructors and administrators to carry on the work, to assist instructors to establish rural research and extension program to root the institutions deeply in their communities. Strengthening libraries and improving and expanding use of audio-visual aids were additional targets.

Twenty instructors, two from each of ten institutes, finished a 12-month round-the-world seminar in 1960.

Under a Contract with Berea College, Kentucky, one American technician spent 21 months in teacher training seminars, consultations with directors and staff, and planning research and extension departments.

Total USAID assistance for this activity was \$222,000 and Rs. 255,000 of Section 402 rupees.

#### 114 - NATIONAL INSTITUTE OF BASIC EDUCATION

The National Institute of Basic Education (NIBE) was one of the several Central Institutes set up by the Ministry of Education in 1950's to conduct, coordinate and publish educational research and to help implement projects sponsored by the Ministry of Education. The NIBE sought to study the problems of Basic Education and develop ways and means of improving the basic education. The GOI requested services of one U.S. technician for two years, training in the U.S. for three participants and technician support commodities.

Between 1957 and 1960, two participants received training in the U.S. in research and evaluation and science for elementary schools. Commodities (books, periodicals and audio-visual

equipment) worth approximately \$16,250 were provided to the NIBE. Since the NIBE was transferred to the newly created National Council of Educational Research and Training, the remaining activities of this project were implemented under the new project --National Education Institute-184 --. Dr. Corey from Teachers College, Columbia University spent two years at the NIBE as a specialist on research in elementary education.

118 - TRAINING IN ADULT EDUCATION

The Ministry of Education had established the National Fundamental Education Center (NFEC) with the objective of conducting research in adult education and preparing programs for community development, removal of illiteracy and continuation education for adults. In order to strengthen programs of the NFEC, the Ministry of Education requested services of one technician for two years, training in the U.S. for one participant and some technician support commodities. Dr. Homer Kempfer was assigned to the NFEC as adult education advisor for two years; one participant completed U.S. training for 10 months, and commodities worth \$23,237 (books, periodicals, audio-visual equipment and jeep station wagon) were provided.

119 - CENTRAL INSTITUTE OF EDUCATION

This activity started in 1958 to develop various departments of the Central Institute of Education. The GOI had requested two specialists in Guidance and Textbook for two years each and four short-term consultants in Psychology, Sociology, Philosophy and Comparative Education for six months each, plus participant training.

Under this activity, one participant completed U.S. training in educational materials for eight months. Commodities worth \$8,260 were provided. The technician and consultant request was transferred for implementation to the new project-- National Professional Education Center.

120 - TEACHER TRAINING IN AUDIO-VISUAL EDUCATION

The purpose of this activity was to provide assistance for teacher training courses at the National Institute of Audio-visual Education--an institute established by the Ministry of Education to serve as a National Center for training, research and extension work in audio-visual education. One technician served for nine months. Commodities (audio-visual equipment, books, periodicals and vehicles) worth \$147,251 plus \$25,000 in Grant-in-Aid equipment were provided.

Total assistance - \$ 160,000.

146 NATIONAL PROFESSIONAL EDUCATION CENTER

The Ministry of Education established from 1950 to 1960 several individual bureaus and institutes to provide educational leadership training and implement centrally sponsored projects. A review of the work of the several units showed that each one was falling short of its potential and that none of the units was paying attention to the total pattern of educational reconstruction in India. The Ministry was anxious to integrate activities of these bureaus and institutes. This desire led the Ministry to concentrate on enlarging and strengthening the Central Institute of Education.

This activity was started when a request was received for technical assistance to improve specific programs at CIE and lay the framework for making CIE a National Center for leadership training in the field of professional education. Under a contract with the Teachers College, Columbia University, technician and consultant services were provided from 1958 to 1961 to CIE for approximately forty-five man-months in the fields of Educational Administration, Guidance, Evaluation Education History/Philosophy, Textbook Development and Educational Psychology. One participant completed six months training in the U.S. in Educational Evaluation.

Commodities, textbooks and periodicals worth \$4,476 were provided. Total assistance - \$391,000.

154 - TEACHER TRAINING IN ENGINEERING EDUCATION

A "crash" program of training teachers to impart engineering education was started in 1958 to partially alleviate the critical shortage of teachers created by a phenomenal expansion in engineering institutes after independence. This activity was designed to provide U.S. graduate training to approximately 300 of the 6,600 engineering teachers India required by 1961, while the "Post-graduate-cum-teacher training program" of the GOI (assisted under Technical Education Institute project-027) got underway.

From inception (1958) through termination (1961), two hundred and nine-nine (299) Indian teachers pursued course work at U.S. universities, leading to, in most cases, M.S. and in some cases, Ph.D. In addition to the course work and thesis requirements for their degrees, the participants attended special seminars arranged for them. Participants also attended local, regional or national meetings of professional societies appropriate to their field of study and visited universities, industries, and government and private research laboratories.

170 - ORGANIZATION AND MANAGEMENT

This project provided technical assistance to the Special Reorganization Unit of the Ministry of Finance in carrying out a "Work Study" program. It represented a concentrated effort on the part of the GOI to evaluate all governmental services to find better and more economical work methods and standards of performance.

One U.S. technician (Johnson) assisted the Special Reorganization Unit for approximately two and a half years until June 1961. Technician support commodities worth \$3,400 were provided. Five participants completed advanced training in work studies in the United States. In June 1961, this project was transferred to the Management Division of the USAID.

184 - NATIONAL INSTITUTE OF EDUCATION

The Government of India, Ministry of Education, established in 1961, the National Council for Educational Research and Training (NCERT) as an autonomous organization under the Societies Registration Act, to reform and modernize school education. The NCERT took over functions of various bureaus and institutes created by the MOE after independence to provide facilities for advancement of school education, including the Central Institute of Education, and established the National Institute of Education to consolidate functions of various bureaus and institutes. USAID was providing technical assistance to the National Institute of Basic Education, Training in Adult Education, Teacher Training in Audio-visual Education, and the National Professional Education Center, before their functions were merged with the National Institute of Education.

Under a contract with the Teachers College, Columbia University, technical assistance was provided to the National Institute of Education in its developmental activities. The left-over elements of assistance program for the institutes whose

functions were taken over by NIE, were consolidated under this project. During the six-year period when the project was in operation from 1961 through 1967, professional services were provided for approximately 522 man-months. Special emphasis was laid in the fields of 1) training teachers and other specialists for educational leadership; 2) planning and implementing significant research projects for continued educational improvement; and 3) developing and conducting extension service programs for in-service training of high level educators.

Forty-seven participants received advanced training in the U. S. in Educational Administration, Guidance, Writing of Syllabus, Curriculum Development, Educational Testing and Evaluation, Methodology of Teaching and Textbook Production. Commodities worth \$155,000 were provided.

Total assistance: \$2,143,000 Sec. 402 Rs. 3,048,000 plus Trust Fund Rs. 84,000.

## 213- HIGHER TECHNICAL EDUCATION

To ensure an adequate supply of technical personnel during the Third and Fourth Five Year Plans the Central and State Governments established fourteen regional engineering colleges. The purpose of the Higher Technical Education Project was to provide rupee assistance for the following colleges:

1. Regional Engineering College, Warangal, Andhra Pradesh;
2. Regional Institute of Technology, Jamshedpur, Bihar;
3. Visvesvaraya Regional College of Engineering, Nagpur, Maharashtra;
4. Karnatka Regional Engineering College, Surathkal, Mysore;
5. Motilal Nehru Regional Engg. College, Allahabad, U.P.
6. Maulana Azad College of Technology, Bhopal, Madhya Pradesh;
7. Regional Engineering College, Durgapur, West Bengal;
8. Regional Engineering College, Silchar, Assam;
9. Sardar Vallabhbhai Regional College of Engg. and Technology, Surat, Gujarat;
10. Calicut Regional Engineering College, Calicut, Kerala;
11. Regional Engineering College, Trichnapali, Tamil Nadu;
12. Regional Engineering College, Rourekela, Orissa;
13. Malaviya Regional Engg. College, Jaipur Rajasthan;
14. Regional College of Engg. Kurukshetra Haryana.

The USAID provided Rs. 165.6 million (as per USAID Financial Management Report of June 30, 1971) as grant-in-aid from PL-480 sales proceeds to partially meet the establishment and development costs of these regional colleges.

218 - ELEMENTARY EDUCATION (Ministry of Education)

This activity was started to provide rupee assistance under Section 104(e) of PL-480 to support the GOI's program for expansion of facilities for elementary education and to provide incentives to attract additional children of the age group 6-14 in schools. A. I. D. reimbursed approximately 783.1 million rupees to the GOI for rupee expenditure incurred on elementary education by the Ministry of Education between 1 April 1961 and 31 March 1966. In addition, a loan of 330 million rupees was also provided for this project.

232 - ASSISTANCE TO EXPANSION OF LITERACY

Assistance under this project was provided to the State of Punjab, by Dr. (Mrs.) Helen Butt, in the development and implementation of a one-year Pilot Adult Literacy Project at Nilokheri for teaching of Hindi to adults in various villages, including training teachers, devising follow-up methods and conducting follow-up. The Literacy Project at Nilokheri phased out in FY-67., Total assistance of Rs. 137,000 was provided to Pilot Adult Literacy Project.

392 - EXPERIMENTATION IN ENGLISH TEACHER TRAINING

This activity was designed to conduct a comprehensive evaluation of the Teacher Education Program (TEP) of the English Language Services. Tryouts were conducted at the Central Institute of English, Hyderabad, and in two other countries--Singapore and Venezuela. In India, Mr. William B. Owen worked for approximately 19 months on the project. A counterpart assigned by the CIE for this activity received training in the development and evaluation of program and use of the TEP equipment supplied to the CIE, Hyderabad.

PART III APPENDICES

APPENDIX A.1

LIST OF TECHNICIANS

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR  
386-11-660-150

CONTRACTOR: EDUCATION DEVELOPMENT CENTER INCORPORATED

<u>Sr.</u>	<u>Name</u>	<u>Position</u> <u>Title/Field</u>	<u>Period</u> <u>Months</u>	<u>ETA</u>	<u>ETD</u>
1.	Norman C. Dahl	Program Leader	24	3/62	5/64
2.	J. E. Vielehr	Admn. Officer	27	6/62	9/64
3.	George R. Meluch	Librarian	24	7/62	6/64
4.	R. H. Zimmerman	Mech. Engineer	24	7/62	3/64
5.	O. L. Chavarria-Agullar	Linguist	21	8/62	5/64
6.	D. A. Davenport	Chemist	12	8/62	7/63
7.	Arthur Gill	Elect. Engg.	12	9/62	8/63
8.	M. J. Kaldjian	Mechanics	24	9/62	7/64
9.	R. J. Halfman	Curriculum Dev.	15	9/62	12/63
10.	T. P. Kohman	Chemist	12	12/62	12/63
11.	Alv. J. Erickson	Mechanical Engg.	33	3/63	12/65
12.	I. N. Rabinovite	Computer Engg.	18	6/63	11/64
13.	Harry D. Huskey	Elec. & Maths.	12	7/63	7/64
14.	V. E. Bergdolt	Mech. Engg.	12	7/63	7/64
15.	Ernst B. Leach	Mathematics	12	7/63	6/64
16.	Arthur H. Bergen	Elect. Engg.	15	7/63	10/64
17.	Forman S. Acton	Elect. Engg.	12	7/63	7/64
18.	Charles E. Dryden	Chemical Engg.	24	7/63	6/65
19.	Russell J. Wood	Architecture	21	6/63	4/65
20.	William B. Shook	Metallurgist	21	9/63	6/65
21.	David Montengro	Lab. Asst.	30	9/63	3/66
22.	Norton C. Seeber	Humanities	20	9/63	5/65
23.	Glenn J. Battaglia	Admin. Officer	24	3/64	4/66
24.	R. L. Funkhouser	Librarian	24	4/64	4/66
25.	Arthur H. Benade	Physicist	14	6/64	8/65
26.	Peter V. Mason	Elect. Engg.	14	6/64	8/65
27.	G. Wayne Brown	Mechanical Engg.	18	7/64	12/65
28.	W. F. Schreiber	Elect. Engg.	22	7/64	5/66
29.	David F. Welch	Mechanical Engg.	9	7/64	3/65
30.	Roberts Green	Program Leader	24	7/64	7/66
31.	R. L. Carrough	Instrument Spec.	14	7/64	9/65
32.	John B. Trenholme	Elect. Engg.	12	7/64	8/65
33.	H. Ashley	Aeronautical Engg.	12	8/64	9/65

<u>Sr. No.</u>	<u>Name</u>	<u>Position Title/Field</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
34.	Leonard Z. Breen	Sociologist	15	8/64	11/65
35.	Peter W. Fay	History	22	8/64	6/66
36.	John Mathews	Physics	12	8/64	9/65
37.	John L. Kelly	Mathematics	14	9/64	11/65
38.	Donald Graham	Elect. Engg.	15	9/64	12/65
39.	David C. Hazen	Aeron. Engg.	12	9/64	8/65
40.	C. E. Elliott	English	21	10/64	7/66
41.	G. M. Wiederhold	Computer	12	10/64	10/65
42.	Thomas Speaker	Design Engg.	12	11/64	12/65
43.	Robert R. Archer	Computer	18	12/64	6/66
44.	J. D. Pigott	Planning Asst.	12	3/65	4/66
45.	Robert M. Lee	Computer	12	6/65	7/66
46.	Harvey R. Wilkey	Sanitary Engg.	12	7/65	6/66
47.	Burton J. Moyer	Physics	12	7/65	7/66
48.	Arthur W. Burks	Philosophy	18	7/65	12/66
49.	Louis D. Smullin	Elect. Engg.	12	8/65	8/66
50.	Lawrence W. Ryan	Glass Blowing	12	8/65	8/66
51.	Frederick R. Suppe	Rest. Asst.	24	10/65	10/67
52.	G. N. Petievich	Admin. Officer	39	10/65	1/69
53.	Gerald Johnson	Computer	24	10/65	10/67
54.	R. T. Paumen	System Consult.	12	12/65	12/66
55.	Lawrence A. Shepard	Met.	18	1/66	7/67
56.	Ray E. Kehoe	Soc. Sciences	18	1/66	6/67
57.	Robert L. Cain	Librarian	18	2/66	7/67
58.	Jack E. Snell	Civil Engg.	18	2/66	7/67
59.	Taras Kiceniuk	Mech. Engg.	19	3/66	12/67
60.	F. W. Hutchinson	Mech. Engg.	24	7/66	7/68
61.	Morrell Heald	History	12	7/66	7/67
62.	Ernst B. Hugg	Res. Tech.	18	7/66	12/67
63.	M. W. Pullen Jr.	Eng. Geology	18	7/66	12/67
64.	R. L. Halfman	Program Leader	24	7/66	8/68
65.	John G. Steeves	Mechanist	12	8/66	8/67
66.	John W. Olcott	Aeron. Engg.	14	10/66	12/67
67.	L. M. Baker	Psychology	17	1/67	5/68
68.	Samuel D. Clark	Medical Services	19	1/67	12/68
69.	T. B. Brandt	Mech. Engg.	24	6/67	5/69
70.	John Bacon	Elect. Engg.	18	6/66	12/68
71.	G. J. Brokaw	RSM	24	7/67	8/69
72.	R. J. Hanson	RSM	18	7/67	12/68
73.	E. J. Rand	English	27	7/68	9/70
74.	S. E. Baker	Mech. Engg.	12	6/67	6/68
75.	G. E. Nicholas	Aeron. Engg.	36	7/67	6/70
76.	J. G. Fox	Physics	36	6/67	12/68
				1/71	6/72
77.	S. P. Franklin	Mathematics	21	7/67	4/69
78.	D. L. Stephenson	Elect. Engg.	12	7/67	7/68
79.	Glen V. Berg	Civil Engg.	24	8/67	8/69
80.	Mrs. M. Berg	Librarian	24	8/67	8/69

IIT/K (Contd.)

Sr. No.	Name	Position Title/Field	Period		
			Months	ETA	ETD
81.	D. J. Wilhelm	Chem. Engg.	36	10/67	10/70
82.	H. F. Meriam	Physics	22	9/67	7/69
83.	Herbert I. Strauss	Chemistry	12	7/68	7/69
84.	Marshal Sittig	Admin. Officer	24	7/68	6/70
85.	Gilbert Oakley	Program Leader	36	7/68	7/71
86.	Thomas Vrebalovich	Aeron. Engg.	24	7/68	8/70
87.	R. B. Starbuck	Admin. Officer	46	8/68	6/72
88.	Roger C. Vogler	Arch.	36	8/68	8/71
89.	Irma Johnson	Librarian	24	8/68	8/70
90.	R. A. Schermerhorn	Sociology	18	9/68	3/70
91.	Charles T. West	Eng. Mechanics	22	10/68	7/70
92.	John G. Steeves	Machine Process	24	8/69	8/71
93.	Richard A. Alo	Mathematics	12	9/69	9/70
94.	A. M. Richardson	Civil Engg.	24	9/69	9/71
95.	Narbey Khachaturian	Civil Engg.	12	9/69	9/70
96.	Alton L. Reynolds	Educ.	24	9/69	9/71
97.	C. Martin Berdahl	Instrum.	24	12/69	12/71
98.	Ronald P. Andres	Chem. Engg.	12	12/69	12/70
99.	Devek A. Davenport	Chemistry	18	1/70	6/71
100.	Fritz Dumpel	Admin.	24	7/70	6/72
101.	R. G. Harrison	Aero.	19	11/70	6/72
102.	D. L. Roth	Librarian	16	12/70	4/72
103.	James J. Huntzicker	Physics	12	1/71	1/72

SHORT-TERM CONSULTANTS

1.	Oliver C. Dunn	Librarian	4	7/62	8/62
				4/64	5/64
				2/66	3/66
2.	R. A. Huttenback	History	1	10/68	11/68
				12/62	1/63
3.	Gerhard Derge	Metallurgy	8	10/62	6/63
				9/70	10/70
4.	W. F. Schneerer	Drawing	2	6/63	8/63
5.	Percy H. McGauhey	Sanitary Engg.	1	7/63	8/63
6.	William Fontaine	Mechanics	3 wks.	11/64	12/64
7.	Gene E. Hayner	Tech. Asst.	3	2/65	5/65
8.	John W. Olcott	Aeron. Engg.	6	12/65	5/66
9.	Rudolf F. Lehnert	Aeron. Engg.	2	6/65	8/65
10.	Edward Seckel	Aeron. Engg.	9	8/65	5/66
11.	Joseph E. Mayer	Chemistry	2	12/66	2/67
12.	Marja G. Mayer	Physics	2	12/66	2/67
13.	J. D. Brown	Economics	3 wks.	2/68	3/68

HIT/K (Contd.)

<u>Sr.</u> <u>No.</u>	<u>Name</u>	<u>Position</u> <u>Title/Field</u>	<u>Period</u> <u>Months</u>	<u>ETA</u>	<u>ETD</u>
14.	W. H. Padgham	Personnel Admn.	1	2/68	3/68
15.	H. H. Uhlig	Metallurgy	1	9/69	10/69
16.	Angel G. Jordon	Elect. Engg.	1	12/70	1/71
17.	M. E. Vanvalkenburg	-do-	1	10/70	11/70
18.	Richard D. Woods	Civil Engg.	1	7/71	8/71
19.	J. M. Chalufour	TV	8	10/71	5/72
20.	John B. Goodenough	Chemistry	1	11/71	12/71
21.	W. B. Schreiber	Elect. Engg.	2	1/72	3/72
22.	H. E. Reedy	Elect. Engg.	3	1/72	4/72
23.	J. L. Kerrebrock	Aero. Engg.	2	1/72	3/72
24.	M. G. Fontana	Metallurgy	2	1/72	3/72

SCIENCE EDUCATION IMPROVEMENT  
386-11-660-226

PASA: NATIONAL SCIENCE FOUNDATION

<u>Sr.</u> <u>No.</u>	<u>Name</u>	<u>Position</u> <u>Title</u>	<u>Period</u> <u>Months</u>	<u>ETA</u>	<u>ETD</u>
1.	G. L. Hiebert	Deputy Chief	24	8/66	8/68
		Chief	24	10/71	
2.	Paul O'Connor	Staff Scientist-Chem.	15	3/69	8/70
		- do -	24	10/71	
3.	E. A. Ashby	Staff Scientist-Bio.	30	3/69	8/71
		- do -	24	10/71	
4.	S. L. Dart	Staff Scientist-Phy.	12	7/71	6/72
5.	J. P. Becker	Staff Scientist-Math.	12	7/71	6/72
6.	C. W. Wallace	Elem. Ed. Adv.	12	8/71	6/72
7.	Ray Koppelman	Chief	24	8/67	9/69
8.	Max Hellmann	Chief	24	9/69	10/71
9.	M. F. Shurtleff	Admin. Officer	24	2/67	1/69
10.	H. Chadyamurry (Mrs.)	Admin. Officer	24	6/69	6/71
11.	R. Laurelli (Miss)	Secretary	24	3/67	3/69
12.	D. P. Detwiler	Staff Scientist-Phy.	45	1/66	9/69
13.	W. R. Riley	- do -	18	4/67	9/68
14.	W. A. Blanpied	- do -	24	8/69	7/71
15.	R. R. Ronkin	Staff Scientist-Bio.	28	1/67	5/69
16.	W. R. Orton	Staff Scientist-Math.	12	9/67	9/68
17.	W. R. Abel	- do -	24	2/67	2/69
18.	H. Huneke	- do -	24	9/69	7/71
19.	Harry F. Meiners	Material Dev. Adv.	24	10/67	10/69
20.	M. V. Sussman	Staff Scientist-Engg.	12	8/67	8/68

SCIENCE EDUCATION IMPROVEMENT (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Position Title/Field</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
21.	E. P. Mikol	Staff Scientist, Engg.	24	9/68	7/70
22.	H. Eller	Staff Scientist, Poly.	24	7/67	7/69
23.	John McGreal	-do-	24	8/69	9/71
24.	Robert Nady	Technologist	18	3/66	8/67
25.	F. A. Rasmussen	Biologist	12	3/66	3/67
26.	George Edman	Publication Adv.	24	2/65	3/67

LOCAL EMPLOYEES

1.	R. C. Nayyar	Office Services Supv.		5/67	
2.	O. P. Dhingra	Program Analyst		4/67	
3.	R. C. Malik	Writer		5/67	
4.	E. P. Joseph (Mrs.)	Secretary		4/67	
5.	Veena Manchanda (Mrs.)	Clerk		5/67	
6.	R. N. Gambiri	Clerk-Steno		3/70	
7.	C. K. Mani	Clerk		5/67	
8.	A. P. Dua	Clerk-Steno		4/67	
9.	Davender Paul	Clerk-Steno		5/67	
10.	K. S. R. V. Krishnan	Chief Admin. Asst.		5/67	3/70
11.	U. S. Nigama	Ed. Specialist		4/67	4/72
12.	C. P. Mohan	Admin. Assistant		3/67	8/67
13.	Leo Fernandez	Admin. Assistant		5/67	5/70
14.	N. K. Chaddha	Clerk-Steno		6/67	1/70
15.	S. M. Sachdev	Clerk-Steno		7/67	5/69
16.	R. R. Bhatia	Clerk-Typist		3/67	3/71
17.	S. K. Khurana (Mrs.)	Clerk-Typist		7/67	2/70

<u>Sr.</u> <u>No.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u>		
			<u>Weeks</u>	<u>ETA</u>	<u>ETD</u>
<u>SCIENCE EDUCATION IMPROVEMENT (Contd.)</u>					
<u>SHORT-TERM CONSULTANTS</u>					
1.	H.N. Alyea	Ele.Sc.Educ.	3	12/70	1/71
2.	S.M. Burkhart	-do-	6	2/71	3/71
3.	Jane Larson	-do-	13	3/71	6/71
4.	G.E. Peterson	-do-	12	6/71	9/71
5.	Ruth L. Roche	-do-	12	1/71	2/71
				6/71	8/71
6.	Lester Packer		4	6/71	7/71
7.	Gerald C. Bassler	Chemistry	4	12/70	1/71
8.	Nancy A. Beach	-do-	33	7/71	1/72
				4/72	6/72
9.	Jerry Braunstein	-do-	2	9/71	10/71
10.	Leallyn B. Clapp	-do-	7	7/71	8/71
11.	Norman Colthup	-do-	4	9/71	10/71
12.	Stuart P. Cram	-do-	2	3/71	3/71
13.	Don C. DeJongh	-do-	3	6/71	7/71
14.	A.J. Diefenderfer	-do-	6	5/71	6/71
15.	L. Carroll King	-do-	8	5/71	7/71
16.	Peter T. Kissinger	-do-	6	5/71	6/71
17.	Harold M. McNair	-do-	2	3/71	3/71
18.	G.H. Morrison	-do-	2	5/71	5/71
19.	R.M. Silverstein	-do-	4	12/70	1/71
20.	Hyman Bass	Mathematics	8	6/71	8/71
21.	S.P. Franklin	-do-	12	5/71	8/71
22.	Burton W. Jones	-do-	8	5/71	7/71
23.	George Pedrick	-do-	6	10/71	12/71
24.	Kenneth A. Ross	-do-	4	5/71	6/71
25.	Henry Van Engen	-do-	4	5/71	6/71
26.	B.S. Chandrasekhar	Physics	6	5/71	7/71
27.	J. Bruce French	-do-	5	5/71	6/71
28.	Walter D. Knight	-do-	3	5/71	6/71
29.	Harry F. Meiners	-do-	6	8/71	10/71
30.	Kundan S. Singwi	-do-	5	5/71	6/71
31.	Axel Horn	Audio-Visual	21	9/71	3/72
32.	Patrick E. Balch	Biology	6	5/71	6/71
33.	William K. MacNab	Chemistry	8	5/71	7/71
34.	Lane K. Branson	Physics	68	12/70	7/71
				4/72	6/72
35.	Harvey E. White	-do-	6	2/71	4/71

SCIENCE EDUCATION IMPROVEMENT (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Weeks</u>	<u>ETA</u>	<u>ETD</u>
36.	George B. Clark	Engineering	4	5/71	6/71
37.	Murray M. Gilkeson	-do-	16	8/71	12/71
38.	William M. Rynack	-do-	8	5/71	7/71
39.	Vincent W. Uhl	-do-	5	5/71	6/71
40.	Thomas J. Zilka	-do-	17	1/71	6/71
41.	Sidney H. Avener	Polytechnic	8	6/71	8/71
42.	Seymour B. Foreman	-do-	10	5/71	8/71
43.	C. A. Higgeson	-do-	10	5/71	8/71
44.	Henry E. Horwitz	-do-	22	6/71	11/71
45.	Tom E. Lawson	-do-	24	9/71	2/72
46.	David Ridgway	-do-	8	10/71	12/71
47.	William W. Rogers	-do-	8	9/71	11/71
48.	Thomas G. Shannon	-do-	36	1/71	9/71
49.	Jacob Stern	-do-	20	5/71	10/71
50.	Charles E. Wales	-do-	2	2/71	3/71
51.	Robert K. Finn		3	5/72	5/72
52.	William Kastrinos		4	2/72	3/72
53.	Richard Price		4	1/72	2/72
54.	B. P. Doctor		3 days	1/72	1/72
55.	Gabor B. Fodor		3	2/72	2/72
56.	R. R. Ronkin		1	2/72	2/72

BOMBAY CENTRAL TRAINING INSTITUTE  
386-15-410-109

CONTRACTOR: WILLIAM HOOD DUNWOODY INDUSTRIAL INSTITUTE

1.	Richard Billette	Electronics	12 mos.	2/71	2/72
2.	Francis McPhillips	Instrumentation	12 mos.	4/71	4/72

TECHNICAL SUPPORT - EDUCATION

386-11-699-395

386-15-999-000

<u>Sr. No.</u>	<u>Name</u>	<u>Position Title/Field</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
1.	G.S. Hammond	Chief Education Adv.	48	7/69	
2.	Joseph M. Loudis	Sci. Education Adv.	48	1/71	
3.	Hazel C. Olson	Education Adv.	28	6/70	10/72
4.	C.S. Liddle	Chief Education Adv.	24	9/54	8/56
			14	6/59	8/60
5.	R.W. Ruffner	-do-	36	8/56	7/59
6.	G.D.K. Wantling	-do-	24	10/60	9/62
7.	C.W. Williams	-do-	36	3/63	5/66
8.	J.R. Hubbard	-do-	36	5/66	6/69
9.	H.H. Kempfer	Dep. Chief Ed. Adv.	30	10/60	3/63
10.	J.R. Hubbard	-do-	12	6/65	5/66
11.	G.L. Hilleboe	Teach. Ed. Adv.	12	2/56	5/57
12.	C.B. Myers	-do-	30	10/57	4/60
13.	D.M. Florell	-do-	24	7/60	7/62
14.	O.L. Ulry	-do-	24	12/62	12/64
15.	L.P. Newberry	-do-	24	7/67	6/69
16.	R.R. Soderberg	Ed. Adv. (Tech.)	52	9/55	10/57
				1/58	5/60
17.	B. Ray	-do-	24	2/60	8/60
				11/60	7/62
18.	Philip H. Haney	-do-	48	6/63	6/65
				8/65	6/67
19.	Irwin L. Slesnick	Ed. Adv. (Sci.)	24	8/67	11/69
20.	E.J. Fox, Jr.	Ed. Program Asst.	60	7/57	9/59
				12/59	5/62
21.	Albert J. Mosley	-do-	27	3/63	6/65
22.	Martin P. Ahrens	Asst. Prog. Officer	44	10/65	6/70
23.	M. Balch	Secretary	12	6/56	4/57
24.	R.J. Butler	-do-	12	2/55	1/56
25.	S. Lustik	-do-	2	4/57	6/57
26.	K.K. Kukenberg	-do-	12	6/57	4/58
27.	A. Hager	-do-	18	8/58	2/60
28.	C.C. Kampmeyer	-do-	24	6/60	6/62
29.	A. Dotherow	-do-	12	6/62	5/63
30.	Alice M. Pesta	-do-	4	2/65	6/65
31.	D.A. Bonin	-do-	12	7/65	5/66
32.	B.E. Vanwinkle	-do-	2	4/66	6/66
33.	F.C. Carey	-do-	8	6/66	2/67
34.	Arlene Snyder	-do-	18	1/67	8/68

Tech. Sup. Ed. (Contd.)

Sr. No.	Name	Position Title	Date Service Started With Ed. Division a/
<u>LOCAL EMPLOYEES (Only current active positions)</u>			
1.	B.S. Vij	Program Analyst (ED)	8/59
2.	D.S. Gujral	Secretary	7/64
3.	S.S. Razdan	Clerk-Stenographer	5/63
4.	M. L. Sahgal	Program Analyst (Opr.)	2/71
5.	K.R. Subramaniam	Assistant I (Prog.)	1/59
6.	M.A. Haque	Secretary	5/63
7.	S. Kumar	Clerk-Stenographer	11/59

Sr. No.	Name	Position Title/Field	Period		
			Months	ETA	ETD
<u>CONSULTANTS</u>					
1.	A. Ray Sims	Polytechnic Adv.	2	5/63	7/63
2.	C.H. Stevens	Summer Inst. Adv.	4	4/64	8/64
3.	R.D. Dolley	Education Officer (NESA)	3	5/64	6/64
				5/65	7/65
4.	P.R. O'Connor	Summer Inst. Adv.	2	6/64	7/64
5.	Robert Jacobs	Edu. Adv.	2	7/64	7/64
				6/65	7/65
6.	Gordon L. Hiebert	Adv. in Chemistry	12	7/65	6/66
7.	Andre Daniere	Edu. Consultant	1	6/67	7/67

MINISTRY OF EDUCATION

1.	W.J. Haggerty	Education Advisor	12	7/52	6/53
2.	J.G. Fowlkes	-do-	15	12/54	3/56
3.	G.N. Mackenzie	-do-	15	5/56	8/57

EDUCATION COMMISSION CONSULTANTS

1.	R. Revelle	Member, Edu. Comm.	2-1/2	2/65	3/65
				11/65	11/65
				2/66	3/66
2.	J.G. Fowlkes	Consultant Edu, Comm.	1-1/2	3/65	4/65
3.	N. De Witt	- do -	4	8/65	9/65
				2/66	5/66

a/ Employee may have served earlier with other Divisions in the Mission

Tech. Sup. Ed. (Contd.)

Sr. No.	Name	Position Title	Period Months	ETA	ETD
4.	G.N. Mackenzie	Cons. Ed. Comm.	1	8/65	9/65
5.	W. C. Smith	- do -	1	8/65	9/65
6.	F. Seitz	- do -		1/66	
7.	J.E. Allen, Jr.	- do -	1	10/65	11/65
8.	F.A. Shils	- do -	1/2	12/65	1/66
1.	Andre Daniere	Education Cons.		1967	

NAS/INSA WORKSHOP CONSULTANTS (Research & Development Workshop)

1.	F.K. Burr	Assoc. Dir. Fabric Res. Lab. Mass		2/70	3/70
2.	T.P. Carney	Vice-Pres. G.D. Searle & Co. Chicago		2/70	3/70
3.	J. Engel	Head, Board on Sci. & Tech. NAS/W		2/70	3/70
4.	H. Gershinowitz	Affiliate Faculty of Rockefeller Univ.		2/70	3/70
5.	L.H. Hattery	American Univ. /Wash.		2/70	3/70
6.	H. Hoelscher	Dean Sch. of Engg. Pittsburgh Univ.		2/70	3/70
7.	V.D. Ludington	Dir. Gen. Food Corp. Cent. for App. Nutrition, N. Y.		2/70	3/70
8.	M.R. McCorkle	Cons. Armour & Co. Chicago		2/70	3/70
9.	B.S. Old	Sr. Vice-Pres. Arthur D. Little Inst. Cambridge		2/70	3/70
10.	Glenn Schweitzer	Dir. Sci. & Tech. Dept. AID/Washington		2/70	3/70
11.	G.F. Tape	Pres. Associated Uniys. Inc. Washington, D. C.		2/70	3/70
12.	G.K. Teal	Vice-Pres. Text. Inst. Inc Dallas		2/70	3/70

NAS/INSA WORKSHOP CONSULTANTS (Water in Man's Life Workshop)

1.	Roger Revelle	Member, NAS		9/71	9/71
2.	Martin Alexander	Prof. Soil Sci. Cornell Univ.		9/71	9/71
3.	John C. Geyer	Member, NAE John Hopkins Univ.		9/71	9/71
4.	Paul H. Jones	Water Resources Div. U. S. Geological Survey		9/71	9/71
5.	Thomas Maddock	- do -		9/71	9/71
6.	Perry L. McCarty	Prof. of Civil Engg. Stanford Univ.		9/71	9/71
7.	David Pimentel	Head, Dept. of Entomology & Limnology, Cornell U.		9/71	9/71
8.	Donald W. Pritchard	Dir. Chesapeake Bay Inst. John Hopkins Univ.		9/71	9/71

Tech. Sup. Ed. (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Position Title</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
9.	Gerald Rohlich	Member, NAE & Dir. Water Res. Center, UOW		9/71	9/71
10.	Robert Smith	Chair. Dept. of Civil Engg. Univ. of Kansas		9/71	9/71
11.	Herald Thomas	Prof. Dept. of Civil Engg. Harvard Univ.		9/71	9/71
12.	Nathaniel Wollman	Chair. Dept. of Eco. Univ. of New Mexico		9/71	9/71
13.	Julien Engel	NAS Staff		9/71	9/71
14.	John Fry	Observer, AID/W		9/71	9/71

IMPROVED TEACHING TECHNIQUES

386-11-640-385

1.	Paul Jacobs (PSC No. AID/nesa-421)	Prog. Learning Cons.	1-1/2	5/69	7/69
2.	Howard N. Sloane (PSC No. AID/nesa-463)	-do-	1	12/69	1/70
3.	Gabriel M. Della-Piana (PSC No. AID/nesa-464)	-do-	1	12/69	1/70

TASK ORDER NO. 36 - NEA CONTRACT NO. AID/csd-1150

1.	D.P. Wedberg	Chief of Party	2	9/69 12/69 3/70	10/69 1/70 4/70
2.	Phil C. Lange	Res. Eval. Spec.	1-1/2	9/69 3/70	10/69 4/70
3.	Philip Tieman	Prog. Learn. Spec.	1/2	9/69	10/69
4.	Joseph Carder	-do-	3 1/2	12/69	4/70
5.	Susan Markle	-do-	1/2	12/69	1/70
6.	Jerome Kaplan	Science-Math Spec.	1	1/70	2/70
7.	Henry Walbasser	-do-	1	1/70	2/70
8.	Dan Smith	Prog. Learn. Spec.	2	12/69	2/70
9.	Marten Tafel	-do-	3	12/69	3/70

TASK ORDER NO. 45

1.	F.A. Cartier	Expert in Languages	1/2	11/70	11/70
2.	Leroy West	Expert in Elem. Edu.	1	11/70	12/70

TASK ORDER NO. 50

1.	Paul V. Robinson	Prog. Learn. Cons.	4	11/71	3/72
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TECHNICAL EDUCATION INSTITUTES

386-11-660-027

CONTRACTORS: UNIVERSITIES OF ILLINOIS, MICHIGAN & WISCONSIN

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Host Institution</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
1.	R. C. Ray	Agr. Engg.	IIT/Kharagpur	24	2/54	1/56
2.	G. H. Dunkelberg	Civil Engg.	- do -	24	9/56	7/58
3.	K. H. Evans	Geology	- do -	12	9/55	9/56
4.	J. L. Hough	Electronics	- do -	15	3/54	6/55
5.	G. E. Anner	Electronics	- do -	24	9/55	8/57
6.	P. H. Nelson	Comm. Engg.	- do -	12	8/57	7/58
7.	T. W. Price	Heat Power	- do -	24	6/55	5/57
8.	R. Bruckart	Industrial Engg.	- do -	22	2/57	12/58
9.	J. Wood	Planning	- do -	18	2/57	7/58
10.	C. E. Pearce	Mech. Engg.	- do -	24	6/56	5/58
11.	M. G. Malti	Elect. Engg.	U. of Roorkee	21	11/56	8/57
12.	C. O. Heath	Mech. Engg.	- do -	24	7/56	6/58
13.	O. W. Israelson	Irrigation Engg.	- do -	12	2/55	1/56
14.	D. E. Hudson	Water Resources	- do -	6	10/58	4/59
15.	G. F. Sowers	- do -	- do -	4	1/59	4/59
16.	G. F. Housner	- do -	- do -	2	1/59	3/59
17.	A. J. Ackerman	- do -	- do -	1	3/59	4/59
18.	J. C. Georgian	Civil/Mech. Engg.	- do -	10	6/54	8/55
				3	6/56	9/56
19.	H. Malors	- do -	- do -	10	10/55	8/56
20.	J. R. Villemonte	Hydraulics	BEC, Calcutta	12	6/54	5/55
21.	H. A. Smallwood	- do -	- do -	22	7/57	5/59
22.	A. C. Ingersoll	Fluid Mechanics	- do -	12	9/54	8/55
23.	T. J. Zilka	- do -	- do -	12	9/56	8/57
24.	R. Villemonte	- do -	- do -	44	9/56	6/60

Tech. Ed. Inst. (Contd.)

<u>Sr.</u>	<u>Name</u>	<u>Field</u>	<u>Host</u> <u>Inst.</u>	<u>Period</u> <u>Months</u>	<u>ETA</u>	<u>ETD</u>
25.	R. R. Benedict	Mach. Design	BEC, Calcutta	24	6/54	5/56
26.	H. W. Mason	-do-	-do-	42	1/56	7/59
27.	T. L. Hansen	Town Plng.	-do-	12	6/54	5/55
28.	R. Marshall	-do-	-do-	14	6/55	8/56
29.	E. D. Olwell	-do-	-do-	48	7/56	6/57
30.	P. Cutler	-do-	-do-	12	6/57	6/58
31.	G. Picket	Appl. Elect.	-do-	26	6/54	8/56
32.	B. B. Brainard	Mech. Engg.	BEC, Pilani	12	6/54	5/55
33.	F. O. Rose	-do-	-do-	24	10/55	5/57
34.	M. G. Young	Elect. Engg.	-do-	12	8/56	7/57
35.	F. H. Pumphery	-do-	BIT, Sindri	12	7/55	5/56
36.	R. W. Atkinson	Elect. Engg.	-do-	24	7/56	5/58
37.	C. H. Kent	Mech. Engg.	IIS, Bangalore	36	6/54	5/57
38.	R. D. Vold	Phy. Chem.	-do-	21	9/55	6/57
39.	H. L. Walker	Metallurgy	-do-	18	6/54	12/55
40.	V. C. Rideout	Communi. Engg.	-do-	12	6/54	5/55
41.	P. H. Craig	-do-	-do-	20	10/57	6/59
42.	G. T. Auston	Chem. Engg.	-do-	24	8/54	7/56
43.	W. C. Leibman	Tracer Engg.	-do-	9	9/55	6/56
44.	R. D. Parks	Metal Mining	ISMG/Dhanbad	12	2/55	1/56
45.	J. G. Holm	Elect. Engg.	CET, Jadavpur	12	7/57	7/58
46.	R. W. Hill	-do-	MIT, Madras	12	6/57	5/58
47.	Thein Wah	Civil Engg.	IIT, Kharagpur	12	9/61	9/62
48.	W. L. Emery	Electronics	-do-	22	6/60	4/62
49.	H. N. Hayward	El. Comm. Engg.	-do-	14	5/63	7/64
50.	J. R. Fellows	Heat Power	"	24	6/60	5/62
				14	7/62	9/63
51.	G. H. Fett	Servo-Mech.	-do-	30	1/62	7/64
52.	J. L. Leach	Foundry Engg.	-do-	6	10/60	4/61
53.	J. C. Miles	-do-	-do-	36	6/61	6/64
54.	H. L. Langhaar	Civil Engg. Hyd.	-do-	18	6/60	1/62
55.	F. Seyfarth	Machine Design	-do-	24	6/60	6/62
56.	D. L. Bitzer	Digital Comp.	-do-	6	1/64	7/64
57.	R. G. Hennes	App. Mechanics	BEC, Calcutta	12	6/60	6/61
58.	W. C. Young	-do-	-do-	17	2/63	7/64
59.	G. Pickett	Hydraulics	-do-	24	7/60	7/62
60.	P. Anderson	-do-	-do-	6	6/62	12/62
61.	J. C. Georgian	Fluid Mechanics	-do-	15	6/61	9/62
62.	R. R. Benedict	Machine Design	-do-	15	10/61	1/63
63.	R. H. Engelman	-do-	-do-	16	2/63	6/64
64.	J. G. VanVleet	Mech. Engg.	-do-	12	6/60	6/61
65.	C. A. Gilpin	Mech. Engg.	-do-	22	8/61	6/63

Tech. Ed. Inst.(Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Host Institution</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
66.	C.S. Siskind	Ele.Mach.Desn.	U. of Roorkee	12	8/61	8/62
67.	H.E. Degler	App. Thermody.	-do-	12	8/60	10/61
68.	H.H. Alvord	Machine Design	-do-	24	8/61	8/63
69.	G.M. Sicular	Hydraulics	-do-	12	6/63	7/64
70.	A.O. Schmidt	Mach. Tool Design	-do-	6	1/64	6/64
71.	H.E. Babbitt	Sanitary Engg.	-do-	15	8/61	11/62
72.	M.J. Wills	-do-	-do-	12	8/62	8/63
73.	T.W. Price	Appl. Thermody.	-do-	12	6/63	7/64
74.	C.A. Gilpin	Indus. Engg.	-do-	12	6/63	7/64
75.	L.V. Nothstine	Civil Engg.	Guindy Engg. Coll.	12	9/61	9/62
76.	D.A. Firmage	Struct. Engg.	-do-	12	6/63	7/64
77.	M.B. Reed	Elect. Engg.	-do-	21	8/62	5/64
78.	F.S. Roop	Combustion Engg.	-do-	24	8/62	7/64
79.	C.V.B. Reed	App. Maths.	-do-	12	4/63	5/64
80.	C.J. Ordon	Civil Engg.	-do-	15	10/61	1/63
81.	L.V. Nothstine	Soil Mech. & Found. Engg.	-do-	3	1/64	3/64
82.	D.P. Brown	Civil Engg.	-do-	3	6/63	9/63
83.	E. DeBenko	Lib. Sci.	-do-	1	9/63	10/63
84.	L.B. Almy	Struct. Engg.	Poona College of Engg.	16	8/61	12/62
85.	D.O. VanStrien	-do-	-do-	12	6/63	6/64
86.	I.O. Ebert	Electr. Comm.	-do-	12	6/63	6/64
87.	M.A. Thomas	Electr. Power Engg.	-do-	24	8/62	6/64
88.	M.S. Gjesdahl	Mech. Engg.	-do-	24	9/62	6/64
89.	J.D. Shingleton	Admin.	Guindy Engg. Coll.	12	8/61	8/62
90.	D.F. Aschom	Admin.	-do-	24	8/62	7/64

AGRICULTURE EDUCATION AND RESEARCH  
386-11-110-028

CONTRACTOR: OHIO STATE UNIVERSITY

1.	O.W. Mintzer	Highway Engg.	Chandigarh	23	9/56	7/58
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EDUCATION ADVISOR, MINISTRY OF EDUCATION  
386-11-680-050

CONTRACTOR: UNIVERSITY OF WISCONSIN

1.	J.G. Fowlkes	Ed. Adv.	MOE	18	1954	1956
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<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Host Institution</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
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**SOCIAL WELFARE EDUCATION**

(Ministry of Education)

386-15-820-058

**CONTRACTOR: COUNCIL ON SOCIAL WORLD EDUCATION, NEW YORK**

1.	H. R. Wright	Social Work	DSSW, Delhi	24	8/56	7/58
2.	V. E. Tennant	Field Work	-do-	12	9/56	8/57
3.	H. S. Pinkus	Case/Field Work	Fac. of Soc. CSWE Work Baroda Univ.	24	9/56	7/58
4.	M. B. Stinson	Res. & Comm. Org.	J. K. Inst. Luck. Univ.	24	9/56	7/58
5.	S. W. Manning	-do-	Tata Inst. of Soc. Sc.	12	9/56	8/57
6.	K. D. Kindelsperger	Group Work	Sch. of Soc. work, Madras	12	7/57	5/58
7.	N. M. Hartman	Soc. Welfare	Kashi Vidya-pith, Banaras	36	6/58	6/59
8.	H. H. Aptekar	Soc. Welfare	Sch. of Soc. Welfare, Delhi	18	12/59	5/61
9.	H. M. Hartman	-do-	-do-	6	6/61	11/61
10.	R. J. Parvis	-do-	J. K. Inst. Luck. University	24	7/59	7/61
11.	J. B. Lightman	-do-	Madras Sch. of Social Work	18	12/59	6/61
12.	R. J. Parvis	-do-	-do-	5	7/61	12/61

**HOME SCIENCE EDUCATION AND RESEARCH**

(Ministry of Education)

386-11-630-060

**CONTRACTOR: UNIVERSITY OF TENNESSEE**

1.	F. P. Kittrell	Food & Nutri.	Baroda Univ.	31	2/53	9/55
2.	M. F. Reed	Child Dev.	-do-	30	10/54	5/57
3.	B. Mallory	Home Sc.	Lady Irwin Coll. Delhi	27	12/55	3/58
4.	D. Williams	Nut. & Biochem	-do-	18	10/55	4/57
5.	M. E. Keister	Home Science	Maharani's Coll. Bangalore	24	10/55	10/57
6.	C. Gilbert	Home Science	Baroda Univ.	24	10/55	8/57
7.	L. Gassett	Home Mgt.	Queen Mary's Coll. Madras	24	10/55	8/57

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Host Institution</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
8.	M.R. Armstrong	Inst. Manag.	Women's Christ. Coll. Madras	24	10/55	9/57
9.	N. Logan	Home Science	LW & St. Christophers Trng Coll. Madras	24	10/55	11/57
10.	J.B. Staab	Home Science & Tr. Trng.	SNDT Women's Univ. Bombay	24	7/56	6/58
11.	M. Bishop	Home Science	MOE/Delhi	24	10/58	7/60
12.	D. Lyon	Home Science	Lady Irwin Coll. Delhi	24	10/58	10/60
13.	E. Davison	Home Science	SNDT, Bombay	24	6/59	4/61
14.	L. Dickey	Home Science	South India Ed. Trust, Madras	24	10/58	10/60
15.	D. Ekstrom	Home Science	Viharilal Mitra Inst. Calcutta	24	1/59	12/60
16.	A. Kirk	Home Science	-do-	24	6/59	5/61
17.	ME. Burrett	Home Science	SNDT Women's Univ. Bombay	24	6/59	5/61
18.	E. Robb	Home Science	Lady Irwin Coll. Delhi	24	7/59	5/61
19.	I. Gross	Home Science	South India Ed. Trust, Madras	1	7/59	7/59
20.	A. Snellman	Home Science	-do-	15	9/60	12/61
21.	E. Robb	Home Science	MOE/Delhi	8	8/61	4/62

ECONOMIC PLANNING  
(Planning Commission & Ministry of Finance)  
386-11-750-062

DIRECT-HIRE

1.	N. Jacoby	Planning	New Delhi	1	10/55	11/55
2.	R.R. Johnson	Management & Organ.	New Delhi	5	2/58	7/58
3.	M. Friedman	Finance	New Delhi	1	10/55	11/55

MULTIPURPOSE SECONDARY EDUCATION  
(Ministry of Education)  
386-11-650-063

1.	C.B. Mendenhall	Curriculum	Dir. of Ext. Prog. Sec. Ed./N. Delhi	24	10/56	11/58
2.	A. Griffin	Soc. Studies	-do-	24	10/56	8/58
3.	S.L. Mikelson	Gen. Science	-do-	24	10/56	7/58
4.	R.B. Sutton	Educ. Eval.	-do-	18	2/57	7/57

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Host Institution</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
<u>MULTIPURPOSE SECONDARY EDUCATION (Contd.)</u>						
5.	E. R. Towers	Sec. Sch. Voc. Edu. Generalist	Dir. of Ext. Prog. Sec. Ed. New Delhi	27	1/59	4/61
6.	C. L. Sterling	Sec. Sch. Voc. Edu. Tech.	-do-	24	2/59	2/61
7.	I. R. Wells	Sec. Sch. Voc. Edu. Commer.	-do-	21	1/59	11/60
8.	M. K. Luther	Sec. Sch. Voc. Edu. Agri.	-do-	21	3/59	12/60
9.	J. G. Odgers	Voc. Guidance Specialist	-do-	21	8/60	5/62
10.	D. G. Lux	Spec. in Indust. Arts, Edu(Tech)	NCERT/ New Delhi	21	7/62	4/64
11.	J. M. Hanna	Spec. in Comm. Education	-do-	30	1/62	7/64
12.	W. E. Ray	Spec. in Indl. Arts Ed. (Crafts)	-do-	30	1/62	7/64
13.	B. K. Bristol	Spec. in Ag. Ed.	Mysore	21	9/63	6/65
14.	M. H. Freeman	Spec. in Comm.	Mysore	24	8/63	6/65
15.	A. W. Earl	Spec. in Indl. Arts.	New Delhi	24	8/63	6/65
16.	S. Land	-do-	Bhubaneswar	21	9/63	6/65
17.	T. H. Herring	-do-	Bhopal	21	10/64	7/66
18.	W. M. Bateson	-do-	Ajmer	21	9/63	6/65
19.	H. L. Coon	Generalist Multi. Sec. & Higher Edu.	New Delhi	21	9/63	6/65
20.	F. A. Olson	Spec. in Indl. Arts	New Delhi	21	10/64	7/66
21.	L. W. Boucher	Specialist in Agri. Edu.	Bhubaneswar	24	8/64	6/66

MULTIPURPOSE SECONDARY EDUCATION (Contd.)

Sr. No.	Name	Field.	Host Institution	Period Months	ETA	ETD
22.	L. E. Hedges	Spec. in Agri.	RCE, Ajmer	24	7/66	6/68
23.	F. A. Poor	Spec. in Commerce	-do-	24	10/65	10/67
24.	I. L. Slesnick	Spec. in Sci.	-do-	24	12/65	7/67
25.	A. E. Peterson	Spec. in Technology	-do-	24	7/66	5/68
26.	Earl E. Julson	Spec. in Agri.	RCE, Bhopal	24	9/66	7/68
27.	J. H. Jackson	Spec. in Commerce	-do-	24	11/65	11/67
28.	Frank Morgan	Spec. in Sci.	-do-	24	11/66	9/68
29.	D. C. Choate	Spec. in Technology	-do-	24	4/67	4/69
30.	R. Perritt	Spec. in Comm.	RCE, Bhub.	24	10/65	10/67
31.	W. R. Brown	Spec. in Sci. (Biology)	-do-	24	8/66	6/68
32.	R. J. Dalphin	Spec. in Technology	-do-	24	7/67	5/69
33.	John P. Morgan	Spec. in Agri.	-do-	24	10/67	10/69
34.	H. Hughes, Jr.	Spec. in Commerce	-do-	24	1967/69	
35.	D. C. Sharp	Spec. in Agr.	RCE, Mysore	40	1/66	5/69
36.	T. Woodward	Spec. in Commerce	-do-	24	9/66	8/68
37.	G. E. Edwards	Spec. in Science	-do-	24	9/66	8/68
38.	Uvan Hostetler	Spec. in Technology	-do-	24	10/65	10/67
39.	A. A. Hoppe	Spec. in Educ.	New Delhi	24	10/65	10/67
40.	W. E. Schroeder	Chief of Party	New Delhi	84	7/62	6/69
41.	H. J. Apfelbaum	Spec. in Tech.	RCE, Mysore	24	19/67/69	

SHORT-TERM CONSULTANTS

1.	G. R. Koopman	Spec. in Curr.	New Delhi	11	10/62	8/63
2.	Gilbert Kahn	Spec. in Comm. Ed.	Mysore	6	1/65	7/65

FOUNDRY TRAINING

386-11-660-065

1.	J. H. Schnur	Foundry Trng.	IIT, Kharagpur	31	2/54	11/56
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EDUCATION PROGRAM DIRECTION & DEVELOPMENT

386-11-690-066

DIRECT-HIRE

1.	E. W. Hersey	Soc. Welfare	New Delhi	48	11/53	12/57
2.	G. F. McCoy	-do-	New Delhi	7	11/56	6/57

Sr. no.	Name	Field	Host	Period		
			Institution	Months	ETA	ETD
3.	J. M. Hanna	Commercial Ed.	New Delhi	2	7/57	9/57
4.	C. J. Falk	Evaluation	-do-	6	11/56	5/57
5.	R. C. Wright	Education	-do-	38	6/52	8/55
6.	F. B. Laubach	Adult Edu.	-do-	36	5/52	5/55
7.	D. B. Pentz	Field Work	-do-	24	7/52	7/54
8.	M. Branscomb	Social Work	-do-	6	12/52	5/53
9.	A. Wilkins	Social Work	-do-	6	12/52	5/53
10.	W. E. Givens	Social Work	-do-	2	10/56	12/56

EDUCATIONAL ADMINISTRATION

(Ministry of Education)

386-11-680-073

No. Technician Element

SCHOOL BUILDING IMPROVEMENT

386-11-690-074

DIRECT-HIRE

1. Dr. Schroeter Min. of Ed. 24

INDIAN STATISTICAL INSTITUTE, CALCUTTA

386-11-690-078

DIRECT-HIRE

1.	S. N. Alexander	Electronics Equipment	ISI, Calcutta	17	3/59	8/60
2.	J. H. Davidson	Statistics	-do-	14	6/59	8/60
3.	M. J. Solomon	-do-	-do-	17	10/59	3/61
4.	L. A. Knowler	Statistics & Quality Control	-do-	12	6/60	7/61

PUBLIC ADMINISTRATION

(Ministry of Education)

386-11-790-080

DIRECT-HIRE

1. D. H. Hecock Public Admin. IPA, Lucknow 3 3/55 6/55

RURAL INSTITUTES  
(Ministry of Education)  
386-11-690-107

DIRECT-HIRE

Sr. No.	Name	Field	Host Institution	Period		
				Months	ETA	ETD
1.	L. Smith	Education	MOE/New Delhi	3	3/59	5/59
2.	L.M. Ambrose	Education	-do-	21	4/60	12/61

NATIONAL INSTITUTE OF BASIC EDUCATION  
Ministry of Education (NCERT)  
386-11-640-114

See Project No. 184

TRAINING IN ADULT EDUCATION  
National Fundamental Education Center  
Ministry of Education (NCERT)  
386-11-670-118

DIRECT-HIRE

1.	H. H. Kempfer	Adult Educ.	New Delhi	24	10/58	10/60
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CENTRAL INSTITUTE OF EDUCATION  
Ministry of Education (NCERT)  
386-11-690-119

See Project No. 146 & 184

NATIONAL INSTITUTE OF AUDIO-VISUAL EDUCATION  
Ministry of Education (NCERT)  
386-11-690-120

DIRECT-HIRE

1.	F. W. Noel	Audio-Visual	New Delhi	9	1/59	9/59
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<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Host Institution</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
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NATIONAL PROFESSIONAL EDUCATION CENTER  
(Ministry of Education)  
386-11-660-146

1.	J.K. Norton	Educl. Admin.	New Delhi	20	10/59	6/61
2.	S.M. Corey	Educl. Tech.	-do-	6	9/59	3/60
3.	R.F. Butts	History/Phil.	-do-	4	2/59	5/59
4.	E.P. Hagen	Evaluation	-do-	4	10/58	1/59
5.	R.M. Fedder	Educl. Guidance	-do-	1	10/58	11/58
6.	B.E. Leary	Textbook Dev.	-do-	4	1/59	5/59

TEACHER TRAINING IN ENGINEERING EDUCATION  
386-15-660-154

No Technician Element

ORGANIZATION AND MANAGEMENT  
Ministry of Finance (Special Reorganization Unit)  
386-11-720-170

DIRECT-HIRE

1.	R.R. Johnson	Organization & Mgt.	New Delhi	30	11/58	6/61
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NATIONAL INSTITUTE OF EDUCATION  
Ministry of Education (National Council of Educational Research & Trng.)  
386-11-660-184

CONTRACTOR: TEACHERS COLLEGE COLUMBIA UNIVERSITY

1.	J.P. Leonard	Educl. Admin.	NIE/New Delhi	72	6/61	6/67
2.	L. Long	Educl. Guidance & Testing	-do-	12	9/61	8/62
3.	W.H. Hill	-do-	-do-	12	1/63	12/63
4.	M. Lawler	-do-	-do-	19	10/61	5/63

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Host Institution</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
<u>NATIONAL INSTITUTE OF EDUCATION (Contd.)</u>						
			NIE/			
5.	R. Bell	Teacher Educ.	New Delhi	38	10/62	12/65
6.	M.N. Dobbyn	Lang. Lab.	-do-	24	2/65	2/67
7.	E. Udell	A.V. Education	-do-	15	6/61	8/62
8.	S.M. Corey	Ele. Education	-do-	24	9/60	7/62
9.	F. Shoemaker	Textbook Devel.	-do-	18	9/61	3/63
10.	H.M. Walker	Educational Research	-do-	27	9/61	12/63
11.	N.E. Bingham	Sc. Methodology	-do-	24	9/62	7/64
12.	W.H. Griffin	In-Service & Ext. Service	-do-	24	8/62	7/64
13.	C.M. McCullough	Methodology of Language Inst.	-do-	24	7/63	5/65
14.	A.J. Perrelli	Inservice Trng. Prog. for primary school teachers	-do-	36	7/63	7/66
15.	W.H. Griffin	Educ. Finance	-do-	12	8/64	8/65
16.	H.D. Webster	Educ. Research	-do-	12	1/64	1/66
17.	E.G. Robinson	Textbook Produc. & Printing	-do-	12	7/63	8/64
18.	R.W. Burnett	-do-	-do-	12	8/64	8/65
19.	W.H. Hill	Measurement and Testing	-do-	12	12/63	12/64
				20	10/65	6/67
20.	J.T. Cowles	-do-	-do-	12	9/64	9/65
21.	R.J. Stollberg	Science Educ.	-do-	15	8/65	11/66
22.	Mrs. L.T. Tibbetts	Curriculum	-do-	18	12/65	6/67
23.	Robert W. Pyle	Teacher Education	-do-	18	12/65	6/67

SHORT-TERM CONSULTANTS

1.	H.R. VanZoeron	Computer Engg.	NIE/New Delhi	4	9/64	1/65
2.	E.P. Little	-do-	-do-	1	7/64	7/64
3.	Eugene Lawler	Edl. Consultant	-do-	6	9/63	3/64
4.	E.P. Link	Edl. Consultant	-do-	6	8/63	1/64
5.	Marie Russ	Research Reports	-do-	6	6/63	12/63

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Host Institution</u>	<u>Period Months</u>	<u>ETA</u>	<u>ETD</u>
6.	Andre Danièr	Edu. Finance	New Delhi	3	5/65	9/65
7.	Konrad Short	Language Lab.	-do-	1	8/65	9/65
8.	C.W. Wilson	Prog. Instruction	-do-	1	12/66	1/67
9.	S. M. Markle (Mrs.)	-do-	-do-	1	10/66	11/66

ASSISTANCE TO EXPANSION OF LITERACY  
386-33-670-232

1.	Helen Butt (Mrs.)	Adult Edu.	Punjab Govt.	15	1966-67	
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TEACHER TRAINING IN ENGLISH  
386-11-690-392

1.	William B. Owen	Spec. in Eval. & Testing	CIE, Hyderabad	18	12/67	6/69
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APPENDIX 'A'

LISTS OF PARTICIPANTS

INDIAN INSTITUTE OF TECHNOLOGY, KANPUR  
386-11-660-150

CONTRACTOR: EDUCATION DEVELOPMENT CENTER INC.

<u>Sr.</u> <u>No.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u> <u>Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	C. Sahai	Mech. Engg.	12	11/62	11/63
2.	G.D. Agrawal	Civil Engg.	29	1/64	6/66
3.	M.K. Kelkar	Librarianship	7	3/65	10/65
4.	R.K. Bakshi	App. Linguistics	7	6/65	1/66
5.	T.S. Jaseja	Res. in Mesers	4	6/65	10/65
6.	S.K. Bhalla	Chemical Engg.	36	9/65	9/68
7.	V. Rajaraman*	Digital Computer	11	8/65	7/66
8.	M.P. Kapoor #	Civil Engg	41	8/65 **	12/68
9.	K.K. Singh	Psychology	1	1/66	2/66
10.	M.M. Hasan	Elec. Engg.	24	8/66	7/68
11.	D. Ramchandra Rao	Optical Spectros	24	8/66	7/68
12.	V.V. Nanda	Aeronautical Engg.	3	6/66	9/66
13.	P.R. Singh	Chemistry	12	8/66	8/67
14.	D.N. Dhar	Chemistry	12	10/66	10/67
15.	R. Krishna Murthy	Aeronautical Engg.	4	5/67	9/67
16.	P.P. Sharma	English	12	8/67	8/68
17.	P.N. Rastogi	Social Sciences	12	8/67	8/68
18.	P.C. Nigam	Chemistry	16	9/67	1/69
19.	J.L. Batra	Mech. Engg.	41	8/68	1/72
20.	R.N. Basu	Computer Engg.	12	8/68	8/69
21.	P.N. Sharma	Admn. Registrar	6	9/68	3/69
22.	R. Kumar	Metallurgy	6	9/68	3/69

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\* USAID financed only international travel.

\*\* Participant was already in the U.S.

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
23.	K. Bidhi Chand	Laser Electronics	12	11/68	10/69
24.	S. S. Rao	Mech. Engg.	36	1/69	1/72
25.	D. V. S. S. N. Murthy	Elec. Engg.	6	2/69	8/69
26.	M. M. Kaushik	Physics	7	3/69	10/69
27.	Surrender Kapur	Computer Engg.	12	9/69	9/70
28.	B. L. Bhatia	Num. Analysis	12	9/69	9/70
29.	Jaganath Sharma	Glass Blowing Tech.	6	9/69	4/70
30.	A. C. Pandey	Eng. (Humanities)	36***	9/69	
31.	S. Krishnamurthy	Metallurgy	6	11/69	5/70
32.	K. V. Lakshmidhar	Soil Mech.	6	10/69	4/70
33.	K. Suryanarayana	Chem. Engg.	9	12/69	7/70
34.	A. B. L. Agarwal	Chem. Engg.	12	11/70	11/71
35.	O. P. Kapoor	Mathematics	12	9/70	9/71
36.	M. L. Vaidya	Metallurgy	12	9/70	9/71
37.	R. K. Ray	Physics	12	8/70	8/71
38.	A. H. Siddiqui	Chemistry	6	10/70	5/71
39.	S. C. Angirish	Chem. Engg.	6	5/71	12/71
40.	S. C. Goel	Civil Engg.	6	8/71	2/72
41.	P. Lal	Elec. Engg.	6	9/71	3/72
42.	M. Chakravarty	Lib. Research	6	9/71	3/72
43.	G. C. Dasgupta	Edu. Tech.	6	9/71	3/72
44.	L. P. Singh	Elec. Engg.	6	1/71	6/71
45.	G. P. Gupta	Computer Tech.	12	5/71	
46.	V. A. Narayan	Chemistry	6	9/71	4/72
47.	J. C. Srivastava	Mech. Engg.	6	9/71	3/72
48.	M. S. Panesar	Mech. Engg.			

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\*\*\* Two-year extension on self financed basis.

SCIENCE EDUCATION IMPROVEMENT  
386-11-660-226

PASA: NATIONAL SCIENCE FOUNDATION

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
<u>CY 1967</u>					
1.	L. S. Kothari	Physics	2	6/67	8/67
2.	S. Krishnaswamy	Zoology	2	8/67	10/67
3.	B. D. Nagchaudhuri	Nuclear Physics	2	6/67	8/67
4.	R. C. Paul	Chemistry	2	8/67	9/67
5.	N. V. Subha Rao	Chemistry	2	8/67	10/67
6.	U. N. Singh	Mathematics	2	8/67	9/67
7.	N. M. Swani	Textile Tech.	2	6/67	7/67
<u>CY 1968</u>					
8.	V. G. Bhide	Physics	3	9/68	12/68
9.	R. D. Deshpande	Biology	2	8/68	10/68
10.	C. S. Jha	Elect. Engg.	2	8/68	10/68
11.	Raj N. Kapoor	Engineering	3	8/68	11/68
12.	R. K. Katti	Soil Engg.	3	8/68	11/68
13.	S. J. Mohamad	Mathematics	3	11/68	2/69
14.	R. G. Narayanmurthy	Mech. Engg.	3	8/68	11/68
15.	A. N. Nigam	Physics	3	9/68	12/68
16.	D. D. Pant	Physics	3	9/68	12/68
17.	R. P. Patel	Chemistry	3	9/68	12/68
18.	P. V. Rajmannar	Zoology	3	10/68	1/69
19.	B. Ramachandra Rao	Physics	3	9/68	12/68
20.	O. S. Reddi	Genetics	3	9/68	12/68
21.	K. K. Rohtagi(Miss)	Chemistry	3	8/68	11/68
22.	Y. Saran	Engineering	3	9/68	12/68
23.	T. K. Vaidyanathan	Tech. Edn.	3	9/68	12/68
24.	L. S. Srinath	Mech. Engg.	3	9/69	9/68
25.	V. N. Wanchoo	Sci. Edn.	2	9/68	11/68
<u>CY 1969</u>					
26.	H. J. Arnika	Chemistry	3	9/69	1/70
27.	F. C. Auluck	Physics	3	9/69	12/69
28.	D. Banerjee	Engg.	3	9/69	12/69
29.	S. R. Beedkar	Engg.	4	1/70	5/70
30.	K. J. Bhatt	Mech. Engg.	3	9/69	12/69
31.	T. R. Doss	Tech. Edn.	3	9/69	12/69
32.	M. S. Duple	Zoology	3	9/69	12/69
33.	M. K. Ganesan	Engg.	3	8/69	12/69
34.	K. S. Iyengar	Sci. Edn.	3	9/69	12/69
35.	A. A. Kulkarni	Elec. Engg.	3	8/69	12/69

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
36.	C. Mande	Physics	3	9/69	1/70
37.	R. C. Mehrotra	Chemistry	3	10/69	1/70
38.	B. G. Pitre	Physics	3	8/69	12/69
39.	Rajendra Prasad	Sci. Edn.	3	9/69	12/69
40.	Arcot Nagarajan	Botany	3	9/69	12/69
41.	K. V. Shenai	Sci. Edn.	3	9/69	12/69
42.	A. K. Sharma	Chemistry	3	1/70	5/70

CY 1970

43.	A. N. Bose	Sci. Edn.	3	9/70	12/70
44.	M. M. Biswas	Engg.	3	10/70	1/71
45.	B. B. Deo	Physics	3	2/71	6/71
46.	N. Gopinath	Medicine	3	9/70	12/70
47.	S. K. Guha	Elec. Engg.	3	9/70	11/70
48.	M. N. Kutty	Zoology	3	9/70	11/70
49.	M. L. Lakhanpal	Chemistry	3	10/70	12/70
50.	K. B. Menon	Elec. Engg.	3	9/70	12/70
51.	P. D. Pathak	Physics	3	9/70	12/70
52.	M. R. Puri	Mathematics	3	9/70	12/70
53.	V. Ramakrishna	Chemistry	3	1/71	4/71
54.	L. R. Row	Chemistry	3	9/70	12/70
55.	S. M. Sen	Elec. Engg.	3	9/70	12/70
56.	B. L. Saraf	Physics	3	9/70	12/70
57.	M. R. Shah (Mrs.)	Sci. Edn.	3	4/70	8/70
58.	D. K. Sinha	Mathematics	3	9/70	12/70
59.	P. Sivalingam	Engg.	3	9/70	12/70
60.	M. R. Suxena	Botany	3	9/70	12/70
61.	J. Bhima Senachar	Physics	3	9/70	12/70

CY 1971

62.	M. L. Abrol	Mathematics	3	6/71	9/71
63.	Y. M. Dube	Administration	3	6/71	9/71
64.	M. V. George	Chemistry	3	9/71	12/71
65.	S. N. Goel	Engineering	3	7/71	10/71
66.	S. M. Das Gupta	Electronics	3	7/71	10/71
67.	A. C. Jain	Chemistry	3	7/71	10/71
68.	S. Kar	Mech. Engg.	2	7/71	9/71
69.	D. Shankar Narayan	Entomology	2	8/71	10/71
70.	P. Venkata Rao	Elec. Engg.	2	7/71	9/71
71.	T. S. Rao	Nuclear Engg.	2	9/71	11/71
72.	V. R. Rao	Physics	3	6/71	9/71
73.	J. M. T. Rajan	Administration	3	6/71	9/71

Science Ed. Imp. (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
74.	A. Ramachandran	Mech.. Engg.	2	9/71	11/71
75.	C.P. Singh	Zoology	3	7/71	9/71
76.	H.D. Tandon	Pathology	3	9/71	12/71
77.	V. Verma	Physics	2	8/71	9/71

TECHNICAL EDUCATION INSTITUTES

386-11-660-027

PHASE I

Indian Institute of Technology, Kharagpur

CONTRACTOR: ILLINOIS UNIVERSITY

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	S.V. Arya	Farm Machinery	16	2/55	6/56
2.	S. Banerjee	Higher Polymer Rubber	9	1/58	10/58
3.	A.K. Chowdhury	-do-	11	2/55	12/55
4.	N.K. Datta	Industrial Engg.	16	2/55	6/56
5.	J. Das	Automatic Switch	10	2/55	12/55
6.	M.R. Das	Metal Engg.	12	1/58	2/59
7.	H.C. Ganguli	Indl. Psychology	12	3/57	4/58
8.	D.K. Guha	Chemical Engg.	12	9/56	10/57
9.	G.M. Mandalia	Arthitecture	24	8/55	8/57
10.	V.N.S. Murthy	Civil Engg.	12	9/55	9/56
11.	D. Neogi	Geology	16	2/55	6/56
12.	P.K. Rajagopalan	Farm Machinery	17	2/55	7/56
13.	Rajagopaliengar	Elect. Engg.	12	9/55	9/56
14.	S. Ramachandra	Mech. Engg.	12	2/55	3/56
15.	C. Ramasastry	Solid Physics	10	2/55	12/55
16.	K.S. Rangaswami	Theory & Structure	12	2/55	2/56
17.	V.R. Rao	City & Reg. Planning	9	1/58	10/58
18.	G.S. Sanyal	Microwave Res.	7	11/58	6/58
19.	M.V.C. Sastry	Applied Chem.	12	3/55	3/56
20.	B.R. Sen	Str. Engg.	6	11/57	5/58
21.	S.P. Sen	Thermodynamics	12	9/55	8/56
22.	S.R. Sen Gupta	Administrator	2	9/56	11/56
23.	S.K. Sidhanta	Geology	12	9/55	9/56
24.	J. Singh	Irrigation Engg.	9	3/58	12/58

386-11-660-027 (Contd.)

Bengal Engineering College, Howrah

CONTRACTOR: WISCONSIN UNIVERSITY

Sr. No.	Name	Field	Period		
			Months	Dep.	Arr.
25.	H. Banerjee	Elec. Engg.	12	2/55	2/56
26.	D. Banerjee	Gas Turbines	6	3/57	8/57
27.	K.K. Banerjee	Applied Mech.	12	1/63	1/64
28.	A.K. Chaudhuri	Applied Mech.	12	2/55	2/56
29.	S.K. Chowdhury	Power Plant Design	12	8/57	8/58
30.	G. Dastodar	Civil Engg.	12	2/55	2/56
31.	B.K. Dutta	Mech. Engg.	12	2/55	2/56
32.	G.K. Panikar	Arch. Engg.	12	10/55	9/56
33.	S.N. Ray	Elect. Engg.	3	10/56	1/57
34.	A.C. Roy	Administrator	1	9/58	10/58

Bihar Institute of Technology, Sindri

35.	D.L. Deshpande	Administrator	2	9/56	11/56
36.	S.C. Ghosh	Str. Engg.	12	9/57	9/58
37.	R. Prasad	Elect. Engg.	24	1/56	1/58
38.	S. Ramachandran	Mech. Engg.	18	5/56	11/57

Birla College of Engineering, Pilani

39.	R.P. Jerath	Applied Chem.	24	8/55	8/57
40.	V. Lakshminarana	Administrator	3	4/56	7/56
41.	B.L. Maheshwari	Mech. Engg.	24	8/55	8/57
42.	N.K.N. Murthy	Civil Engg.	24	8/55	8/57
43.	I.J. Nagrath	Elect. Engg.	24	8/55	8/57

Indian Institute of Science, Bangalore

44.	J. Balachandra	Metallurgy	17	9/54	2/56
45.	C.S. Ghosh	Elect. Engg.	12	9/55	9/56
46.	K. Mahadevan	Int. Combust Engg.	16	9/54	12/55
47.	M.C. Munshi	Indl. Economics	8	9/54	5/55
48.	K.K. Nair	Elect. Comm.	18	1/55	6/56
49.	T.L. Ramachar	Electro-Chem.	12	9/54	8/55
50.	S. Ramaseshan	Physics	11	9/54	7/55
51.	P.L.N. Rao	Biochemistry	18	9/54	3/56
52.	K. Seetharamiah	Hydraulics	12	9/54	8/55
53.	P. Srinivasan	Mech. Engg.	22	9/54	7/56

386-11-660-027 (Contd.)

University of Roorkee, Roorkee

CONTRACTOR: WISCONSIN UNIVERSITY

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
54.	A. N. Khosla	Administrator	2-1/2	5/56	7/56
55.	M. N. Saxena	Metal Engg.	12	9/58	8/59
56.	N. K. Vaswani	Highway Engg.	12	9/58	8/59

Indian School of Mines & Applied Geology, Dhanbad

57.	B. K. Bhattacharya	Mining Engg.	6	7/57	1/58
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College of Engg. & Tech., Jadavpur

58.	T. Sen	Administrator	4	10/56	2/57
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## PHASE II

### FY 58 PARTICIPANTS

1.	S. C. Das	Technology	12	2/60	1/61
2.	A. M. Datta	Fine & Ind. Arts	12	2/60	1/61
3.	R. C. Mitra	Forging	10	2/60	12/60
4.	T. K. Subramanyam	Social Physics	14 <sup>60</sup>	2/60	3/61
5.	Y. D. Wadhwa	Fluid Mech.	12	2/60	1/61
6.	V. R. Reddy	Observation Tour	4	12/64	4/65
7.	P. Banerjee	Soil Mech.	12	1/60	2/61
8.	M. V. Kamlani	Power & Design	6	10/60	4/61
9.	A. M. Roy	Elect. Engg.	16	1/60	6/61
10.	S. J. Mukerjee	Mech. Engg.	16	1/60	6/61
11.	A. K. Deb	Sanitary Engg.	12	1/60	2/61
12.	Digvijay Singh	Thermodynamics	42	1/61	7/64
13.	P. S. Natarajan	Civil Engg.	12	9/61	9/62
14.	A. M. Srinivasan	Mechanical Engg.	12	9/61	9/62
15.	G. K. Ogale	Observation Tour	3	9/63	12/63

TECH EDU INSTITUTES (Contd.)

FY - 60 PARTICIPANTS

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	P. Dorai Babu	Geology	16	2/60	6/61
2.	S. Modi	Combustion Engg.	12	2/60	2/61
3.	P. Purushothaman	St. Engg.	16	2/60	6/61
4.	S. Natarajan	EE	18	2/60	8/61

FY - 61 PARTICIPANTS

1.	H.K. Pande	Agronomy	11	9/61	8/62
2.	B. Bhattacharya	Pub.H. Engg.	5-1/2	4/61	10/61
3.	D.K. Sen	Mine Engg.	14	1/62	3/63
4.	K.V.N. Lakshmanan	Mech. Tools	9-1/2	2/61	12/61
5.	D.K. Sen Gupta	Mining Geology	11	9/61	8/62
6.	V. Venkatasubramaniam	Highway Engg.	5	7/61	12/61
7.	P.D.S. Verma	Elasticity	11	5/61	5/62
8.	S.K. Handa	Observation Tour	3	12/64	4/65
9.	N.C. Bose	Soil Mech. (Observation Tour)	3	2/61	5/61
10.	P.N. Chatterjee	Hydraulics	4	6/62	11/62
11.	P.K. Das	Mech. Design	18	8/61	2/63
12.	J.L. Jethi	Elect. Engg.	11	1/61	12/61
13.	A.K. De	City Planning (Observation Tour)	2-1/2	5/61	8/61
14.	R.K. Suri	Heat Trans.	42	8/61	2/65
15.	R.S. Chaturvedi	Civil Engg.	6	5/62	11/62
16.	H.C. Misra	Hydraulics	42	8/61	2/65
17.	Amitava Mustafi	Elect. Engg.	18	8/61	3/63
18.	S.K. Mukherjee	Civil Engg. (Observation Tour)	3	7/63	11/63
19.	L.S. Sane	Mech. Engg.	12	9/62	9/63
20.	G.V. Sapre	Mech. Engg. (Observation Tour)	3	4/64	7/64

TECH EDU INSTITUTES (CONTD.)

FY - 62 PARTICIPANTS

<u>Sr.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u> <u>Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	S. D. Agarwal	Mech. Engg.	10	8/62	6/63
2.	L. V. Agashe	App. Geology	10	8/62	6/63
3.	N. N. Chattopadhyay	Mech. Engg.	9	8/62	5/63
4.	P. G. Deo	Physics	6	8/62	2/63
5.	D. N. Mitra	Mathematics	6	8/62	2/63
6.	K. Narayanaswamy	Mech. Engg.	12	8/62	8/63
7.	R. K. Mukerjee	Elect. Engg.	10	8/62	7/63
8.	M. G. Samant	Elect. Engg.	10	8/62	6/63
9.	C. P. Sinha	Math.	10	8/62	7/63
10.	L. R. Sharma	Chemistry	10	8/62	6/63
11.	M. K. Jain	Maths.	12	9/63	9/64
12.	N. Chakravartty	Printing Tech.	4	10/63	2/64
13.	L. R. Nagpal	Printing Tech.	4	10/63	2/64
14.	S. K. Khanna	CE	12	1/64	2/65
15.	Karamvir Mittal	Linear Prog.	16	8/64	12/65
16.	P. C. Chandrasekharam	Servo. Mech.	12	12/62	12/63
17.	S. Badrudin	Structure Engg.	29	8/62	1/65
18.	S. S. Peer Mohd.	Indl. Engg.	12	12/62	12/63
19.	S. Krishna	Arch.	10	8/62	6/63
20.	K. K. Prasad	Mech. Engg.	46	8/62	6/66
21.	J. K. Sen	Elect. Engg.	30	8/62	8/65
22.	R. S. Shukla	Elect. Engg.	10	8/62	6/63
23.	A. C. Srivastava	App. Math.	12	8/62	7/63
24.	B. G. Chatterjee	Chemistry	12	9/63	8/64
25.	D. Chaliha	Elect. Engg.	27	11/62	2/63
				6/63	8/64
26.	S. S. Sharma	Civil	25	2/63	2/65
27.	S. Natarajan	Civil	24	2/63	2/65
28.	A. K. Mitra	Chemistry	12	9/63	8/64
29.	P. Banerjee	Metallurgy	12	1/63	2/64
30.	V. K. Jain	Elect. Engg.	28	1/63	1/64
31.	G. C. Mitra	Arch.	12	9/62	9/63
32.	K. K. Banerjee	Gen. Edn.	12	1/63	1/64
33.	S. Narasimhan	Civil	32	9/62	5/65
34.	M. V. Rao	Civil	38	9/62	11/65

TECH EDU INSTITUTES (Contd.)

Sr. No.	Name	Field	Period		
			Months	Dep.	Arr.
35.	N. A. Ramaiah	Chemistry	12	7/63	7/64
36.	B. G. Deshpande	Elect. Engg.	12	1/63	12/63
37.	V. Y. Hardikar	Civil	12	1/63	12/63
38.	C. P. Kamath	Metallurgy	18	6/63	12/64
39.	J. N. Wartikar	App. Math.	12	1/63	12/63
40.	A. C. Patwardhan	App. Math.	12	1/63	12/63

FY - 62 PARTICIPANTS - TEACHING METHODS

41.	J. S. Arwikar	Mech. Engg.	10	8/64	7/65
42.	Jot Ram Bimbrahw	Mech. Engg.	10	8/64	7/65
43.	M. Chaudhuri	Electronics	10	8/64	7/65
44.	P. C. George	Public Health	10	9/64	7/65
45.	Bhalchandra M. Jani	Str. Engg.	10	8/64	7/65
46.	K. L. Joshi	Radio Physics	10	8/64	7/65
47.	P. P. Mowli	Pub. Health	10	8/64	7/65
48.	Sidheshwar Prasad	Civil Engg.	10	8/64	7/65
49.	Surya Prakash	Physics	10	8/64	7/65
50.	V. V. Sardesai	Mech. Engg.	6	8/64	7/65

RESEARCH SCHOLARS

1.	S. Banerjee	Cast Iron Metal	18	9/64	3/66
2.	B. P. Bhattacharyya	Control System Engg.	20	9/64	5/66
3.	C. A. Bijlani	Refrigeration	21	9/64	6/66
4.	R. C. Desai	Control Sys. Engg.	18	9/64	3/66
5.	R. K. Ghosh	Metal Cutting	18	9/64	3/66
6.	G. K. Grover	Mech. Vibration	18	9/64	3/66
7.	V. P. Gupta	Phy. Metallurgy	18	9/64	3/66
8.	P. Kundu	Elect. Engg.	19	1/65	9/66
9.	R. Kumar	Arch. & Planning	18	9/64	3/66
10.	S. C. Nandi	Structural Engg.	18	9/64	3/66
11.	N. M. Natarajan	Chemical Engg.	18	1/65	8/66
12.	P. K. Pande	Hyd. & Fluid Mech.	18	9/64	3/66
13.	B. Ramaswamy	Computers	18	1/65	8/66
14.	T. Satyanarayana	Soil & Water	18	9/64	3/66
15.	V. C. Shah	Soil & H. Wa.	18	9/64	3/66
16.	R. Subbayyan	Mach. & Control	18	1/65	7/66
17.	K. S. Sankaran	Civil Engg.	19	1/65	8/66
18.	M. C. Gupta	Mech. Engg.	19	1/65	8/66

AGRICULTURE EDUCATION AND RESEARCH - No Participants Element  
386-11-110-028

EDUCATION ADVISOR, MINISTRY OF EDUCATION  
386-11-680-050 - No Participants Element

SOCIAL WELFARE EDUCATION  
386-15-820-058

<u>Sr.</u> <u>No.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u> <u>Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	S. H. Pathak	Social Work	14	12/57	2/59
2.	K. C. Gangrade	-do-	12	9/58	9/59
3.	G. G. Dadlani	-do-	12	9/58	10/59
4.	S. Chandra	-do-	12	9/58	1/59
5.	R. S. Pandey	-do-	12	9/58	10/59
6.	R. R. Shastri	-do-	14	6/59	9/60
7.	S. K. Khinduka	-do-	10	9/60	7/61
8.	K. O. Peter	-do-	10	9/60	7/61
9.	R. K. Man Singh	-do-	12	1/61	2/62

HOME SCIENCE EDUCATION AND RESEARCH  
386-11-630-060

CONTRACTOR: UNIVERSITY OF TENNESSEE

Sr. No.	Name	Field	Period		
			Months	Dep.	Arr.
1.	S. Dantiyagi	Home Economics	12	9/56	8/57
2.	A. Samson	-do-	15	5/57	8/58
3.	A.K. Shroff	-do-	16	12/56	4/58
4.	N. Kher	-do-	12	3/57	4/58
5.	P.S. Das	-do-	12	6/56	7/57
6.	S. Suvarna	-do-	12	5/57	6/58
7.	H. Christie	-do-	12	5/57	6/58
8.	E.A. Sunderajan	-do-	12	6/56	6/57
9.	P. Devaraj	-do-	12	3/57	4/58
10.	J.T. Paul	-do-	12	6/56	6/57
11.	S. Ratnam	-do-	14	5/58	7/59
12.	B. Daftary	-do-	12	12/59	12/60
13.	A. Inamdar	-do-	12	12/59	12/60
14.	G. Baxter	-do-	12	12/59	12/60
15.	N.A. Nalini	-do-	12	12/59	12/60
16.	Gouri Mukherjee	-do-	12	12/59	12/60
17.	B. Sen	-do-	12	12/59	12/60
18.	P. Madhavi	-do-	12	12/59	12/60
19.	Shakun Joshi	-do-	12	12/59	12/60
20.	Fatima Akhtar	-do-	4	9/60	2/61
		(Administrative Visit)			
21.	Kusam Mehta	-do-	3	9/60	1/61
22.	A.R. Irawathy	-do-	3	9/60	1/61
23.	B.P. Menon	-do-	3	9/60	1/61
24.	N. Apitha	Home Economics	11	9/60	8/61
25.	K. Nirmala	-do-	15	9/60	12/61
26.	S. Randhawa	-do-	12	9/60	9/61
27.	B. Lakshmi Santa	-do-	12	9/60	9/61

ECONOMIC PLANNING  
386-11-750-062

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	B. D. Jain	Economic Dev.	12		
2.	K. N. Kohli	-do-	12		
3.	V. Kalyanasundaram	Mineral Eco.	6	9/58	4/59

MULTIPURPOSE SECONDARY EDUCATION  
386-11-650-063

CONTRACTOR: OHIO STATE UNIVERSITY

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Sponsoring Institute</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	M. S. Murari Rao	Technology	NCERT	7	11/62	6/63
2.	N. R. Ranganatha Rao	-do-	-do-	7	11/62	6/63
3.	B. Gopalan	-do-	-do-	7	11/62	6/63
4.	V. J. R. Hudli	Agriculture	-do-	7	11/62	6/63
5.	P. M. Sapre	Commerce	-do-	7	11/62	6/63
6.	S. G. Mathur	Indl. Arts & Crafts	-do-	7	11/62	7/63
7.	S. P. Ram	Technology	-do-	6	1/63	6/63
8.	S. Doraiswami (Mrs.)	Comprehensive Craft Edu.	-do-	3	2/64	6/64
9.	B. K. Sharma	Indl. Arts & Crafts	-do-	6	12/63	6/64
10.	N. Hassan	Commerce	-do-	6	9/65	3/66
11.	R. M. Nemade	-do-	-do-	6	9/65	3/66
12.	S. N. Sharma	Workshop Prac.	-do-	6	9/65	3/66
13.	K. Patnaik	Teaching of Crafts	-do-	6	9/65	3/66
14.	S. Nath	Agriculture	-do-	6	8/65	3/66
15.	M. A. Aswath- narayan	Tech. & Indus. Crafts	-do-	6	9/65	3/66
16.	Mohd. S. Khan	Commerce	-do-	6	9/65	3/66
17.	B. N. Singh	Science	-do-	6	9/65	3/66
18.	A. D. Banerjee	-do-	-do-	6	9/65	3/66
19.	P. N. Natu	Edn. Admn.	-do-	3	12/64	3/65

## Multipurpose Sec. Ed. (Contd.)

Sr. No.	Name	Field	Sponsoring Institute	Period Months	Dep.	Arr.
20.	S. A. Khurāishi	Agriculture	RCE, Mysore	6	12/63	6/64
21.	U. S. Prasad	Commerce	-do-	6	12/63	6/64
22.	G. Chaurasia	Teach. Edn.	-do-	3	12/64	3/65
23.	K. R. Sreenivasan	Agr. Teach.	-do-	6	12/64	6/65
24.	S. N. Prasad	Physics	-do-	6	12/66	6/67
25.	J. M. Jagadesa	Tech. & Indl. Arts	-do-	6	12/66	6/67
26.	T. G. Satyanarayanan	Organization & Curricula	MDS, Mysore	3	12/64	3/65
27.	M. G. Kelkar	Agriculture	RCE, Ajmer	6	12/63	6/64
28.	S. M. Ishaque	Tech. & Crafts	-do-	6	12/63	6/64
29.	S. S. Srivastava	Teach. of Agr.	-do-	6	12/64	6/65
30.	H. P. Sharma	Teaching	-do-	6	12/64	6/65
31.	S. B. Singh	Physics	-do-	6	12/66	6/67
32.	V. E. D. Rozario	Organization & Curricula	MDS, Ajmer	3	12/64	3/65
33.	R. C. Sharma	-do-	-do-	3	12/64	3/65
34.	A. Tripathy	Agriculture	RCE, Bhub.	6	12/63	6/64
35.	J. N. Bajpai	Agr. Teach.	-do-	6	12/64	6/65
36.	M. A. Chandrasekar	Physics	-do-	6	12/66	6/67
37.	K. Srinivasario	Chemistry	-do-	6	12/66	6/67
38.	K. K. Chakravarty	Math.	-do-	6	12/66	6/67
39.	S. P. Saksena	Chemistry	RCE, Bhopal	6	12/66	6/67
40.	P. K. Khanna	Biology	-do-	6	12/66	6/67
41.	R. P. Singh	Agriculture	IARI	6	12/63	6/64
1.	S. S. Kalra	Anatomy	UGC	12	9/65	9/66
2.	T. R. Anantharaman	Physical Metall.	UGC	10	1/65	11/65
3.	G. N. Venkataraman Rao	Boundary Layer	UGC	12	7/65	7/66
4.	A. K. Mahalanbis	Feedback Con.	UGC	10	5/65	2/66
5.	S. V. Rao	Economics	UGC	12	5/65	6/66
6.	K. R. Rao	Sociology	UGC	12	5/65	6/66
7.	D. N. Elhance	Adm. of Business Sch.	UGC	4	5/65	9/65
8.	B. S. Sonde	Solid State Elec.	UGC	4	4/66	8/66
9.	S. H. Rasul	Applied Geology	UGC	12	4/66	4/67

EDUCATION PROGRAM DIRECTION AND DEVELOPMENT  
386-11-690-066

Sr. No.	Name	Field	Period		
			Months	Dep.	Arr.
1.	B. Singh	Social Work	2	3/52	5/52
2.	M.R. Adharekar	Motion Pic. Tech.	1	9/52	10/52
3.	Divecha	-do-	1	9/52	10/52
4.	B. Kapoor	-do-	1	9/52	10/52
5.	M. Matrek	-do-	1	9/52	10/52
6.	K.M. Modi	-do-	1	9/52	10/52
7.	C. Shah	-do-	1	9/52	10/52
8.	B.N. Sircar	-do-	1	9/52	10/52
9.	K. Subramaniam	-do-	1	9/52	10/52
10.	K.G. Singh	Com. Activities	6	1/53	7/53
11.	Q.H. Zaidi	Curriculum Planning	6	1/53	7/53
12.	B.S. Rao(late)	Adult Education	6	1/53	6/53
13.	P.K. Trivedi	-do-	6	1/53	7/53
14.	S.M. Ahmed	Curriculum Planning	6	1/53	7/53
15.	S.G. Padhi	Vocational Ed.	6	1/53	7/53
16.	S. Prasad	Rural Welfare	6	1/53	7/53
17.	G. C. Sarma Barooa	Edl. Admn.	6	1/53	7/53
18.	U.K. Sharma	Elem. Ed. Tech.	7	1/53	8/53
19.	S.M. Sayeed	Rural Edn.	9	1/53	10/53
20.	G. Massey	Book Illustration	12	2/53	3/54
21.	S. Pai	Rural Welfare	6	7/53	12/53
22.	B.M. Bosee	Vocational Trng.	6	8/52	3/53
23.	R.L. Barooah	Rural Welfare	6	5/53	11/53
24.	M. Varma	Psychometrics	6	4/53	7/53
25.	J.N. Misra	Juvenile Delinq.	12	9/53	9/54
26.	S.S. Varma	Film Animation	8	1/54	9/54
27.	M.D. Bhavanani	Documentary Films	6	9/54	10/54
28.	P.B. Rao	Adv. Engg. Maths.	12	9/54	9/55
29.	S.S. Subramaniam	Pharmacognosy	6	1/55	7/55
30.	K.B. Nair	Embryology Edn.	6	2/55	8/55
31.	S.C. Sen	Voc. Teach. Edn.	6	3/56	9/56
32.	P.B. Shahani	Air Survey Meth.	12	3/56	3/57
33.	K.V. Chary	Ed. Testing	6	3/56	8/56
34.	S.K. Das	Tech. Education	12	3/56	3/57
35.	D.M. Desai	Ed. Testing	6	3/56	9/56
36.	M.V. Joshi	Teach. Training	12	3/56	2/57
37.	T.P. Lele	Ed. Testing	6	3/56	9/56
38.	C.V.D. Murthy	Tech. & Voc. Edn.	6	3/56	9/56
39.	M.D. Devadason	Ed. Testing	6	3/56	8/56
40.	V.K.R.V. Rao	Teach. Bus. Admn.	3	5/56	8/56
41.	D.N. Sinha	Foreign Lang. Teach.	12	9/56	8/57

386-11-690-066.(Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
42.	S.D. Galviya	Foreign Lang. Teach.	12	9/56	8/57
43.	M.A. Husain	Public Admn.	1	5/56	6/56
44.	A.K. Sen	Ed. Editors Conf.	18days	8/3/56	8/21/56
45.	M.M. Wasi	-do-	18 days	8/3/56	8/21/56
46.	B. Roy	Home Science	12	8/56	8/57

SCHOOL BUILDING IMPROVEMENT - No Participant Element  
386-11-690-074

INDIAN STATISTICAL INSTITUTE  
386-11-790-078

1.	G.V.S. Desikan	SQC Systems	9	8/60	6/61
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TRAINING IN PUBLIC ADMINISTRATION  
386-11-790-080

1.	S. Kumari	Pub. Admn. Ed.	15	9/57	12/58
2.	P.N. Masaldan	-do-	12	9/57	8/58
3.	V.N. Shukla	-do-	11	9/57	7/58
4.	D.P. Singh	-do-	11	9/57	7/58

RURAL INSTITUTES

386-11-690-107

NON-CONTRACT PARTICIPANTS

<u>Sr.</u> <u>No.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u> <u>Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	R. M. Andharia	Extension	12	9/59	7/60
2.	K. L. Basu	Research	12	9/59	7/60
3.	D. A. Bholay	Extension	12	9/59	7/60
4.	S. C. Jain	Research	12	9/59	7/60
5.	A. Krishnamurthi	Research	12	9/59	7/60
6.	N. S. Kulkarni	Research	12	9/59	7/60
7.	G. P. Krishna Rao	Extension	12	9/59	7/60
8.	P. L. Pareek	Extension	12	9/59	7/60
9.	P. Rangaswamy	Evaluation	12	9/59	7/60
10.	A. R. Saiyed	Evaluation	12	9/59	7/60
11.	B. M. Save	Extension	12	9/59	7/60
12.	J. M. Shah	Research	12	9/59	7/60
13.	M. K. Selvaraj	Extension	12	9/59	7/60
14.	B. Sen Gupta	Research	12	9/59	7/60
15.	K. K. Sinha	Research	12	9/59	7/60
16.	B. M. Singh	Extension	12	9/59	7/60
17.	G. S. Sisodia	Extension	12	9/59	7/60
18.	R. Subramaniam	Research	12	9/59	7/60
19.	H. S. Urmale	Research	12	9/59	7/60
20.	V. Virmani(Miss)	Extension	12	9/59	7/60

NATIONAL INSTITUTE OF BASIC EDUCATION  
386-11-690-114

CONTRACTOR: TEACHERS COLLEGE COLUMBIA UNIVERSITY

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Sponsoring Institute</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	R.K. De	Res. & Eval.	PG Basic Trg. Coll. Banipur	12	6/59	6/60
2.	M. Rahman	Sci. Ed. Elem. Schools	Teach. Trg. Coll. Bhagalpur	12	6/59	6/60

TRAINING IN ADULT EDUCATION  
386-11-670-118

CONTRACTOR: CORNELL UNIVERSITY

1.	H. P. Saksena	Research	NFEC	10	9/59	7/60
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CENTRAL INSTITUTE OF EDUCATION  
386-11-660-119

1.	U. C. Tripathi	Edl. Materials	Central Bureau of Textbook Res.	9	1/58	9/58
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TEACHER TRAINING IN AUDIO-VISUAL EDUCATION - No Participant Element  
386-11-690-120

NATIONAL PROFESSIONAL EDUCATION CENTER  
386-11-660-146

CONTRACTOR: TEACHERS COLLEGE COLUMBIA UNIVERSITY

1.	Udai Pareek	Edl. Eva.	NIE New Delhi	6	3/61	9/61
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TEACHER TRAINING IN ENGINEERING EDUCATION

386-11-660-154

FY-58 PARTICIPANTS

<u>Sr.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u> <u>Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	A. Achuthan	CE	13	8/58	9/59
2.	V.K. Agrawal	Metallurgy	23	8/58	7/60
3.	B.K. Ahuja	ME	34	9/58	7/61
4.	D.Aichbhamik	Arch.	18	9/58	3/60
5.	J.L. Ajmani	CE	18	1/59	7/60
6.	A.A. Anantha- narayanan	ME	18	8/58	3/60
7.	A. Bhattacharyya	ME	12	8/58	8/59
8.	D.R. Bhattacharyya	Metallurgy	33	8/58	5/61
9.	T.K. Bhattacharyya	Geophysics & Geo.	32	9/58	5/61
10.	S.K. Biswas	Chemical	36	8/58	10/61
11.	B.K. Bose	EE	18	8/58	3/60
12.	S. Chandra	ME	12	9/58	9/59
13.	D.K. Chawdhury	Geophysics & Geo.	32	9/58	5/61
14.	Roy S. Datta	CE	36	8/58	9/61
15.	S.K. Davar	Arch.	24	8/58	8/60
16.	A.K. De	ME	12	9/58	8/59
17.	V.P. Dewan	ME	12	9/58	9/59
18.	R.K. Dhar	Arch.	22	9/58	7/60
19.	C.R. Gangopadhyay	CE	40	9/58	12/61
20.	K.K.R. Dikshitulu	EE	25	8/58	9/60
21.	G. Gangadharan	EE	18	8/58	3/60
22.	D.N. Ghosh	Chemical	44	8/58	5/62
23.	D.S. Gill	Metallurgy	11	8/58	7/59
24.	T.S. Govindan	Chemical	48	8/58	9/62
25.	S.J. Gude	ME	19	9/58	4/60
26.	A.K. Guha	EE	12	9/58	9/59
27.	B.K. Gupta	ME	42	9/58	3/62
28.	M.M. Hasan	EE	18	9/58	3/60
29.	R. Jindal	CE	12	9/58	9/59
30.	V. I. John	EE	12	8/58	8/59
31.	R.S. Kalluri	EE	30	9/58	3/61
32.	D.V. Kapoor	ME	12	8/58	8/59
33.	B.V. Karlekar	ME	44	8/58	5/62
34.	A.R. Kelkar	EE	12	9/58	9/59
35.	A.K. Kayal	ME	19	8/58	4/60
36.	D.R. Kohli	EE	15	8/58	11/59

Teach. Trg. in Engg. Ed. (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
37.	S. Krishnamurthy	CE	19	8/58	3/60
38.	B.K. Mahanti	ME	18	8/58	3/60
39.	D.D. Mathur	Arch.	18	8/58	3/60
40.	S. Mirza	CE	37	1/59	2/62
41.	A.C. Mukherjee	Geology & Physics.	13	9/58	10/59
42.	N.S. Murthy	ME	19	9/58	4/60
43.	R. Prasad	ME	18	9/58	3/60
44.	I.K. Puri	Arch.	24	8/58	8/60
45.	P. Radhakrishnan	ME	15	8/58	11/59
46.	R.G. Ramakumar	EE	44	1/59	9/62
47.	M.V. Ramamoorthy	CE	18	8/58	3/60
48.	N. Rama Rao	EE	13	8/58	10/59
49.	R.S. Rao	EE	19	8/58	3/60
50.	G.V.N. Rayudu	ME	18	8/58	2/60
51.	V. Sadagopan	Metallurgy	48	8/58	9/62
52.	B.K. Sahu	Geophysics & Geo.	37	9/58	10/61
53.	R.C. Saxena	EE	23	8/58	8/60
54.	S.D. Sehgal	Metallurgy	11	8/59	7/60
55.	R. Sharan	Metallurgy	12	8/59	7/60
56.	S.S. Sharma	CE	12	9/58	9/59
57.	B.N. Srimani	Chem. Engg.	18	8/58	3/60
58.	L. Srinivasan	ME	18	8/58	3/60
59.	M.D. Srinath	EE	38	9/58	11/61

FY-59 PARTICIPANTS

1.	Q.A. Ahmad	ME	12	9/59	9/60
2.	A.K. Aiyer	CE	13	8/59	9/60
3.	B.P. Ambasht	ME	14	8/59	11/60
4.	T.M. Ameer Ahmed	CE	19	1/60	8/61
5.	M.Y. Ansari	CE	12	8/59	9/60
6.	K.V. Apparao	ME	12	8/59	8/60
7.	K. Arumugam	CE	15	1/60	3/61
8.	A.S. Arya	CE	21	8/59	5/61
9.	G.R. Bahri	CE	36	8/59	8/62
10.	V. Balasundaram	EE	18	8/59	2/61
11.	A.K. Banerjee	Arch.	13	8/59	9/60
12.	J. Banerjee	ME	18	8/59	2/61
13.	J.S. Bajwa	EE	33	3/60	12/62
14.	S.S. Bhasin	EE	23	8/59	7/61
15.	S.G. Bhonsale	EE	13	8/59	9/60
16.	N.N. Biswas	EE	12	8/59	9/60

Teach. Trg. in Engg. Ed. (Contd.)

<u>Sr.</u> <u>No.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u> <u>Months</u>	<u>Dep.</u>	<u>Arr.</u>
17.	T. Bose	EE	13	8/59	9/60
18.	V.V. Chalam	EE	29	2/60	7/62
19.	P.N. Chaudhari	EE	12	8/59	9/60
20.	B. Chatterjee	EE	12	9/59	9/60
21.	C. Chiranjivi	Chem.	12	8/59	8/60
22.	S.K. Damle	CE	13	8/59	9/60
23.	K.L. Datta	Arch.	12	8/59	8/60
24.	R.M. Dave	CE	12	8/59	8/60
25.	P. Dayaratnam	CE	34	8/59	6/62
26.	G.N. Desai	CE	12	8/59	8/60
27.	S.D. Desai	Geology	14	1/60	3/61
28.	A.K. Dhol	ME	12	8/59	9/60
29.	S.K. Dikshit	Metallurgy	18	8/59	2/61
30.	M.A. Dorai	ME	12	8/59	9/60
31.	H.N. Dutta	Mining	14	8/59	10/60
32.	V. Dwarkaprasad	CE	13	8/59	9/60
33.	S.M.E. Haque	EE	17	9/59	2/61
34.	K. Ganapathy	EE	18	8/59	2/61
35.	D.P. Garg	ME	13	8/59	10/60
36.	P.J. George	ME	13	8/59	10/60
37.	C.V. Girjavallabhan	CE	13	8/59	10/60
38.	M.B. Gopalakrishnan	CE	24	8/59	8/61
39.	S.P. Gupta	CE	25	8/59	9/61
40.	J.R. Handa	EE	18	8/59	3/61
41.	H.M. Ismail	CE	13	8/59	10/60
42.	C.M. Jain	Mining	15	2/60	5/61
43.	S.P. Jain	Metallurgy	14	8/59	11/60
44.	Jalaluddin	EE	22	9/59	6/61
45.	B. Janakiramaiah	Geology	19	8/59	6/61
46.	D.P. Joshi	Arch.	12	8/59	8/60
47.	R.N. Kackar	Arch.	14	8/59	10/60
48.	P.J. Kangle	Chem.	13	1/60	2/61
49.	R.C.D. Kaushik	Textile	19	8/59	4/61

Teach. Trg. in Engg. Ed. (Contd.)

<u>Sr.</u> <u>No.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u> <u>Months</u>	<u>Dep.</u>	<u>Arr.</u>
50.	P.R. Khangaonkar	Metallurgy	33	8/59	6/62
51.	M.F. Khudrathullah	EE	18	8/59	2/61
52.	K.M. Kothari	EE	18	1/60	6/61
53.	C. Krishnamurthy	EE	18	9/59	2/61
54.	N. Krishnamurthy	CE	38	8/59	10/62
55.	M. Lal	EE	36	1/60	1/63
56.	S.K. Malhotra	CE	41	9/59	1/63
57.	S.L. Malhotra	Metallurgy	14	8/59	11/60
58.	M.A. Manan	ME	17	9/59	2/61
59.	L.B. Mankani	ME	12	8/59	8/60
60.	V.K. Mathur	Chem.	19	8/59	3/61
61.	A.K. Mehta	ME	13	8/59	9/60
62.	P. Meiyappan	CE	13	1/60	2/61
63.	H.S. Mejie	ME	10	8/59	7/60
64.	R.K. Merwade	EE	18	8/59	3/61
65.	A.G. Mirajgoaker	CE	23	8/59	8/61
66.	T.R. Mohan	ME	12	8/59	9/60
67.	D.V.S. Muni Swamy	Textile	19	8/59	3/61
68.	V. Muthuveerappan	ME	18	8/59	2/61
69.	B.R. Nag	CE	12	8/59	8/60
70.	C.J. Nagabhushana	ME	17	2/60	6/61
71.	N.K. Naidu	EE	12	9/59	8/60
72.	A.K. Narasimhan	CE	12	8/59	9/60
73.	M.P. Narasimha	ME	26	8/59	10/61
74.	I.C. Nayak	EE	13	8/59	9/60
75.	I.V. Nayak	CE	18	8/59	3/61
76.	B.N. Neogy	CE	12	8/59	8/60
77.	P.K. Patel	ME	13	8/59	9/60
78.	N. Patnaik	ME	36	1/60	2/63
79.	P.U. Paul	CE	13	8/59	9/60
80.	W.D. Paul	ME	18	1/60	6/61
81.	D.N. Pestonji	ME	13	1/60	2/61
82.	S.D. Phatak	EE	13	8/59	9/60
83.	S. Phukan	CE	18	1/60	7/61
84.	H.S. Ponnuraj	EE	17	9/59	3/61
85.	S. Prakash	CE	29	8/59	1/62
86.	J. Prasad	ME	12	8/59	8/60
87.	V. Rai	EE	18	8/59	2/61
88.	T.C. Rajagopalan	ME	18	8/59	2/61
89.	P.S. Ramachandran	Chem	13	8/59	10/60
90.	S.M. Ramchandra	ME	33	8/59	5/62
91.	B. Ramaswamy	EE	12	8/59	8/60
92.	L.N. Ramamurthy	CE	15	8/59	12/60

Teach. Training in Engg. Ed. (Contd.)

<u>Sr.</u>	<u>Name</u>	<u>Field</u>	<u>Period</u> <u>Months</u>	<u>Dep.</u>	<u>Arr.</u>
93.	M.V. Ranganath	CE	16	8/59	12/60
94.	B.M.B. Rao	ME	12	8/59	9/60
95.	B.N., B.V. Rao	CE	13	8/59	9/60
96.	H.D. Rao	EE	18	8/59	3/61
97.	V.K. Rao	ME	18	8/59	3/61
98.	C.N. Rao	Geology	12	8/59	9/60
99.	H.M. Rao	EE	18	8/59	3/61
100.	K.K. Rao	CE	13	8/59	10/60
101.	M.V. Ratnam	CE	31	8/59	3/62
102.	D.P. Ray	CE	16	8/59	12/60
103.	E.S. Reddi	CE	13	8/59	9/60
104.	C. Roy	Mining	15	8/59	11/60
105.	N. Roy	CE	13	8/59	9/60
106.	R. Sahay	ME	18	8/59	2/60
107.	O.S. Sahgal	CE	28	8/59	12/61
108.	R.K. Sahu	Arch.	19	8/59	3/61
109.	G.G. Salem	ME	18	8/59	2/61
110.	C.K. Sarkar	CE	12	8/59	8/60
111.	N. Sarkar	EE	13	1/60	2/61
112.	L.B. Sastry	EE	12	8/59	8/60
113.	P.V.V.S. Sastry	EE	16	8/59	12/60
114.	V.G. Sastry	ME	18	1/60	6/61
115.	V.V. Sastry	CE	10	8/59	7/60
116.	K. Seetharamulu	CE	18	8/59	2/61
117.	B. Sen	CE	12	8/59	8/60
118.	M. Selot	EE	31	1/60	9/62
119.	P.K. Sen	Metallurgy	12	8/59	8/60
120.	B.K. Sen Gupta	Geology	15	8/59	11/60
121.	V. Seshadri	EE	22	8/59	6/61
122.	S. Shanmugham	CE	10	8/59	7/60
123.	S.R. Shankar	EE	12	8/59	8/60
124.	S.B. L. Sherry	Chem.	13	8/59	9/60
125.	B.D. Shiwalkar	ME	13	8/59	10/60
126.	J.N. Shrivastava	Geology	17	1/60	9/61
127.	S.N. Sinha	ME	37	8/59	9/62
128.	K.C. Singhal	ME	13	8/59	9/60
129.	B.P. Sinha	CE	36	8/59	9/62
130.	M. Sitaramaraju	CE	18	8/59	3/61
131.	M. Sivakumar	CE	13	1/60	2/61
132.	N.M.R. Sreedharan	ME	13	8/59	9/60
133.	S. Srikantiah	Textile	19	1/60	8/61
134.	K. Srinivasan	CE	13	8/59	9/60
135.	V. Srinivasagopalan	CE	13	8/59	9/60

Teach. Trg. in Engg. Ed. (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
136.	K. Subramanayam	ME	13	1/60	2/61
137.	R.A. Sundaram	CE	15	8/59	11/60
138.	D.G. Tamaskar	EE	17	1/60	6/61
139.	V. Tatabhai	EE	13	8/59	9/60
140.	B. Thapar	EE	40	8/59	12/62
141.	B.L. Vaishnavi	CE	17	1/60	6/61
142.	R.N. Varadarajan	ME	12	8/59	9/60
143.	D.V.R. Vithal	EE	18	8/59	3/61
144.	C. Venkateswarlu	Chem.	13	8/59	9/60
145.	N.P. Wadhwa	Geology	20	1/60	10/61

FY-1960 PARTICIPANTS

1.	D.S. Achtani	ME	13	8/60	9/61
2.	B.C. Agarwal	Metallurgy	13	8/60	10/61
3.	S. Ananthawamy	ME	13	8/60	9/61
4.	C.P. Arora	ME	12	8/60	7/61
5.	P.L. Ballaney	ME	12	8/60	8/61
6.	V.S. Bansal	EE	11	8/60	7/61
7.	S.K. Basu	EE	18	8/60	2/62
8.	A.R. Chandrasekaran	CE	12	8/60	8/61
9.	A.K. Chatterjee	Arch.	11	8/60	7/61
10.	R.G. Chatterjee	Physics	12	8/60	8/61
11.	Nilay Chaudhuri	CE	42	8/60	3/64
12.	D.S. Chehil	Maths.	47	8/60	7/64
13.	A.M. Chowdiah	CE	38	8/60	10/63
14.	C.H. Doshi	Text.	18	8/60	2/62
15.	Om Dutt	CE	13	8/60	10/61
16.	B.N.P. Ghildyal	Soil Physics	13	8/60	10/61
17.	S.C. Goyal	CE	12	8/60	8/61
18.	C.P. Gupta	ME	39	8/60	11/63
19.	N.L. Jain	ME	12	8/60	8/61
20.	T.S. Jayadeviah	EE	17	2/61	6/62
21.	S. Kannappan	ME	11	8/60	7/61
22.	B.K. Kaul	CE	12	8/60	8/61
23.	C.P. Kothandaraman	ME	11	8/60	7/61
24.	S.R. Krishnamurthy	EE	18	8/60	3/62

Teach. Trg. in Engg. Ed. (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
25.	Vijay Kumar	Arch.	12	8/60	8/61
26.	D.P. Lahiri	Metallurgy	12	8/60	8/61
27.	N.S. Lakshmanarao	CE	34	8/60	7/63
28.	K.C. Lalvani	Indl. Engg.	10	8/60	6/61
29.	S.V. Mallapur	ME	13	8/60	9/61
30.	P.N. Maskara	ME	13	8/60	9/61
31.	N.C. Mathur	EE	36	8/60	1/64
32.	K.S. Murthy	EE	18	8/60	2/62
33.	M.K. Namboodiri	Textile	19	8/60	3/62
34.	S.S. Niyogi	EE	18	1/61	2/62
35.	K.C. Pal	ME	11	9/60	8/61
36.	S. Palaniappan	ME	13	8/60	9/61
37.	K.C. Pande	Physics	13	1/61	2/62
38.	G.I. Parthasarthy	EE	18	8/60	2/62
39.	S.S. Patel	ME	3	8/60	11/60
40.	M.M. Pathan	Physics	18	8/60	3/62
41.	B.S. Rao	EE	17	1/61	6/62
42.	R. Giri Rao	CE	12	8/60	9/61
43.	S. Ramanathan	CE	12	8/60	9/61
44.	S. Ramaseshan	CE	44	8/60	5/64
45.	S. Rangarajan	Chem.	13	8/60	9/61
46.	S.K. Roy	CE	12	8/60	8/61
47.	S.S. Saluja	Mining	22	1/61	12/62
48.	P.S. Satsangi	EE	11	8/60	7/61
49.	A.K. Sengupta	Textile	19	8/60	3/62
50.	C.D. Shah	Tech. Chem.	6	8/60	2/61
51.	P.C. Sharma	CE	50	8/60	9/64
52.	S.R. Sikdar	AEE	13	8/60	9/61
53.	L.S. Srivastava	Geology	12	8/60	8/61
54.	A. Subbakrishniah	Arch.	13	8/60	9/61
55.	A. Rama Subbaiah	CE	12	1/61	2/62
56.	N.K. Suryanarayanan	EE	11	8/60	7/61
57.	P. Swaminathan	EE	12	8/60	7/61
58.	S. Vasudeva	CE	30	8/60	2/63
59.	K. Venkatraman	ME	13	8/60	9/61

Teach. Trg. in Engg. Ed. (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
FY-1961 PARTICIPANTS					
1.	C.V. Agarwal	Chemistry	12	8/61	8/62
2.	V.V. Athani	EE	13	8/61	9/72
3.	V.K. Balakrishnan	Mathematics	34	8/61	6/64
4.	P.K. Chatterjee	Physics	12	8/61	8/62
5.	R.D. Chaudhari	Metallurgy	34	8/61	6/64
6.	B.S. Chhokar	ME	13	8/61	9/62
7.	V.R. Ekbote	EE	17	8/61	1/63
8.	K.P. Gupta	Chemical	34	8/61	6/64
9.	T.S.K.V. Iyer	EE	11	8/61	7/62
10.	G.K. Kanhere	Arch.	21	8/61	5/63
11.	C.R. Keshava Rao	Civil Engg.	11	8/61	7/62
12.	V.C. Kulandaiswamy	Civil Engg.	31	8/61	3/64
13.	S.P. Luthra	Mech. Engg.	8	8/61	4/62
14.	P.K. Mukerjee	Geology	12	8/61	8/62
15.	B.S. Murthy	Mech. Engg.	11	8/61	7/62
16.	M.V. Natrajan	Textile	19	8/61	3/63
17.	G.S. Pandit	EE	11	8/61	7/62
18.	R. Prakash	ME	12	8/61	8/62
19.	O.P. Puri	Physics	20	8/61	4/63
20.	V. Ramachandran	Metallurgy	13	8/61	9/62
21.	A.B. Raman	Applied Geo.	17	8/61	1/63
22.	J.V. Rao	Civil Engg.	7	8/61	3/62
23.	P.V. Rao	Civil Engg.	34	8/61	7/64
24.	T.V. Rao	ME	20	9/61	6/63
25.	V.A. Rao	EE	13	8/61	9/62
26.	S.K. Saraf	Chemical Engg.	38	8/61	10/64
27.	C.R. Sastry	EE	11	8/61	7/62
28.	S.B. Sehgal	Civil Engg.	38	8/61	10/64
29.	N.A. Shah	Civil Engg.	10	8/61	5/62
30.	C.C. Shah	Mathematics	10	8/61	6/62
31.	A. Shariff	ME	12	8/61	7/62
32.	R.P. Singh	Chemistry	30	8/61	1/64
33.	S.K. Sood	ME	13	8/61	9/62
34.	S.D. Talwar	Civil Engg.	12	8/61	8/62
35.	V.B. Vaidya	Arch.	10	8/61	6/62
36.	S.S. Warty	Textile Engg.	10	8/61	6/62

ORGANIZATION AND MANAGEMENT

386-11-720-170

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Sponsoring Institute</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
1.	R. Champakalakshmi	Org. & Mng.	O & M Divn. MOF	7	8/60	3/61
2.	G.R. Kulkarni	-do-	-do-	4	7/61	11/61
3.	Dr. Kaumudi(Miss)	-do-	-do-	9	10/61	7/62
4.	Henry Pant	-do-	Central Statis- cal Org. Delhi	7	9/61	5/62
5.	S.M. Goel	-do-	Directorate of Civil Supplies Himachal Pradesh Simla	7	9/61	4/62

NATIONAL INSTITUTE OF EDUCATION

386-11-660-184

CONTRACTOR: TEACHERS COLLEGE COLUMBIA UNIVERSITY

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
F.Y-1962 and Prior Years					
1.	C.L. Bhatt(Miss)	Guidance	5	9/61	2/62
2.	J.N. Das	Ed. & Voc.	5	9/61	2/62
		Guidance			
3.	S.M. Divekar	Ed. Admn.	5	9/61	2/62
4.	S.V. Jevoor	Sec. Ed. Inst.	5	9/61	2/62
5.	R.G. Misra	Psych. & Guidance	5	9/61	2/62
6.	S.K. Pal	-do-	6	9/61	3/62
7.	I.J. Patel	Curr. & T. Trng.	5	9/61	3/62
8.	B. Prasad	Ed. Admin.	5	9/61	2/62
9.	J.D. Raulkar	Coop. Prog.	4	9/61	1/62
10.	R.P. Singh	Ed. Instruction	3	9/61	12/61

National Inst. of Ed. (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
11.	K. Venkatasubramaniam	Teacher Trng.	5	9/61	2/62
12.	Sunitee Dutt (Miss)	Nursery & Child Welfare Edu.	9	9/62	6/63
13.	V. Franklin	Textbook Prod.	8	9/62	5/63
14.	Adarsh Khanna (Miss)	Elem. Teacher Trng.	8	9/62	5/63
15.	P.R. Mehta	Ed. Testing	10	9/62	7/63
16.	G.H. Nafde	Dev. of Guidance	9	9/62	6/63
17.	B.N. Pandey	Comp. Edu.	8	9/62	5/63
18.	M.C. Pant	Gen. Science	10	9/62	7/63
19.	D.S. Rawat	Edu. Testing	6	9/62	3/63
20.	S.S. Sharma	Science	10	9/62	5/63
21.	S.N. Tripathi	Educ. Research	10	9/62	7/63
22.	C.K. Vajpai	Textbook Inst.	10	9/62	7/63
23.	V.N. Wanchoo	Physical Science	10	9/62	7/63

FY-63 PARTICIPANTS

24.	H.L. Chugh	Res. Methodology	12	9/63	9/64
25.	B. Mehdi	Ed. of gifted children	11	9/63	8/64
26.	S.N. Mukhopadhyay	Ed. Finance	9	9/63	7/64
27.	Shankar Narayan	Audio-visual Ed.	9	9/63	7/64
28.	B.S. Parakh	Textbook & Curr.	9	9/63	6/64
29.	P.K. Roy	Ed. Research	5	1/64	6/64
30.	R.C. Saxena	Maths. & Teaching	6	9/63	6/64
31.	Raja Roy Singh	Admn. Visit	1	10/63	12/63
32.	H.P. Saxena	Soc. Foundn.	17	9/63	2/65

FY-64 PARTICIPANTS

33.	A.K. Vidyalkar	Curr. & Lang. Teaching & Ling.	12	6/64	7/65
34.	D.N. Gaiind	Curr. & Dev. of Instr. materials	9	9/64	6/65

National Inst. of Ed. (Contd.)

<u>Sr. No.</u>	<u>Name</u>	<u>Field</u>	<u>Period Months</u>	<u>Dep.</u>	<u>Arr.</u>
35.	S.N. Katiyar	Curr. & Adv. Methodology of Teaching	9	9/64	7/65
36.	A.K. Sen	Public Health & Health Edu.	9	9/64	7/65
37.	M.B. Buch	Inservice and Teacher Edu.	6	12/64	6/65
38.	Bimla Bhatnagar (Mrs.)	Home & Family Life Edu.	10	9/65	6/66
39.	R.C. Sharma	Ed. Plng. and Financing	21	9/65	5/67
40.	N.P. Bhattacharya	Audio-visual Education	6	9/65	3/66
41.	Nalini Singhal(Miss)	Child Psychology & Development	24	9/65	12/66
42.	ABL Srivastava	Ed. Statistics	6	12/65	5/66
43.	S.N. Saha	Ed. Evaluation	9	9/65	6/66
44.	K.G. Rastogi	Ed. Evaluation & Measurement	10	3/66	1/67
45.	K.P. Surindernath	Inservice Ed.	10	3/66	1/67
46.	R.K. Mathur	Statistics and Psychometrics	11	3/66	2/67
47.	B.C. Rokadiya	Adult Education	11	3/66	2/67

APPENDIX B

UNIVERSITY CONTRACT EXECUTIVE VISITORS

Executive visits to India of contractors' administrative officers under specified conditions are usually provided for in university/A.I.D. contracts. The major purpose of an executive visit is administrative in connection with the planning/implementation/evaluation of the contractor's work in India. Such visitors are not classified herein as U.S. technicians, either on-roll or contract, nor are they GOI requested. The list of executive visitors to India follows:

386-11-660-027: TECHNICAL EDUCATION INSTITUTES

<u>Sr.</u>	<u>No.</u>	<u>Name</u>	<u>Designation</u>	<u>University/Institute</u>	<u>Period of Visit</u>
	1.	D.G. Carter	Campus Coordinator	Univ. of Illinois	June/July, 1953
	2.	V.L. Parsegian	Campus Coordinator	Rensselaer Poly.Inst.	June/July, 1955
	3.	W.L.Everitt	Dean	Coll. of Engg. UOI	Jan./March, 1963 Feb./March, 1958
	4.	I.L. Baldwin	Vice-President	Univ. of Wisconsin	Nov./Dec., 1956
	5.	K.F. Wendt	Dean	College of Engg. Univ. of Wisconsin	June 1953 and August 1958
	6.	H.A. Peterson	Professor	Elec.Engg.Dpt UOW	June 1953
	7.	R.C. Hay	Campus Coordinator	Univ. of Illinois	Jan.Feb., 1959
	8.	F.H. Harrington	Vice-President	Univ. of Wisconsin	April/May, 1960
	9.	E. Young	Chairman	Eco. Dept. UOW	April/May, 1960
	10.	J.D. Ryder	Dean	Michigan State U.	Jan./Feb., 1961
	11.	Prof. H.C. King	Asst. to the Dean	-do-	Jan./Feb., 1961
	12.	Ross J. Martin	Director	Engg. Exp. Stn. UOI	January, 1962
	13.	Merton R. Barry	Campus Coordinator	Univ. of Wisconsin	March 1962 and March 1964
	14.	Glen Taggart	Dean of Int. Prog.	Michigan State U.	February, 1962
	15.	U. Jeffries	Campus Coordinator	Michigan State U.	Apr./May, 1962 and March 1964

386-15-820-058: SOCIAL WELFARE EDUCATION

	1.	Ernest F. Witte	Director	Council on Social Work Education	November, 1957
	2.	K.A. Kendall	Asst. Director	-do-	January, 1961

Exec. Visitors (Contd.)

386-11-630-060: HOME SCIENCE EDUCATION AND RESEARCH

<u>Sr. No.</u>	<u>Name</u>	<u>Designation</u>	<u>University/Inst.</u>	<u>Period of Visit</u>
1.	J.K. Harris	Dean	Coll. of Home Eco. Univ. of Tennessee	July, 1954 & Jan/April, 1957
2.	M. Fedde	Campus Coordinator	Univ. of Tennessee	July/Aug., 1955
3.	C.E. Brehm	President	Univ. of Tennessee	March 1956
4.	F. Zuill	Dean	Coll. of Home Eco. Univ. of Wisc.	Jan. /April, 1957
5.	M.L. Browder	Campus Coordinator	Univ. of Tennessee	Oct. 1958 & July/Aug. 1960
6.	Lura M. Odland	Dean	Coll. of Home Eco. Univ. of Tennessee	Nov. /Dec. 1960
7.	Harold Reed	Vice-President	Univ. of Tennessee	Feb. 1962

386-11-650-063: MULTIPURPOSE SECONDARY EDUCATION

1.	L.D. Haskew	Dean	Coll. of Educ. Univ. of Texas	June 1955
2.	D. Cottrell	Dean	Coll. of Educ. Ohio State Univ.	Nov. /Dec., 1956 Dec. 1960/Jan. 61 Jan. 2, 64-Jan. 24, 64
3.	D.A. Severino	Associate Dean	Coll. of Educ. Ohio State Univ.	Jan. /Feb., 1959 Feb. 1962

386-11-690-107: RURAL INSTITUTES

1.	Louis Smith	Dean	Berea College	Sept. /Dec. 1961
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386-11-660-150: INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

1.	R.L. Halfman			
2.	J.A. Hrones			
3.	S. Brooks	Campus Coordinator		April 1966
4.	Edward Baker	Asst. Treasurer		

ESI CONTRACT EVALUATION TEAM

1.	D.H. Buchanan			
2.	A.W. Toker			
3.	H.M. DeGroff			
4.	F.C. Lindvall			
5.	Mr. & Mrs. B.R. Teare			
6.	L.B. King			
7.	S.W. Churchill			

Exec. Visitors (Contd.)

386-11-660-184: NATIONAL INSTITUTE OF EDUCATION

<u>Sr. No.</u>	<u>Name</u>	<u>Designation</u>	<u>University/Inst.</u>	<u>Period of Visit</u>
1.	David Scanlon	Campus Coordinator-	Teachers Coll. Columbia Univ.	April 1959
2.	J.H. Fischer	Dean	-do-	Jan. 1960
3.	W.H. Griffin	Campus Coordinator	-do-	Nov. /Dec. 1961
4.	R.F. Butts	Dir. of International Studies	-do-	March/Apr. 1962
5.	R.J. Schaefer	Dean	-do-	1/16/64-1/27/64
6.	J.L. Davis		-do-	2/21/65-4/8/65

386-11-660-226: SCIENCE EDUCATION IMPROVEMENT PROJECT (Formerly  
Summer Institutes & Sciences)

1.	D.A. Severino	Campus Coordinator	Coll. of Educ. Ohio State Univ.	July 5-25, 1964 July 12-26, 1965 March 1966
2.	H.F. Wendt	Dean	Coll. of Engg. UOW	August 1965
3.	H.E. McCallick	Dean	Coll. of Tech. UOH	July 1965
4.	C.F. McElhinney	Sr. Vice-President	-do-	July-Aug. 1965
5.	P.G. Hoffman	President	-do-	June-July, 1965
6.	Merton Barry	Campus Coordinator	Univ. of Wisc.	July 1966
7.	F. Shoemaker	-do-	Teachers Coll. Columbia Univ.	Feb. 14-22, 1965 May 1966
8.	Lewis A. Gist	Ass. Prog. Dir. Summer Study Prog.	National Science Foundation	4/67-5/12/67
9.	John K. Major	Staff Associate Univ. Sc. Dev. Sec.	-do-	April 1967
10.	Arthur Roe	Head, OISA	-do-	3/29/67 7/10/67
11.	John T. Wilson	Deputy	-do-	July 10-16, 1967

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APPENDIX C

U.S. Assistance in Education  
('000 of dollars & rupees)

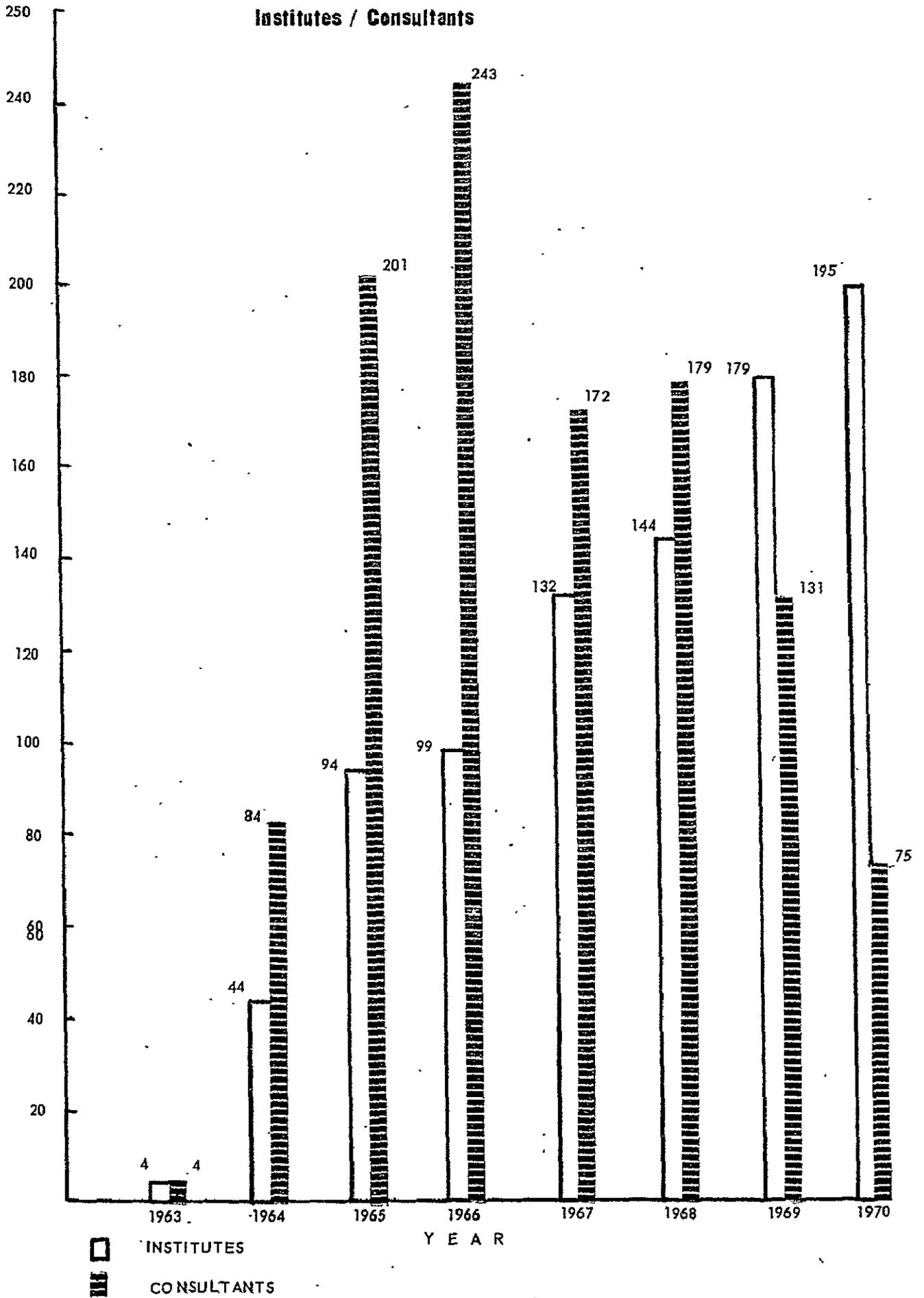
<u>Project No.</u>	<u>Dollar Funds</u>	<u>Rupee Funds</u>			
		<u>Trust Fund</u>	<u>Sec. 402</u>	<u>PL 480</u>	
		<u>Grant</u>	<u>Grant</u>	<u>Grant</u>	<u>Loan</u>
-027	4,481	-	3,886	1,200	-
-050	58	-	-	-	-
-058	581	-	224	-	-
-060	1,045	-	224	-	-
-062	37	-	-	-	-
-063	3,924	4,713	3,352	-	-
-065	171	-	-	-	-
-066	189	-	-	-	-
-073	60	-	-	-	-
-074	62	-	-	-	-
-078	128	-	69	-	-
-080	55	-	-	-	-
-107	222	-	255	-	-
-109	75*	380*	-	-	-
-114	29	-	-	-	-
-118	51	-	9	-	-
-119	14	-	-	-	-
-120	160	-	-	-	-
-146	391	-	-	-	-
-150	13,846	15,525	6,087	52,000	54,100
-154	2,250	-	1,690	-	-
-184	2,143	79	2,954	-	-
-213	-	-	-	165,600	408,500
-218	-	-	-	783,073	329,500
-226	6,527	26,983	3,416	-	-
-228	7,300**	-	-	-	-
-232	-	4	137	-	-
-392	-	275	-	-	-
-393	-	-	-	30,000	-
-395	302	2,223	-	-	-
L.H.	-	-	-	7,935	-
Misc.	461	-	-	-	-
	<u>37,262</u>	<u>50,182</u>	<u>22,303</u>	<u>1,039,808</u>	<u>792,100</u>
	7,300**				

\*Funds contracted. Actual expenditure may be lesser. \*\*Loan

- Sources: 1. Project Status Reports - Dollar Fund Allotments - 31 March 1972  
2. Project Status Reports - Rupee Funds - 31 March 1972  
3. Financial Management Report on Completed Projects as of 6/30/71  
4. Annual Financial Management Reports on Status of U.S. Assistance Program as of June 30, 1971

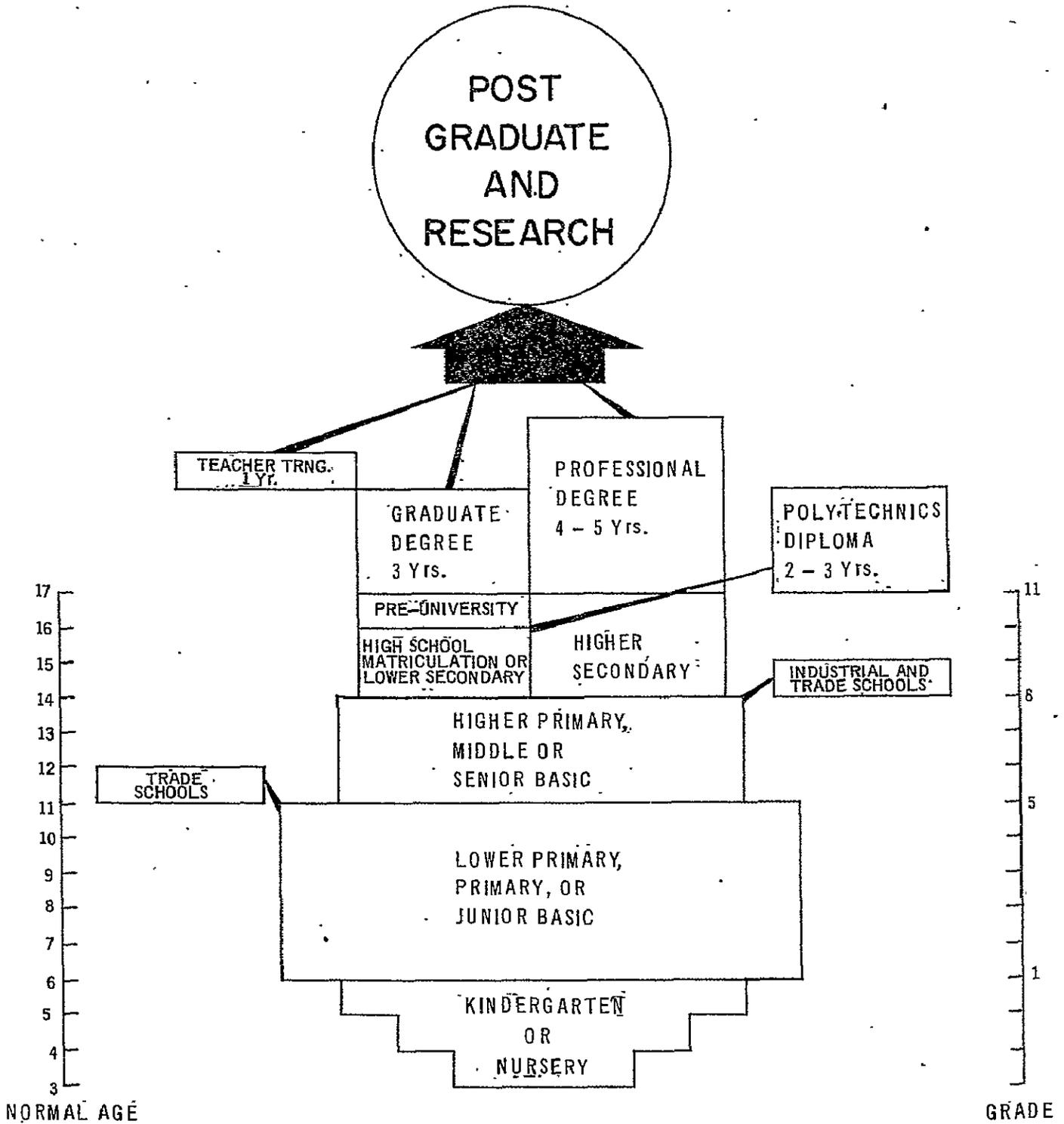
APPENDIX D

SUMMER SCIENCE INSTITUTES  
Institutes / Consultants



APPENDIX E

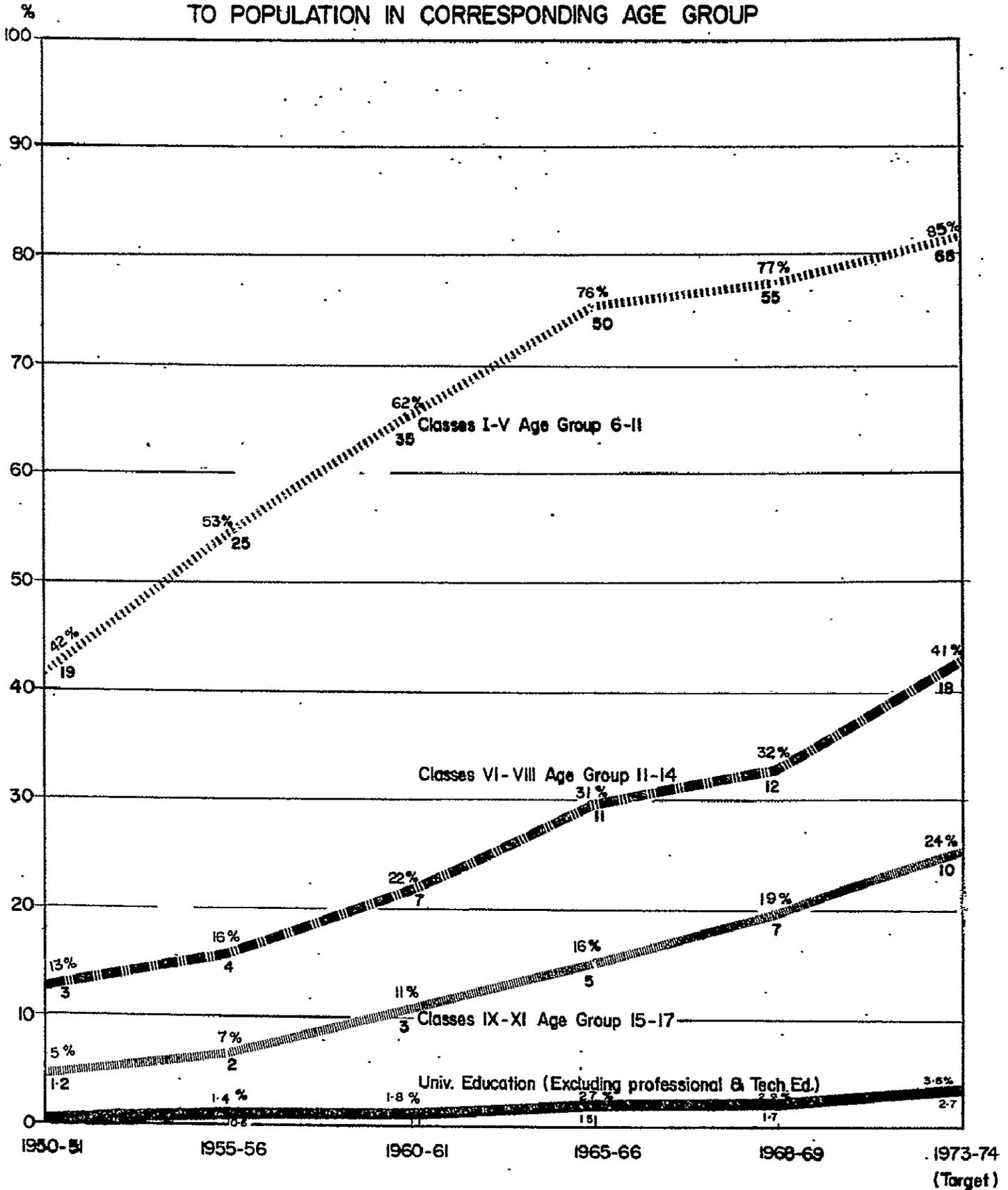
# PATTERN OF EDUCATION IN INDIA



APPENDIX F

# PROGRESS OF EDUCATION

TOTAL ENROLMENT (MILLIONS) AND  
PERCENTAGE OF ENROLMENT  
TO POPULATION IN CORRESPONDING AGE GROUP



APPENDIX G

BIBLIOGRAPHY

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5. The Ohio State University A.I.D. Education Programs in India  
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6. NESA Feasibility Study on Programmed Learning -- 1969-70  
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8. Polytechnic Education in India  
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9. INDIA - 1971-72  
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10. The Development of the National Institute of Education  
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