This document contains three sections each of which provides an overview of teacher centers and several case studies of individual centers in Japan, Britain, and the U.S. Although teacher centers tend to be diverse, those in England and Japan seem to have a describable national characteristic, Japanese centers tend to be large with regard to both physical structure and organization, while those in Britain and the U.S. vary widely in size and structure. Funding patterns also differ from country to country: in England, centers are funded largely through local education agencies; in Japan, the Prefecture of Education provides most of the funding; and in the U.S., the U.S. Office of Education generally provides funds for the initiation of a center, while subsequent operation is paid for by the state or local education agency. Some functional problems are common to teacher centers in all three countries: (a) how to encourage teachers to participate in the activities of the center; (b) how to remain responsive to teachers, while being supported by sources outside the teacher group; and (c) how to staff a teacher center. (HMD)
Teacher Centers in Japan, England, and the United States

A Series of Case Studies

M. Vere DeVault
University of Wisconsin-Madison
October 1973
TEACHER CENTERS
IN
JAPAN, ENGLAND AND THE UNITED STATES

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Preface

The present study was undertaken as a logical extension of the work of the Wisconsin Elementary Teacher Education Project at the University of Wisconsin, Madison. Funded continually by the U.S. Office of Education since 1969, the project has studied a variety of innovative efforts in teacher education. This collection of case studies is an extension of those efforts.

The investigator wrote the first draft report of each case study of centers in England and in Japan. Staff members of the Wisconsin Elementary Teacher Education Project at the University of Wisconsin visited the centers in the United States. In each instance the first draft of the report was returned to the center director for reactions and revisions and in the case of the Japanese and English centers the director was invited to join the investigator as co-author of the case study. The assistance by all was substantial and made essential contributions to the final drafts included in this report.

A number of people in all three countries have served in a variety of ways to make this report possible. In Japan my special thanks go to the Tokyo staff of the Japan Center for International Exchange. Of major assistance was Mr. Kazuo Kojima, Director for Educational Services of the JCIE. He was initially contacted to serve
as interpreter but just as great were his contributions as manager, guide, professional consultant, and constant companion and friend. Miss Haruko Minegishi was of assistance during my stay in Tokyo and in America during the summer of 1973 translated this report for a Japanese edition.

In England it was Dr. Wesley White of Huddersfield Polytechnical College who assisted in organizing the trip and in planning the appropriate meetings with persons in the Ministry of Education and at the Schools Council. His assistance while here in the United States during the summer of planning prior to the trip and in England during those October days was essential. In the United States my appreciation goes to a pair of professionals, Dr. William L. Smith and Dr. Allen Schmieder of the U. S. Office of Education whose cooperative efforts, vision, energy and commitment have been the major source of continued support for Teacher Centering in this country.

Appreciation must be expressed to a great number of persons who contributed in a variety of ways to the success of this venture. Though far too numerous to mention in these paragraphs, many of their names are listed at the end of the report. Appreciative mention must be made of the agencies that financially supported the project. The source of travel support was the Graduate School Research Committee of the University of Wisconsin, Madison. The Leadership Training
Institute funded through the U. S. Office of Education supported per diem expenses during the trip and financed the preparation and publication of this report. To both agencies I express my sincere thanks.

M. Vere DeVault
Madison, Wisconsin
November, 1973
that new approaches to continued professional growth of practicing teachers must be found. Out of this sense of urgent need the teacher center concept has grown.

What is a teacher center? Teacher centers appear in many forms particularly in the United States. In both Japan and England, however, there is a national character that at least in part can be described. The movement in the United States has drawn more heavily on the English experience than on the Japanese but teacher center case studies confirm considerable diversity in all countries.

The Japanese Centers described in this report as case studies tend to be large structures in which staff members provide a wide variety of workshops and courses. The English Centers are housed in a wide variety of facilities that vary from old discarded schools to small office buildings or large ornate mansions. In the United States the facilities are of the greatest variety ranging from large elaborate structures to small otherwise unused facilities and in some instances are identified as an idea with no defineable space for the center itself. The use of the teacher center as a concept rather than a facility may also be a dimension of some English centers and certainly is true of one kind of Japanese center, the informal study circle.

Funding patterns also differed from one country to another. In England the centers were funded largely through the Local Education Agency; in Japan it was through the Prefecture that most funding was
Introduction

Teacher education does not end with certification. Around the world professional educators recognize that the continued professional education of teachers well beyond their initial classroom experience must maintain a high priority. This priority is maintained for at least four reasons: 1) college courses and student teaching does not complete one's preparation for teaching; 2) practicing teachers need continued study and assistance to maintain skills previously developed; 3) innovations in education require continuous updating on the part of teachers; 4) social and cultural mores shift requiring new emphases and new understandings on the part of teachers. To meet these needs in-service education has been for many years a recognized part of the educational enterprise.

Institutes, college and university courses and degree programs, local education agency workshops and meetings, teacher's guides and other instructional materials prepared for teachers; and government sponsored programs have been supported in many locations. These specific activities have too often failed and this failure has been especially obvious and distressing to the teachers whose time and energies have been absorbed without commensurate improvement of their classroom competence. For two or three decades it has been apparent
obtained; and in the United States, federal funding through the Office of Education seemed to initiate many centers that were later funded from a wide variety of state, local and foundation sources.

Some functional problems were common to the centers of all three countries. How to encourage teachers to attend teacher center activities was a problem each was solving in its own way. How to maintain the center as a response to the expressed wishes and needs of teachers while funded from sources outside the teacher group was also a common major concern. The question of how to staff centers and how to deploy staff for in-service training was of concern in each country. Notwithstanding the differences that characterized the way teacher centers sought to solve these problems, the basic purpose of developing a center for continuing education of in-service teachers was common to all.

Broad generalizations do not tell the story of teacher centers. Each has a particular character that can be appreciated only as it stands independent of centers elsewhere.
Education Centers in Japan can be understood only in the context of other teacher training institutions designed to serve both pre-service and in-service training. Hence, the introduction to the Japanese portion of this report is taken from two documents published by the Japanese Ministry of Education.*

The Basic Concept of Teacher Training

When the Education Order was first promulgated, the role of the teacher, a person acquainted with Western science, was seen as a "transmitter of knowledge." Therefore, in training teachers the main emphasis was laid on the teaching methods. In the decade following 1877 the teacher was looked upon as a moral person and, as such, was accorded a high status. From this developed a tendency to concentrate in teacher training on moral education. This was confirmed in the Normal School Ordinance of 1886 and in the Imperial Prescript on Education of 1890. The importance of morality has, since that time, remained a cornerstone in teacher training in Japan.

In the reform of the school system after the war, emphasis was laid on trainee teachers acquiring a general cultural background and

pedagogical techniques as well as more specialized knowledge. The Central Council for Education emphasized in 1958 the need for these elements to be complemented by the teacher's own sense of mission and affection for the school children in his charge.

Teacher Training Institutions

When the Education Order was first promulgated, normal schools had already been established as such, before the diffusion of general schools. Applicants had to be about 20 years of age. Following the increased demand for qualified teachers, a result of the spread of elementary education, the age limit was lowered and normal schools were positioned within the general education system. They ranked at the level of secondary education for about 70 years but were promoted to college level in 1943 and university level in 1949.

In-Service Training of Teachers

The Ministry of Education, prefectural board of education, and national and prefectural educational research centers provide opportunities for systematic in-service training for public school teachers, principals and teacher consultants. Some of the larger municipalities and professional associations also hold workshops and study meetings for in-service training. The Ministry of Education holds workshops for inservice training for those principals and vice-principals who...
are recommended by prefectural boards of education. Central workshops for teachers in charge of middle management (e.g., heads of teachers' groups teaching the same grade or the same subject in a school) are also held by the Ministry of Education. The contents of study usually includes school administration, curriculum organization and supervisory methods. Prefectural boards of education hold workshops of shorter duration for principals. Generally, training is provided through lectures, but recently smaller group study meetings adopting the methods of case-studies and discussions and studying problems in depth have become more common. In-service training for vice-principals uses similar methods.

Recently, several prefectural boards of education have been giving serious attention to in-service training for the teachers in charge of middle management.

In-service training for new teachers is usually provided by the supervisory staff of prefectural boards of education. The Ministry of Education subsidizes the training projects. The responsibility for in-service training, however, is shifting gradually from the supervisory staff of boards of education to the staff of education centers.

Universities, professional associations and educational study groups which are voluntarily organized by school teachers also hold workshops and study meetings.
Hundreds of principals, vice-principals and teachers are sent to study abroad by the Ministry of Education and some prefectural boards of education.

In-service training in Japan is designed to promote the teachers' professional abilities. Participation in in-service training is not normally rewarded with salary increments.
Tokyo Metropolitan Institute for Educational Research and Inservice Training
Kazuyoshi Kurita and M. Vere Devault
One of the earliest of the Education Centers, the Tokyo Metropolitan Institute was established in 1954. The Institute moved into its present multi-storied facilities in 1966. Educational facilities throughout Tokyo under the responsibility of the Tokyo Metropolitan Board of Education in addition to school education from Kindergarten through Higher Technical School and Junior College University include a wide variety of educational institutions and facilities. These include libraries, public halls, social education hall, Tokyo Metropolitan Festival Hall, an art gallery, a Museum of Modern Japanese Literature, Metropolitan Youth Houses, and the Tokyo Metropolitan Gymnasium.

Functions

The functions of the Metropolitan Institute for Research assumes a wide range of responsibilities including the basic tasks 1) to study educational problems in Tokyo theoretically and positively and to put the results of these studies to good use, 2) to promote the qualities and abilities of the teachers and other teaching staff and, 3) to supply the teaching staff and the citizens with educational data and information and to respond to their educational consultation. Of special interest is the manner in which Japanese Education Centers integrate research and in-service education. This integration occurs as a result of 1) research emphases which are linked directly to instructional problems in the classroom and 2) to the utilization of the same staff to serve both major functions: research and in-service training.
Organization

The Institute is divided into six major divisions each including a number of sections. A chart taken from a descriptive bulletin of the Institute follows:

**Divisions:**

- President
  - General Affairs
  - Information and Public Relations
  - Management
- Vice-President
  - School Subjects
  - Science
  - Child Study and Guidance

**Sections:**

- General Affairs, Planning, Accounting, Facilities and Equipments, Mitaka Branch Institute Management.
- Information and Public Relations Resources.
- Physics, Chemistry, Biology, Earth Science, Primary School Science, Industry Arts 1-Machinery, Industry Arts 1-Electricity, Industry Arts 11-Commercial and Agricultural Education, Homemaking
- Guidance, Psychotherapy Child Study, Special Education.
In-service Training Program

A general view of the Institute program is seen in the organizational chart previously presented. Sixteen percent of the 1971-72 budget was devoted to teachers' in-service training. This training was directed toward primary, lower secondary and upper secondary teachers throughout the Tokyo Metropolitan area. Most of the in-service training program is in the form of a series of lecture-discussion or laboratory periods during which a particular interest is followed over a period of several weeks. In one suburban area seminars are held in a kind of extension setting, but otherwise the in-service lectures, laboratory and seminars are held at the main building of the Institute.

The Science Department is engaged in the project named "Inquiry Process Oriented Science Instruction." The aims of the project are 1) to establish the philosophy of the inquiry approach to science in Japan, and 2) to develop the educational materials for inquiry processes of instruction, i.e., simple science equipment, new science apparatus, instructional methods, procedures for experiments, work sheets for pupils and teacher's manuals. The materials developed are usually disseminated to schools by bringing teachers into in-service programs held at the Institute. The personnel involved in the project include university professors and about 50 teachers from the schools in addition to the permanent Institute staff. They cooperate with the Institute by utilizing the new materials in their classrooms and returning feed-back information on their effectiveness.
The Science Department is also involved in the Integrated Science Curriculum Project sponsored by the Ministry of Education. This project is designed to enhance cooperation among the institutions engaged in science curriculum development throughout Japan.

Structure of the Science In-service Training Program

The in-service training programs of the Science Department of the Institute can be categorized into several main types.

1) Field Work Program

Field work, particularly in the sciences, is undertaken in the form of three-day seminars under the direction of staff from the Institute. There are several types of field work seminars: High Mountain Plant Seminar with excursions into alpine fields; Geological Seminar, located on the Chichibu Plateau; and Marine Biology Seminar, at the Yokohama University's Marine Laboratory. Each program consists of 30 participants and as with all the Institute's programs, no fee is charged.

2) Regular Classes

There are eight sections with each section having four or five new sessions a year. Forty participants in each class meet six to ten times on week-day afternoons. All participants are selected by the local Board of Education in each ward and need to pay only the money necessary for travel.

3) Once-a-Week Program

This program consists of 25 teachers from elementary to secondary schools. Each participant pursues a research theme proposed to
satisfy his or her needs and approved by the staff members of the section. These teachers usually come to the Institute once a week and investigate the problem using the laboratory's equipment and apparatus with the assistance of the staff.

4) Saturday Program
Each of the 23 wards and 26 city districts throughout Tokyo has science classes for primary and lower secondary school pupils every Saturday afternoon. Meetings are led by teachers at the schools in each of the wards. These leaders are trained for this purpose in the Institute.

5) Academic Program
Tokyo Metropolitan Board of Education has given 50 teachers leave from their schools to study their own research themes at universities or the Institute for an academic year. Of the original group, 10 to 13 are science teachers who stay at the Institute the full year to complete their investigation.

Staff

The staff of the Institute consists of 137 full-time members. Of this number, 43 are administrative, clerical or technicians; the rest are professional instructors and researchers. Staff members are expected to participate in both kinds of activities. Most of the professional instructors and researchers were selected mainly by exams provided by the Board of Education for teachers of elementary and secondary schools who
had taught more than ten years. This system serves to connect the Institute activities with the school activities; that is, the products of the Institute research are more readily implemented in classroom practice.

Facilities and Finance

The building in which the Institute is housed includes four stories above ground and two basements with a total of 12,497 square meters of space. It was constructed in 1966 at a cost of $1.8 million* equipped for $420,000. It is an extensive facility well-equipped to serve the many and various functions that such a multi-purpose Institute must fulfill. Language labs, audio-visual labs with broadcasting study, music rooms, fine arts rooms, and others are all in addition to extensive facilities usually associated with the science areas.

The Institute has an annual budget of approximately $350,000. Teachers' in-service training (16%), Research (10.7%), Information and Public Relations (6.8%), Counseling (5.4%) represent the program budget divisions. Management, including payment on the facilities, (40.6%) and Other (20%) complete the total financing of the Institute operation.

*The rate of exchange between the yen and the dollar was stable from 1948 to 1971. During that period 360 yen was equivalent to 1 dollar. This study was completed during the fall of 1972 with the exchange rate of 300 yen per dollar. Even though the exchange has since decreased an additional 11 percent, dollar conversions for operating budgets are based on the exchange rate prevalent during the fall of 1972 (1 million yen equals 3,330 dollars).
Osaka
Science Education Institute of Osaka
Gentaro Kuse and
M. Vere Devalleu
The purposes of the Osaka Science Education Institute are to give in-service training to elementary and lower and upper secondary school teachers in Osaka, and to conduct research in professional and technical matters in the field of education. To achieve these purposes the Osaka Board of Education founded the Institute in 1962.

Program

The program of the Institute is organized around three departments: Natural Sciences, Liberal Arts, and Educational Research. These departments are coordinated through a Department of General Affairs which is responsible for personnel management, maintenance of facilities and equipment, management of the library which includes a textbook center and is, of course, responsible also for the general budget of the Institute.

The Natural Sciences Department offers in-service training for elementary, and lower and upper secondary teachers in the areas of physics, chemistry, biology and earth sciences. Programs are offered during the regular session of the school year for two groups of participants. In one program, meetings are scheduled on 20 days during the school year. The program for elementary and lower secondary levels covers all the science areas, while upper secondary participants devote themselves to one of the areas for 20 days. During the 1972 school year, 120 elementary teachers and 40 teachers at the lower secondary and 80 at the upper secondary school levels participated in the series of 20 meetings. In addition to these meetings there is a program offered which selected teachers attend daily for the length of the school term (April-September or October-March).
The participants are relieved of classroom duties on those days to attend the meetings. During the 1972 school year 40 elementary and 40 lower secondary teachers attended the Institute in these full-time programs. The Natural Sciences Department also offers 5 days of in-service training during the summer which was attended by 120 elementary teachers and 80 teachers at each of the two secondary levels. Lecture series which met eight times each were held on occasion and were attended by approximately 100 teachers at each of the three levels, elementary, lower and upper secondary. A total of 900 teachers participated in the programs offered by the Natural Sciences Department.

The focus of the in-service training program in the Osaka Institute is for those teachers who have two to five years teaching experience. The intent here is less as support for the beginning teacher as is the case in many Education Centers but rather for those teachers who have enough work in the classroom to recognize rather specifically the areas in which they need additional training and assistance.

The Liberal Arts Department is divided into six separate areas including: Japanese language, social studies, mathematics, English language, industrial arts and homemaking, and information processing. In each of these areas regular session series of in-service meetings were offered and attended by both elementary and secondary teachers except in the area of English language, and industrial arts and homemaking where only secondary teachers participated and indeed, only upper secondary teachers used the in-service programs in information processing. A total
of 3,443 teachers participated during 1972 in the programs offered by the Liberal Arts Department. On every hand it is clear that a unique feature of the Osaka Science Education Institute was its inclusion of extensive offerings in the Liberal Arts. The intent of the Center is to provide in-service education in the total range of subject areas which are the responsibility of the classroom teacher. In the program descriptions, the discussions with the Acting Director and the Director of General Affairs, through observation of in-service training sessions in progress, and the inspection of the facilities and equipment, the commitment to the broad range of school subjects is in evidence.

The Educational Research Department serves the purposes of
1) obtaining fundamental data on the improvement of educational administration in Osaka; 2) to conduct research and to investigate special problems arising in school education today; and 3) to obtain useful data for in-service training. Several special activities are underway. Many of these are related to the search for improved ways of teaching and learning in the schools. Educational technology, instructional systems and teaching methods are major topics of study. Special emphasis is given problems in school administration, educational planning and evaluation, and to management systems as they relate to data processing. A special interest and concern of the Research Department is in the area of counseling and psychotherapy and other in-service training in the area of special education for the handicapped.
Staff

A staff of full-time personnel administer and teach in the Institute. The Director of the Institute, Dr. Munio Kotake is an emeritus professor at Osaka University and Osaka City University. Twenty-one persons including the Director of General Affairs, Mr. Taketoshi Adachi, provide the coordination of the Institute. Twenty full-time persons are assigned to the Institute's Departments of Natural Sciences and Liberal Arts. There are 19 staff members in the Educational Research Department. Thus the Institute is staffed by 80 full-time persons. These persons are usually employed by the Institute for a period of three to ten years. The staff in the Natural Sciences Department are usually drawn from universities. On the other hand, the staff in the Department of Liberal Arts and Educational Research are selected from elementary, lower or upper secondary school faculties. A few of them have returned to school as administrators. It is thought that such programs provide still another kind of in-service training at the Institute, for each of these individuals returns to a school with a stronger competence to administer and teach.

Facilities

The building in which the Science Education Institute of Osaka is housed is a structure devoted exclusively to the activities of the Institute. It was designed and built originally as a Science Education Institute. The extended program activities prompted the additional wing
ten years after the Institute had been initiated. This addition which more than doubled the space was completed in 1971. The present structure includes 8,911 m² floor space located on a lot of 11,025 m². The building is spacious in its corridors, laboratories, work spaces and lecture rooms.

In all subject areas, the instructional equipment and facilities are outstanding in quantity and quality. The usually expected science materials and equipment in excellent condition, readily available on open shelves were seen in each of the laboratories. A language laboratory equipped with 48 stations, an elaborate control room with a recording studio, served language instruction in English. A computer with 32K storage capacity served both as a training center and as a research tool in data processing. A powerful 100,000x electronic microscope was a showpiece during our visit but was not out of keeping with the other excellent special purpose kinds of equipment throughout the building.

Supplement

The Science Education Institute has been taking the initiative in in-service education of Osaka Prefecture for the past 11 years. Approximately 4,000 of the 40,000 teachers each year attend in-service programs at the Institute. In recent years, however, some of the major cities have built newly equipped education or science centers, which offer additional programs to the teachers in the area. The Teachers' Union has its own in-service education program. Still other teachers are members
of voluntary spontaneous study groups or study circles. In some instances the Osaka Board of Education funds requests for support which come from these voluntary study groups. Where funds are made available to such teacher groups they are provided with "no strings attached."

**Funding**

The financing of the Institute both in terms of the original cost of the building and for the continuing operational costs are borne largely by the Osaka district government. The Ministry of Education contributed $100,000 of the $1,400,000 cost of the new wing of the building (completed in 1971). The operational costs total 97 million yen including travel fees of the participants and they are totally assumed by the Osaka Prefecture.
Kyoto

Kyoto Science Center for Youth

Sakae Shimizu
and
M. Vere DeVault
The Kyoto Science Center for Youth is housed in a magnificent structure on grounds which have been maximally used to further the science education objectives of the Center. Combining the desire to maintain an aesthetic environment which is also instructional, the grounds are complete with a rock garden for which each rock has been selected with instructional purposes in mind. The beauty of the setting reflects the influence of the informal Japanese garden as well as the educational intent of the Center which was completed on May 3, 1969 at a cost of one billion yen (3.3 million dollars).

Quoting from the Center document:

The Center aims to imbue the minds of the younger generation with the scientist's spirit, which means the scientific way of looking at, thinking of, and treating things, and to make them acquire the habit of putting it in practice.

To carry out the object, the Center is equipped with laboratories, exhibition rooms, a planetarium and other facilities where pupils and students may study, teachers may undergo training and general citizens may receive science education.

Program

The Center is first a youth science center and indirectly, but importantly, an in-service education center. The Center serves in-service education in three important ways: 1) as the staff teach children in classes from primary and junior high schools -- called the study program for pupils and students; 2) in-service workshops provided directly to children and teachers; and 3) as temporary full-time appointments of
teachers to the Center. In-service functions are maintained through the regular visits made to the Center by teachers as they accompany children who come in class groups to laboratories, exhibition halls, the planetarium, and rock garden. The teacher's visit with the children serves as direct instruction for the teacher, it attempts to motivate extensions of the study of science from the Center into the classroom, and it motivates individual teachers and groups of teachers to perceive the Center as a source of consultant services, instruction in science, and laboratory facilities for their own explorations in science and in instructional methods.

The study program for pupils and students was started immediately after completion of the Center in 1969. All children in the fifth and sixth year classes of the primary school and the first and second year classes of the junior high school, can participate in this study program once a year, for four successive years during their compulsory education. The object of this study is to foster the spirit of the scientist as well as to promote the improvement of science education in schools. Main features of this program are as follows:

1. Participants (in 1972)

   The fifth and sixth year classes of the primary school; about 160 schools; about 32,200 pupils.
   The first and second year classes of the junior high school; about 60 schools; about 27,940 pupils.
   The first year classes of the evening classes of the high schools: five schools; about 1,000 students.
2. Instruction

School teachers bring their classes to the Center. About 130 days are devoted to this program every year. The staff of the Center serve as the instructors.

3. Transportation and expense

The Center arranges the transportation by buses from the school to the Center. All necessary expense is paid by the budget of the Kyoto City (about $25,000 every year).

4. Program of study

Experiments in the laboratories. In the laboratories of physics, chemistry, biology, earth science, and in the workshop, children perform experiments by themselves individually or by a pair or a quartet, upon the basis of scientific knowledge children have already had, or according to instruction given by the instructor.

Teaching by the use of the outdoor facilities. Observation and experiments using mineralogical and geological materials which are arranged in natural style in the garden, including the rock garden, a small pond, an insect house, and a greenhouse.

Demonstration teaching. The instructors show the demonstration experiments and then ask children using exhibits in the exhibition rooms to do some experiments to understand the fundamental laws and principles inherent in natural phenomena.
Teaching in the planetarium hall. In the 16 meter diameter hall with a Minolta planetarium, children can grasp the law of celestial motions and some other astronomical knowledges by their own activities by guidances of the instructor.

In addition to the in-service training which is associated with instruction to children, the Center provides many direct services to teachers. The Center works closely with Science Study groups to provide the kind of instruction which members of the groups determine to be important for them. Inasmuch as the Center includes complete and often-times elaborate facilities including demonstrations, exhibits, and laboratories in each of the science areas, teachers' needs in any of the science areas can be readily met.

The Center serves a direct in-service education function for approximately 2,100 elementary and secondary teachers each year through days set aside specifically for teachers -- a time when the facilities are not available to children. Regular Thursday and summer in-service education programs place special emphasis on individual study by teachers. A substantial input from teachers in the classroom contributes to the determination of the nature of the facilities and in-service training programs offered by the Center.

A staff of 26 teachers serve in the Center for a period of three to four years in a variety of professional capacities and return to their respective schools as teachers. This latter represents the most in-depth kind of in-service education and is viewed as a significant contribution of the Center to science education in the schools.
The research program of the Center seeks improved techniques of instruction and study in the sciences. For instance, a research project "Systematization of Individual Teaching and Group Instruction by the Use of Educational Instruments" was commenced from April 1971, in close cooperation of the staff of Kyoto University of Education, as one of the science education research projects of the Ministry of Education. The research grant of about $23,500 has been given to this project from the Ministry of Education. The most distinctive program is called "Study Class for Educational Materials of Science in the Primary School" which is offered periodically for primary teachers. Teachers prepare teaching tools they bring back for use in their classroom instruction. Study of activities in their respective schools is also actively discussed in this special class. An elaborate insect house is an illustration of the kind of research underway. This insect house is much like a greenhouse but as one enters he is greeted with butterflies, caterpillars, and well-eaten plants in a warm sunny environment. Staff members are at work on various research projects especially directed toward the development of equipment which would facilitate science instruction in new ways. The instructional staff sets aside Mondays for special time to devote efforts to their own research activities.

Staff

The staff of the Center is divided between administration and instruction. The part-time Director of the Center is a professor of
experimental nuclear physics at Kyoto University. In addition, there is an assistant director and two division heads, one for administration and one for instruction.

```
| Director -- Asst. Director -- |
| Div. of Administration (17) |
| Div. of Instruction |
| (24 Instructors, 6 Demonstrators & 13 purchase, public relations and others) |
| Committee of Academic Advisers (Some are professors of scientific institutes in Kyoto University) |
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Facilities and Budget

The facilities of the Kyoto Science Center for Youth are both elaborate and extensive. Two major structures and a planetarium make up the major components of the Center. One building is devoted to research and in-service education activities. The building's facilities are divided to serve a well-equipped auditorium, an administrative function, an audio-visual training, a library, and facilities service, and science research and in-service education in four areas; biology, earth science, chemistry and physics. In each of the science areas there are two laboratories with appropriate tables, equipment and preparation room; and space for research activities.

The laboratories are equipped with the most modern facilities including a special emphasis on the unique contributions of audio-visual equipment. TV is especially evident. These TV facilities are incorporated into the large lecture auditorium which has TV cameras that may be
focused on the demonstrator at the lectern and shown on the several monitors placed at the sides of the auditorium. The biology laboratory has a microscope equipped to relay visual images to the monitors in the laboratory or elsewhere in the building. In addition, on the uppermost floor of this building there is a small astronomical observatory having an 8-meter diameter dome with a 25-centimeter diameter refracting equatorial telescope, which is used actively by teachers and amateur astronomers of the Kyoto citizenry. In the basement floor there are a few workshops equipped with metal and wood-working machines. Data obtained by a seismograph and meteorological apparatuses are also used by the staff for education of children and teachers.

The three story museum building is 2,600 square meters. The creatively designed participation exhibits are artistically arranged throughout the upper two floors of the museum to facilitate class-size groups of children who move through the museum with a staff member who demonstrates each exhibit and leads a discussion with the children. Several bus loads of children converge on the museum each day but are scattered throughout the museum's 60 exhibits giving it a feeling of spacious viewing comfort.

Illustrative exhibits include:

A large transparent incubator for hens' eggs.
Seismographs and simulation of earthquakes.
An NKS permanent magnet.
A demonstration apparatus of vacuum phenomena.
An apparatus demonstrating the rotation and revolution of the earth.

A tide pool with small marine creatures and fishes in the seashore.

A demonstration apparatus of the principle of binary arithmetic.

A water wave and wind tunnel.

Annual operation costs of the Center which are directly attributed to the Center are about $667,000 (for personnel expenses, $467,000; for non-personnel, $200,000). This total amount comes annually from the Board of Education of Kyoto City.
Chiba
The Science Department of the Chiba Prefecture Education Center
Toshio Shintani
and
M. Vere DeVault
In-service education in the Chiba Prefecture is undertaken by a number of different agencies of which the Prefecture Education Center is one. The Science Department of the Chiba Prefecture Education Center plays a major role in science in-service education both in a coordinating function and as a center for instruction for leaders in science education throughout the Prefecture. Of the total in-service education in Chiba Prefecture, it was estimated that 60 percent of all effort was undertaken by study circles; 20 percent by City Boards of Education and City Education Centers; and 20 percent by the Prefecture Board of Education including the efforts of the Prefecture Education Center.

Objectives

The Chiba Prefecture Education Center was founded in April of 1961 and moved into its present building late that year. The purposes of the Science Department of the Center are:

1. To offer in-service courses to science teachers of 625 primary schools, 252 lower secondary schools and 79 upper secondary schools in Chiba Prefecture.

2. To make studies of and carry out investigations into the contents of the above mentioned courses and to gather and arrange data on them.

3. To offer expert advice on a variety of matters pertaining to science education.

4. To disseminate data and information on science education.

Program

The seminars identified with the Science Department of the Chiba Prefecture Center are of three kinds: seminars in methods of experiment
and observation and teaching technique; those in the promotion of teacher's research work and information on the Management of Science Education; and those which are entrusted to the 18 local Science Education Centers. The following seminar titles, and purposes of the seminars are taken from a Center publication.

| Seminar Title                                         | Purpose and Content                                                                 |
|======================================================|====================================================================================|
| **Course for Leaders of Local Science Education Centers** | To help leaders master the contents to be studied in Local Science Education Centers in separate groups according to the areas and the kinds of schools. |
| **Seminar of Science Education**                      | To help participants develop new methods of experiments and methodology concerning teaching materials contained in each year and make reports of them in separate groups according to the areas and the kinds of schools. |
| **Course of Modernization of Science Education**       | To help participants acquire a method of guidance attaching importance to the process of investigation. |
| **Outdoor Observation Practice**                       | To help participants study practically plants, geological features or heavenly bodies in separate groups in the open air. |
| **Science Teaching Materials Course**                  | To help participants acquire the basis of science in each of Local Science Education Centers. |
| **Seminar of Industrial Arts**                         | To help participants acquire the principles and ways of manufacture concerning teaching materials as well as the methods of guidance. |
| **Seminar of Commercial Education**                    | To help participants study the modernization of commercial education. |
Electronic Computer Course
To help participants study the basic principles of electronic computers and the method of programming.

One Year Course
To let teachers research on one theme through a year as well as to help them improve their quality as leaders of local districts.

Exhibition of Students' Science Reports
To make public the results of science researches by pupils and students and to rear their scientific abilities and attitude.

Exhibition of Students' Newly Devised Science Materials and Works
To make public the results of scientific devices by pupils and students and to rear their scientific abilities and attitude.

Exhibitions of Teachers Newly Devised Teaching Equipment
To make public the equipment devised by teachers to encourage them.

Except for the Science Teaching Materials Course which is usually taught in the Local Centers at the 18 schools, most other courses are offered as two-day workshops and are attended by approximately twenty in-service teachers. Some seminars, however, range from one to twelve days in length with an average of about four. Several of them are offered two or more times each year and most of the effort is directed toward primary and lower secondary schools. A few seminars are offered for teachers in the Upper Secondary schools but it is expected that teachers will supplement these seminars with a considerable amount of independent study in their special areas of interest.
Staff

The staff of the Science Department includes ten professionals with two assigned to each of the five science areas. These staff members provide leadership for lectures and seminars and serve in a capacity of organizing and planning as well as instructing. In addition, about 70 instructors on a part-time basis supplement the work of those regular full-time members each year.

The Center is a facility of the Chiba Prefecture Board of Education which falls under the direction of the Ministry of Education. The Director of the Center is advised by a Council and by a Committee of Advisors.

The three member Council is made up of the Director of the National Institute of Educational Research, a Professor of Tokyo University of Education and the President of a large commercial company. The function of the Council is to provide the director with advice concerning the fundamental activities of the Center from the viewpoint of the professional community outside the Chiba Prefecture. The Committee of Advisors, on the other hand, provides the director with a continuous flow of information from within the Prefecture concerning the needs of local schools and local teachers. Membership on the Committee of Advisors includes ten persons of learning and experience in the worlds of education, arts, science, culture, industry, labor and others.
Facilities

The Chiba Prefecture Education Center can be understood only as a network of institutions and activities directly related to the Prefecture. Two Center Extensions, one at Toso and one at Nanso carry on many of the activities for the Center in their respective regions but also undertake the implementation of some of their own plans. In addition to those two Extension Centers, 18 local schools, 16 primary and 8 lower secondary, have been identified as local Science Education Centers and serve the science education needs of faculties in their respective schools. Each of these local Science Education Centers has a steering committee composed of the director, chief teacher and expert teachers of the district.

The Chiba Center is housed in a five story concrete building with a total floor space of 3,463 square meters of which the Science Department uses 1,137 square meters solely and 1,058 square meters in common with the other department. Separate facilities are provided for each of the five science areas including: chemistry, physics, biology, earth science and industrial arts. For each area a laboratory and a preparation room is provided.

On the roof of the building is a six inch reflecting astronomical telescope with equatorial mounting and meteorological study facilities. Throughout the building are appropriate workshops, dark rooms, an optics lab, including an electronic microscope and a machine tool room.
### Budget 1972-73

<table>
<thead>
<tr>
<th>Department</th>
<th>Amount</th>
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<tr>
<td>Science Department</td>
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<tr>
<td>Other Departments</td>
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Part II: England

British Teachers' Centres: A Descriptive Note
Gordon Hamphlett

Origins

There were very few teachers' centres until the early 1960's. In its research and development projects in primary mathematics, science and modern languages, the Nuffield Foundation was instrumental in bringing teachers together locally. It required Local Education Authorities participating in a project to provide a centre where trials school teachers could meet to share experiences, receive support through local courses and prepare materials. Such centres also would assist two-way communications between the project and its trials teachers. From its inception in 1964, Schools Council continued this policy of seeing opportunities for participating teachers to meet and to discuss work together in their local situations as essential to its philosophy of curriculum review and development.

Through the work of its projects and field officers, through publications such as Schools Council Working Paper No. 10, "Curriculum development: teachers' groups and centres" (HMSO 1967), and through three national conferences in 1969 (SC Pamphlet No. 6, Teachers' centres and the changing curriculum, SC 1970), Schools Council continued to encourage the development of local groups and centres. Notable among its earlier projects was the North West Regional Curriculum Development
Project centred on Manchester University School of Education in which teachers in 13 LEAs, based on 15 curriculum development centres, co-operated to develop courses in seven subjects in preparation for the Raising of the School Leaving Age. During 1971 and 1972, the Council's field officers organized a series of eight regional conferences specially concerned to support the work of teachers' centres and their wardens and to encourage co-operation among them; almost every LEA and a majority of ATOs in England and Wales sent representatives. Equally significant in the growth of teachers' centres has been the encouragement given by many education officers and advisers, by teacher and subject association and by the enterprise of many teachers themselves in their own areas.

Numbers and Types of Centres

There are at present about 500 centres in England and Wales, the number having practically doubled during the last three and a half years. In almost all cases the centres are provided by the LEA or, in a few instances, by two or more authorities in partnership. The facilities provided, the activities undertaken and the role and responsibilities of the wardens vary considerably. The accommodation frequently is an adapted school or part of a school or an adapted house. A few are sited at colleges of education, though quite separate from them in their control and management. Though increasing, the number of purpose built centres is comparatively small. Many of the centres originally established as subject centres associated with the Nuffield Foundation's projects have subsequently become multi-purpose centres. Two authorities have specialist centres
only and a number, including some of the large and predominantly urban cities, have a combination of specialist and general centres.

In the great majority of authorities the policy is for the activities of teachers' centres not to be limited to specific areas of the curriculum, although the warden's own expertise or specialist knowledge is often apparent in the work of the centre. There are now comparatively few authorities still without a teachers' centre.

Whilst there are almost as many different kinds of centres as there are centres, it is possible to identify five broad types:

a) the social-pastoral centre;

b) the focus and resource for in-service courses, workshops and discussion groups;

c) the convenient and neutral (so far as status is concerned) venue for meetings, exhibitions and local survey or report writing groups;

d) the resource centre including

1) availability of information about courses, curriculum development projects, educational publications,

2) advice and assistance in reprographic and educational technology,

3) loan facilities in equipment and resource materials;

e) the centre for curriculum development groups.

In practice most centres are an amalgam of more than one of these types, to differing degrees; comparatively few combine all five. a, b and c might be considered the most normal but d and e are steadily growing features.
Teachers' Centre Wardens/Leaders

Whilst the status and role of the warden or leader vary significantly, more than half the teachers' centres have a full-time warden (or equivalent) drawn largely from the primary and secondary sectors of education. Some of these full-time wardens combine their responsibilities at the centre with local advisory work, for example, in curriculum development or audio-visual aids. About a quarter have wardens whose duties at the centre are part-time and coupled with teaching duties, usually on the staff of one school but sometimes on a peripatetic basis. The remainder are run by an executive committee of teachers or by the LEA through an education officer or adviser. In these cases, the day-by-day administration is usually in the hands of a "spare-time" warden or secretary, often the head or an assistant teacher at the school where the centre is based. Many of these are head teachers of small primary schools in rural areas, where full-time centres are not a viable proposition. In some counties with scattered rural areas, in which distance from school to teachers' centre can be significant, a number of centres have associated satellite centres under the care of a single warden.

Wardens are in the main practicing, or recently practicing teachers, although some full-time wardens have been appointed from previous posts as college of education lecturers or LEA advisers. In many areas full-time wardens are able to visit neighbouring schools to establish closer links with other practicing heads and teachers. Whilst wardens with part- or full-time teaching duties frequently are teachers already well known in
areas, time alone makes it difficult or impossible for them to visit schools in the same way.

Management

A substantial number of centres involve the active participation of local teachers on a management or advisory committee. In many areas this is looked upon as an essential feature of the centre and, in some, decisions over allocation of finance as well as over the centre's programme are in the hands of the management committee. In the great majority of centres the role and leadership of the warden is crucial. A small but growing number of authorities release a number of teachers, perhaps for half a day per week, to assist in the leadership of groups at the centre.

October 1972
Burton-upon-Trent
Burton-upon-Trent Teachers' Centre
Peter A. Braithwaite
and
M. Vere Devault
The Teachers' Centre in Burton upon Trent is housed in one of the original public school buildings dating from the mid 1870's. These facilities though not recent in either design or decor, provide adequate and ample space for the multi-faceted program functions of the Centre. Centrally located, the facility is in easy reach of teachers from throughout the city in which thirty-seven schools serve the population of approximately 55,000 persons.

Centre Initiation

The Centre was initiated in 1965 as a response to local teacher interest in the Nuffield Primary Mathematics program and materials. The Burton upon Trent schools became associated with the Nuffield project on the condition that the Local Education Authority (LEA) provide space for those teachers working on that project. The LEA provided a room in one of the schools and the Teachers' Centre was started as a mathematics centre.

In 1967 the Mathematics Centre moved to the location of the present Teachers' Centre and a full-time person was seconded from one of the schools to the Centre. In 1969 in response to the need for in-service education and curriculum improvement, the Mathematics Centre became a multi-purpose centre and the present director became its full-time director with the title, Curriculum Development Officer.

To understand the basic philosophy under which the Centre functions, one must understand the nature of the autonomy under which the British
teacher works. The director, in clarifying this point, commented on the autonomy of the Schools Council as an agency jointly funded by the National Department of Education and Science and Local Education Authorities but with complete autonomy concerning the nature of curriculum projects which are generated under the auspices of the Council. In like manner the Burton upon Trent Teachers' Centre, though funded by the Local Education Authority, enjoys a high degree of autonomy in the determination of program activities including both curriculum development and in-service education undertakings. He emphasized that because of this autonomy, the Management Council of the Teacher Centre was in a position to respond directly and wholly to the expressed needs and interests of classroom teachers constrained only by limitations of budget.

Programs of the Centre

The flavor of the Centre program emanates from the Director who has been directly related to each activity from its initiation through implementation, but will be less so as more activities develop. It is important however to understand the basic premise under which the director functions. As he indicated on more than one occasion, the Centre can function effectively only when interpersonal relations are on a "power equalized" basis. Whether the interaction is between the Centre Director and a classroom teacher, between a probationary teacher and a Headmaster, between a visiting lecturer and a primary teacher
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or whether these interactions take place in one-to-one settings
or in large group discussions at the Centre, the "power equalized"
or "working alongside" relationship is maintained. A visitor recognizes
this kind of working relationship in operation both as the Director
works with individuals at the Centre and with small group discussions
in in-service meetings.

The programs of the Centre are designed to foster both curriculum
development and in-service education. Although it is difficult to
clearly distinguish between those activities which serve one purpose
from those which serve another, some tentative delineations can be
drawn. A bulletin describing the activities of the Centre is distributed
for each semester and for the summer term. In that bulletin the
activities of the Centre are classified as Primary, Primary and
Secondary, and Secondary. Workshop and Study Group topics are varied
as indicated in the listing below.

**Primary**

- Infant Mathematics Workshop
- Primary Mathematics Study Group
- Primary Religious Education Group
- Primary French
- Art, Craft and Design Course for Infant and Junior Teachers
- Aims of Primary Education Research & Development Project
- The Treatment of Poor Readers
Primary and Secondary

First Aid in Schools
Audio Visual Aids in Schools
Probationary Year
Probationary Teachers Induction Conference
Probationer Teachers In-Service Programme
Probationary Year Study Group
Second Programme Production Groups
Science 5/13
Slow Learners
Library Working Party
Environmental Studies
Community Service

Secondary

ROSLA and After Project
Mathematics: Computer Appreciation
Mathematics: Shell Centre Mathematics Group
Humanities:

Humanities Curriculum Project
Integrated Studies Project
General Studies Project
North West Curriculum Development Project
Childwall Project
Religious Education in Secondary Schools Project
This substantial list of activities underway during a given semester is impressive. The variety of activities grows out of the attempt of the Centre to respond to the expressions of need by any teacher or groups of teachers. As listed in the bulletin these specific projects were scheduled as single initial meetings called for the purpose of exploring the nature and direction the study group should take for the semester; as a series of meetings previously planned for the semester; or as culmination meetings scheduled for the purpose of making final reports concerning the past work of the study group.

A description of two study group meetings will serve to illustrate the nature of Centre meetings. The first was an after school meeting of a ROSLA* study group. ROSLA is a series of video tapes prepared by BBC specifically for use in In-service Education. The topic on this occasion was "Remedial Education and Discipline." Twenty-eight instructors including the Headmasters from the two schools participating

*ROS LA (Raising of the School Leaving Age) results from the extension of compulsory education to an additional year of Secondary school. Throughout England it is recognized that teachers need assistance in preparing to meet the challenges of this change.
in this study group were in attendance at the meeting which was held
in still another school. The meeting was opened perfunctorily by
the Centre director and the video tape was then viewed by members
of the group. After the showing of the video tape the group was
divided into two sub-groups each with a preselected leader for the
purpose of leading the discussion. The discussion was spirited
throughout the 45 minutes to an hour duration.

The second meeting was an evening audio-tape planning session
attended by ten (9 men and 1 woman) primary teachers interested in
using audio-visual equipment in preparation of instructional
materials. The two hour discussion centered on content ideas for the
materials to be prepared and on the available resources of the Centre
and the schools which could be used to facilitate their efforts. Their
interest in audio-tape production was extended to include accompanying
slides. After considerable debate about how they might organize
themselves they concluded by setting a schedule of three meetings
for the purpose of learning to use the equipment: 1) audio-tape
recorders; 2) reprographic equipment; and 3) photographic reproduction.

Services of the Centre are varied. Exhibits of books and of
Mathematics Apparatus were held early in the semester. The Centre
serves as an information service about college and university courses
in the area as well as schedules of courses for the Open University.
It is especially used as a continuing source of Schools Council
information and in one document, The Curriculum Development Officer outlined the major recommendations of the James Report, a national report which by all accounts is to have a major impact on British education in the years immediately ahead. Especially significant are some of the recommendations concerning Teachers' Centres and In-Service Education.

Centre Staff and Organization

The administration of the Centre is under the direction of a full-time director assisted by some part-time staff. Both the secretary and the librarian serve approximately half-time. There are five teachers who are seconded to the Centre on a part-time or short-term basis. Four secondary teachers, one each in history, geography, mathematics, and science work on Centre business one full-day each week. The fifth person is on a term's leave with the nearby BBC local radio station in Derby which serves this community. His work is primarily in the preparation of a series of educational programs relating to the local environments. The four one-day-per-week teachers serve primarily in the capacity of developing learning resource materials and assisting in the relating of Centre activities to staff members in the curricular areas.

Four Committees serve as the policy making and decision-making arms of the Centre. The elected Management Committee is one on which persons serve two-year terms and are eligible for re-election. Ten of the
members are elected teachers, four additional persons serve because of their responsibilities at the Bishop Lonsdale College, as Secondary General Organizer (LEA), as Primary General Organizer (LEA), and as Further Education General Organizer (LEA). In addition the Director of the Centre and the Deputy Director of Education serve as ex officio members of the committee. Three sub-committees, one for Infant, one for Junior and one for Secondary Schools are appointed Ad Hoc committees with members selected so as to insure representation of each of the 37 schools by at least one member on at least one of the committees.

Finance

The Centre is financed exclusively by the Burton-on-Trent LEA. In addition to the salaries of the Director and his part-time assistants, a large proportion of the secondary teachers have a period free each week for curriculum development and in-service training purposes. Elementary teachers are oftentimes freed of classroom responsibilities for a series of half day meetings and, in cases of costs necessitated by these absences, the LEA assumes financial responsibility. The building upkeep, repairs and fuel are also the responsibility of the LEA. Additionally, the Centre has from the LEA an annual budget in the amount of £2,000 ($5,000) for consumable materials such as paper, film, audio tapes, cards, glue, etc., for equipment such as audio-visual materials, and Centre furnishings and for the fees and expenses of visiting lecturers and oftentimes minimal fees for local teachers who serve leadership roles in the in-service activities of the Centre.
Banney Royd
Banney Royd Teachers' Centre
at Huddersfield
William T. Spouge
and
M. Vere Devault
A variety of factors contribute to the specific nature of any given Teachers' Centre. The Wardens speak of the differences among various centres as a function of the unique needs of each community to which the Centre responds. At Banney Royd as elsewhere, the nature of the facility and the philosophy and personality of the Warden draw an indelible line through the continuous unfolding of the Banney Royd Teachers' Centre. The operational philosophy of the Warden, William Spouge, was aptly stated in an annual report. The Chairman of the Managing Body expressed their appreciation to the Warden for "His firm but unobtrusive guidance (which) ensures the smooth efficiency of our Centre." It is apparent that the vision of the Local Education Authority in establishing the Teachers' Centre is being implemented through a consistent and expanding vision of the Warden. In reviewing the written proceedings of the committees and panels of the Centre it is obvious that this vision, with its concurrent aspirations for the Centre, is being increasingly taken up by teachers throughout the LEA.

Initiation and Organization of the Centre

The establishment of the Teachers' Centre in Huddersfield was initiated by the Education Committee and the Chief Education Officer. A scheme or constitution for the Teacher-Management of the Centre was prepared by the Chief Education Officer and approved by the Education Committee on the 23rd of January, 1967, after full consultation with representatives of all schools and colleges.
The purpose of the Centre was to provide the teaching staff employed by the Authority with a place where they could "combine professional studies (e.g., through short courses of various kinds, or private reading of experiments with teaching materials) with opportunities for social contact." Membership in the Centre is open to about 2,000 persons in the service of the Huddersfield Authority including lecturers in colleges, administrative and professional staff or associate membership to other groups throughout the community who have a substantial involvement in the education of youth.

The administration and organization of the Centre is clearly in the hands of the Managing Body which provides direction to the Warden who is the chief administrative officer of the Centre and who is directly responsible to the Chief Education Officer for all matters concerned with the Centre. The Administrative Body consists of 38 persons, two each from the Heads of Primary and Secondary Schools, 15 secondary teachers (one from each of the 15 secondary schools), 10 primary teachers selected from ten defined sets of Infants and Junior Schools, six staff representing the three colleges in the Authority area and an additional four representing the other professional staff including a representative from the office of the Chief Education Officer.

The Managing Body meets regularly three times a year and at other times as business requires. This body serves an Executive function and has created committees and panels to carry out the administrative and
professional functions of the Centre. The House Committee is charged with the management of the facilities which is no mean task given the size of Banney Royd and the complexity of plans for its use. Professional Panels are appointed to serve the in-service functions as requested by members of the Centre. The success of the Centre during these first five years is undoubted. Attendance at Professional meetings has grown year to year from 1967-68 to 1971-72 (1212, 5552, 5312, 7062, 8379) and at Social Functions from the second year to last year by estimates of 1300, 1300, 2070, and 1926. The latter reduction was due to a power crisis which closed the Centre for many evenings. The figures represent attendance at functions in the Banney Royd Centre Building and could be increased substantially were one to consider the persons attending meetings elsewhere as a result of Centre initiation or Centre encouragement. In every case, teachers, headteachers, and administrators spoke of the contribution the Teachers' Centre had made in bringing them together, to get acquainted with one another, to learn that they have common problems from school to school and from one level to another, and to discover that ways can be found to tackle problems on an Authority-wide basis.

Professional Programs of the Centre

The Managing Body receives recommendations for the establishment of study areas. The recommendations may come from a single teacher, a group of teachers, the head teachers, or from other members of the Centre.
Once approved by the Managing Body, a panel is appointed and assumes responsibility for planning activities and making requests to the Managing Body for funds to support those activities. At the present time the following Panels function to provide activities designed to involve Centre members.

- Child Study Group
- Compensatory and Remedial Education Panel
- Community Relations Panel
- Counselling and Pastoral Care Panel
- Head Teachers' Panel
- History Panel
- Library Panel
- Mathematics Panel
- Music Panel
- Primary Panel
  - Reading
  - Mathematics
  - Drama
- Organization for Teaching
- Schools/Further Education Links

These panels undertake their work through a variety of means. Their results are disseminated throughout the LEA and have been instrumental in changing school practice in a number of instances. A few illustrative activities taken from the Fifth Annual Report for the 1971-71 year:
1) The Community Relations Panel organized a competition entitled "Living Together in Huddersfield." All schools were invited to submit children's work in the form of booklets and art or craft work. This committee also investigates race biased textbooks.

2) The Compensatory and Remedial Education Panel organized an exhibition of teaching aids made by Infant and Special English Teachers.

3) Counselling and Pastoral Care Panel: A series of six meetings based on the theme of children with special needs.

4) The Primary section of the Head Teachers' Panel concerned itself with problems arising out of changes in the academic calendar, whereas the secondary sections looked at problems associated with the coming reorganization of the Authority into a larger unit and re-organization of secondary education.

5) The History Panel has continued to collect original materials and to create and locate teaching units in the Centre Library Archive.

6) The Music Panel met every two weeks during the summer term in a workshop attended by 24 teachers. This panel also sponsored evening recitals by members and professional artists which were held at Banney Royd Centre.

7) The Primary Panel made visits to several schools as the central thrust in their study of the effects of building design on teaching methods.

8) The Mathematics Panel meets weekly to study the extent to which fractions should be taught in the primary school and to plan practical courses.
Social Programs of the Centre

A Social Committee elected by all teachers and staff in the Huddersfield Authority serves as an independent agency in assuming the social responsibilities of the House Committee. From the outset of the Banney Royd Centre, the social committee has been unique because of the necessity of creating an autonomous body to acquire and maintain the liquor license and the bar facility in the Centre.

The nature of the social program is related directly to the character of the facilities in which the Teachers' Centre is situated. A lovely stone structure, built about 1900, situated on seven acres of beautifully landscaped grounds and gardens, provides an atmosphere conducive to informal visits among colleagues before and after meetings. These social contacts are an important part of the Centre. This informality is enhanced by the presence of a fully-functioning bar and by the work of the social committee which oversees the management of the bar and plans other social activities throughout the year. Their largest function is the Summer Ball which in 1972 was attended by 340 members and guests.

Facilities

The importance attached to the Centre by the Authority Education Committee is perhaps best illustrated by the $50,000 which were expended for the purpose of restoring Banney Royd to its present condition. The building had been empty for a number of years and required substantial
work to repair it to its original state and to make minor changes appropriate to the functions of the Teacher Centre. The building has a meeting room which will hold about 80 persons. This room together with a lounge, the bar, a dining room, kitchen, a suite of administrative offices and the entry foyer comprise the first floor. The second floor is given over to several rooms appropriate for workshop activities. Two of these are equipped with duplicating equipment and with woodworking equipment. Teachers are actively encouraged to use all equipment independently and informally.

Staff and Budget

The staff of the Centre consists of the Warden and his secretary, both of whom are full-time employees of the Authority. Additional staff include two caretakers and a gardener. A half-time typist completes the roster of staff salaried by the Huddersfield Authority. Two additional persons, a caterer and a bartender, are the financial responsibility of the Centre itself. In addition to salaries, wages, and insurance, the budget of the Centre has been approximately $12,500 annually. Panels submit annual estimates to the Managing Body which puts together a total request for the Centre. This total request is approved or revised by the Education Committee and returned to the Warden and Managing Body. If the budget has been revised, the Managing Body assumes the responsibility to determine where and how the cuts will be administered -- an important element of control. The work of the Managing Body and of the other
committees and panels of the Centre are open to scrutiny by all members. A sense of participation is felt by a large proportion of the teachers in the Authority. While there are no data regarding the numbers of staff who do and do not use the Centre (only data on total number of persons attending each meeting totalled for the year), one gets the impression that teachers do feel free to use or not use the Centre and that approximately 50 per cent of the teachers make some use of the Centre and about 25 per cent make regular use of the Centre as active panel members.

That the Centre is, indeed, in the hands of the members and their Warden is illustrated in a statement made by the Chief School Officer when asked by a group of Chief Officers from other Authorities during a visit to Banney Royd, "How do you run this place?" He replied, "I don't, I leave that to the Warden and the Managing Body."

Toward the Future: A Statement by Warden W. T. Spouge

When the Centre was proposed in 1966, the Authority envisaged full teacher participation in a situation where there was only a very small advisory service with no curriculum specialists, apart from Physical Education and Music. Hence the provision for teacher responsibility for curriculum panels and the requisition and administration of Centre funds. This situation meant also that the Centre started "with a clean sheet," and, with no precedents for patterns of in-service programmes, the Managing Body could only be forward looking. This too,
was the right time for an empirical approach and flexibility. But this could only be a temporary state. By the very nature of the enquiries which teacher-groups committed themselves, it was realised that the services of specialists would be required. In the new local government area into which Huddersfield will be merged from April 1974, the Education Authority will establish a large advisory staff for all major curriculum areas. It is my purpose now to work with the Managing Body towards a fruitful relationship between advisors and Centre committees in a way that will preserve the teacher initiatives already developed in the first phase. The present Scheme of Management has shown itself to be sensitive to changing needs and I am confident that it will enable the Centre to work well in a coherent manner.
Bath
City of Bath
Teachers' Centre
Ivan Wood
and
M. Vere Devaldt
The nature of the Teachers' Centre in Bath derives its character largely from the philosophy and personality of its Warden. Teacher involvement, not service to or for teachers, is the first peg to which the Centre is pinned. Consequently, the Warden plays service roles specifically designed to build relationships between the Centre staff, and schools and their teachers. As a result, many teachers find the Warden a sympathetic listener, a person who can help cut through the red tape to solve their professional or personal problems, and a source of professional inspiration. The Centre, then, can be characterized as a place where teachers involve themselves in planning and implementing curriculum development and in-service training activities. The Warden, while facilitating these efforts, also plays the role of counselor to all who seek him out.

The Origin of the Centre

Existing teacher groups had long felt the need for a forum, or meeting place, and in 1966/67 the local teachers' organizations proposed to the Local Education Authority that a teachers' centre should be established. The LEA and the Education Committee of the Bath City Council were in general, sympathetic to this proposal although at that time few had any real idea of just what a teachers' centre should be. In 1967/68 funds were made available and the Warden was appointed in 1969.
Function of the Centre

The revised constitution for the Centre identifies four major purposes.

a) to enable teachers to come together to examine the objectives of their work

b) to develop methods and materials likely to achieve these objectives

c) to assess and modify these methods in the light of experience in the schools

d) to facilitate the work and study of existing subject groups in the City, and to encourage the formation of others.

In the Warden's report at the Fourth Annual General Meeting in October, 1972, he interprets these purposes in a way which more clearly portrays what he sees to be the Centre function.

Quite clearly, our main function must lie in the field of curriculum innovation and development. For the first time in the history of popular education in this country teachers have become involved in, and to a large extent, responsible for significant innovation and development in the curriculum . . .

I sense too in my colleagues a growing awareness that they are the real professionals in education; that the expertise that really matters is that which can be found in schools and within individual classrooms, and that the peripheral services -- the inspectorate, the organizers and advisers, the colleges and the teachers' centres have so much to offer only because they are nourished and sustained by the ideas and experiences of the grassroot professional.

If this is true, then the teacher today must be able to draw upon resources to help him in this more professional role, and this, in my opinion must be our second, but very important function.
Centre Program

By the beginning of the 1971-72 school year, the pattern of programs for the Centre began to fall into six classifications. Although there were no formal designs to identify or clarify these classifications as distinct elements within the Centre, the many program activities seemed to be moving in a variety of directions.

Curriculum Development. A large proportion of the meetings organized at the Centre were for the purpose of reviewing the objectives of a given curriculum area and designing improved curriculum materials to be used in the classroom. Curriculum development activities underway in 1972-73 were especially planned for such areas as Environment, Conservation, Mathematics for Non-readers, Science 5-13, History, and Religious Education. In many instances in the past, the work of curriculum development committees has resulted in the publication of reports which were then distributed to teachers throughout the City of Bath. In other instances, curriculum materials developed by the Schools Council, by commercial publishers or from other sources were studied for their implications for curriculum for local schools. Adapting these materials to meet local needs was then the primary focus of the teacher committee.

In-Service Training. In this area it is sometimes difficult to distinguish between the work of the LEA and that of the Teachers' Centre.
The Area Training Organisation of Bristol University also coordinates some in-service activities which are held in the Teachers' Centre. In general the ATO will be providing those courses which add to a teacher's "qualification," the LEA will provide courses which it sees as relevant to the needs at the schools while the Teachers' Centre will respond to the more personal needs of teachers; those which help them in the day-to-day contact with pupils, e.g., music, crafts, science activities and those connected with pupils' number and reading problems. Regularly scheduled in-service workshop and discussion activities during the 1972 school year have been in the area of English, Geography, Outdoor Activities, Programmed Calculators, Nursery School, Primary and Secondary French, Art, Careers, and ROSLA (Raising of the School Leaving Age).

Exhibitions. Twenty to twenty-five exhibits of instructional materials are held each year. Publishers, manufacturers, and the Schools Council materials have been the focus of these exhibits, and are readily available for irregularly scheduled meetings with teachers and students interested in becoming acquainted with new developments in curriculum.

Resources. The provision of resources for teachers is a major function of the Centre. Resources of the Centre are both material and human. Initially the Centre was seen as a source of personal classroom assistance and to this end, Centre personnel continue to spend a large portion of their time in the schools working with children and teachers. Serving always at the request of teachers, the Warden may serve as a team member working with children alongside the classroom teachers, or as a
demonstrator to illustrate for the teacher a new technique or new materials, or even at times as a substitute for the teacher who needs to be free of the classroom for a short period of time for any number of reasons. Material resources include Schools Council curriculum materials, craft materials from local merchants, special audio-visual equipment, and duplication facilities to name a few.

**Pastoral.** Teachers frequently consult the Warden about both personal and professional problems. Through his own knowledge and skills as a counselor or through his knowledge of other persons or resources, he has provided an important almost adjunct service of the Centre. In the Warden's words, "Looked at in a cold and logical manner, it could be difficult to justify the work we are doing in this field, yet it is, in human terms, perhaps the most valuable service we offer."

The success of the Centre program can be judged in part by the volume of teachers coming to the Centre during the 1971-72 school year. Two hundred ten teacher meetings were held during the year, with an attendance of about 1,500 per term or an average of about 23 for each school day; considering that the area has about 700 teachers this indicates that a substantial proportion of them join in the Centre's activities. The importance of the role the Warden and Technical Assistant play in going into the schools as a source of support for the work of the Centre, as a means of building confidence in the sincere intentions of the Centre staff, and as a means of keeping an open and active dialogue between teachers and Centre staff cannot be overemphasized.
Organization and Staff of the Centre

The constitution for the City of Bath Teachers' Centre provides for two major governing bodies: The Council and the Executive Committee. The Council is composed of 17 classroom teachers, 8 representatives of colleges of education, technical schools, and other defined institutions of higher education, 6 representatives of associations of head masters or mistresses, 2 representatives of unions, 1 youth and community representative, the teacher representatives on the Bath Education Committee, a representative from the LEA and the Warden. The Council serves as the policy-making body of the Centre. The day-to-day running and development of the Centre in keeping with the policies of the Council is the responsibility of the Executive Committee. This committee is composed of 4 primary teachers, 3 secondary teachers, 1 teacher from Further Education, a representative from the LEA and the Warden.

Bath is one of the smaller local education authorities with 40 schools and about 700 teachers -- an area small enough to enable the Centre staff to have friendly and intimate contact with their colleagues in the schools. The two local colleges of education and the university school of education have also encouraged useful contacts between their students and the Centre.

The staff of the Centre consists of three persons: the Warden, a Technical Assistant and a half-time secretary. The Technical Assistant
was added to the staff at the beginning of the 1972/73 school year in recognition of the extremely heavy load being carried by the Warden. Either his trips into the schools were to be curtailed or programmes of the Centre were to suffer if assistance was not provided. The Centre was fortunate in obtaining the services of a qualified and experienced teacher as Technical Assistant and it is anticipated that her role will become increasingly like that of a Deputy Warden. At the present time the Technical Assistant is assuming responsibility of the audio-visual aspects of the programme but, because she is a teacher, is also increasingly assuming responsibility for the social science and craft subject areas whereas the Warden's major role may turn primarily to science and mathematics.

Facilities

The Centre is housed in the centre of Bath at 5 Hot Bath Street. It is but a few steps from the Roman Baths and no more than a block from Bath Abbey. The building is a part of the historical setting of the immediate community. To the American visitor, it is part of the "things to see" in Bath; to the local teacher it serves its essential purposes without flourish. The building is shared with the local Technical College and both the College and the Centre face a shortage of space. The Centre presently includes a Warden's office and a secretary's office on the second floor; a conference room and the technician's room on the first floor. In the basement is a lounge, a kitchen and storage space.
**Budget**

The LEA budget for the year 1972/73 (April 1st to March 31st) amounted to $15,500 and was made up as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Salaries</td>
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</tr>
<tr>
<td>Premises</td>
<td>913</td>
</tr>
<tr>
<td>Supplies</td>
<td>1,988</td>
</tr>
<tr>
<td>Warden's Car Allowance</td>
<td>475</td>
</tr>
</tbody>
</table>

This, for a small authority must be considered generous. On a "per-capita teacher" basis it compares very favourably with larger authorities and reflects the authority's interest in education.
The teacher center concept is one of the hottest educational concepts on the scene today (and that is no mean compliment, given the rapid ascendency of career education, competency-based education, the open classroom, schools and universities without walls, and a myriad of other outstanding present-day educational innovations). The impetus for teacher centering has come from many places, contributing to its rapid growth and relatively widespread base of support. Stephen Bailey, Harry Silberman, and a bevy of other renowned educational spokesmen have advocated the approach; a number of demonstration centers were started by Task Force '72 of the United States Office of Education; the Ford Foundation supported a series of "lighthouse" programs; the National Association of Independent Schools conducted a series of workshops on the subject and helped organize a communication network among some of the centers; the National Education Association, American Federation of Teachers, and United Federation of Teachers have shown a high interest in the concept and have published a number of position papers outlining some possible models; Texas, New York and Florida have legislation regarding the development of centers; and many supporters have been brought in through the fascination for the seemingly greener grass that grows
across some deep oceans. But probably even more important than all of these very strong roots of the movement is the fact that teacher centering deals with several of the most important needs of teacher education: how can pre-service and in-service education be successfully linked; how can education professionals be continually renewed in their ability and vigor; and, probably most important, how can teacher energy be most powerfully and effectively generated. Because these needs are relatively old ones, thoughtful educators have been grappling with them for some time--and have been putting together "teacher-center-like" gizmos for some time. (I use the word gizmo because a teacher center can be a non-place--a concept or organizational mechanism--as well as a place.) Because of the importance of the problems it deals with, the long years of searching for more effective means of in-service education and the post-Sputnik avalanche of resources for experimentation and innovation, teacher centering in America is much more wide-spread and complex than even the informed educator would generally expect. While many Americans are rushing off to foreign lands to observe "real centers" in action, teacher centering of one kind or another is being actively pursued in thousands of different places--and probably in a much richer variety than in any other nation in the world. It is occurring in training complexes, staff development centers, portal schools, lighthouse schools, advisories, curriculum centers, etc., etc., etc., as well as in a rapidly growing number of "teacher centers."
Although the hackneyed expression "every place or concept in the nation is unique" would apply, some generalities can be made about the kinds of teacher centering that now exist. Twelve types seem to stand out: 1) independent centers (tea centers), modeled after the British Teacher Centers, places where teachers can share experiences and successes without "interference" from other educators; 2) staff development centers (establishment centers), commonly found in most major American school districts, places where in-service training of educational personnel takes place--generally on a relatively systematic basis and in relation to particular priorities of the sponsoring school system; 3) consortium centers (cooperating centers) exemplified by the training complexes sponsored by the United States Office of Education, places where school and university personnel work together to solve the most urgent problems of schooling; 4) exemplary material and experience centers (full banquet centers), existing in a few large systems, e.g., New York City, places where innovative and sometimes unique materials are made readily available for both independent study and use within specialized training programs; 5) installation centers (hottest new thing centers), exemplified by the portal schools advocated and sponsored by the National Teacher Corps, places devoted to the demonstration or delivery of a new educational concept or approach into a larger school system or region; 6) creativity centers (do you own thing centers), like the Education
Development Corporation Curriculum Center, places where teachers generally work alone to create new materials and programs for the improvement of the educational of children; 7) **regional training centers** (training smarts centers), relatively non-existent but well described in Teachers for the Real World, places where the best training expertise of a given community or region—both from the private and the educational sectors—is brought together to focus on problems of personnel development; 8) **field intern centers** (university in a strange land centers), ala the regional centers in Michigan and Pennsylvania, places which focus on the training of and introduction into the system of new educational personnel; 9) **lighthouse centers** (swing places centers), characterized by many of the centers sponsored by private foundations, places which because of proven successes and exciting new practices are used as exemplars for program development and staff training elsewhere; 10) **concept centers** (process is more important than place centers), characterized by the "circuit rider" programs used in some school systems and the Educational Extension Agent program sponsored by the United States Office of Education, "places" which go wherever the greatest need for personnel development happens to be at a given time; 11) **combination centers** (mongrel centers), probably the most common type of center in the nation, places which combine two or more of the functions listed in the first 10 types; and 12) **other centers** (ideal centers),
most commonly found in the minds of creative people, places which do things that have not been covered here or that are being planned for some future time or place to do something that is not discussed here but which is "more important than anything else that has been done to date."

Although this is a long list of center types, it is probable that many kinds and examples have been left out. The list is presented then not only as a description of some of the exciting kinds of centers that are being developed across the land but to help spark a dialogue about the rich range of promising possibilities that do exist.

Views about the nature and potential of teacher centering have been somewhat mixed at the Federal level. On the one side are those who feel that in these days of great need for improving our educational systems and for combining our resources in the most effective way possible, that the last thing that should happen is to further isolate any group in the educational spectrum--and especially the teachers who already have one of the "loneliest jobs" in education. This group advocates centers that bring the various constituencies together and argue that the separatism that generally exists between teacher and administrator and between schools and colleges is one of the major problems in American education. Others argue that the classroom teacher is and always has been at the core of the formal educational system and it is about time that they have become the focus of plans...
for new organizations and approaches to educational personnel development. Both viewpoints are valid and there is no reason that they need to result in divergent programming. No matter the organization or function of a center that has a relationship to a larger educational system, it should be a place where responsibility is shared by all educational constituencies, including the children. But highest priority should also generally be given to the improvement of the teacher-learner relationship, and as long as that remains the programmatic focus of the center, teachers should play the major role in determining the needs and operations of such a place.

For more important reasons than the "alleged teacher surplus"¹ most educational leaders are finally admitting that the greatest payoff in staff development can come at the inservice level. Teacher centers, no matter their specific form or name, probably represent the best current experience we have in how to most effectively deliver inservice education. There is a great need to spark a rich dialogue about the pros and cons of each form and to more completely communicate success across systems.

¹. One half of the nation's kindergarten-age children are not in school, pre-school education is non-existent in most parts of the country, we have only one counselor for every 500 students, we have an acute shortage of special education teachers, many classrooms are over-crowded, one half of adults over 25 are functionally illiterate, etc.
Since the inception of the Appalachian State University Training Complex in 1970, its purpose has been to provide a place where teachers come to be trained from the moment of their decision to teach until leaving the profession. Education personnel from 57 schools in 8 mountain counties in northwestern North Carolina are the target group for the Complex. The impact made by the ASU Training Complex can be measured in part by the participants' increased involvement in curriculum development.

People Involved

Participants in the Complex's Programs. The participants are described as "the existing student body in the schools with which the Complex works." This includes university staff, teachers, administrators, interns, parents, and pupils. The applicants are chosen as a result of discussion and agreement of local district superintendents, principals, and the Director of the Complex.

The Training Complex Staff. The staff consists of the Director and a full-time secretary, located at the ASU College of Education. In addition to promoting the program among schools and handling budget allocations, the Director acts as a resource person to schools in staff development.

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1. This and subsequent quotations are taken from the Director's End of Year Report: Appalachian State University Training Complex, June, 1971, Paul Federoff, Director.
The Advisory and Governing Boards make policy. The former meets three times a year. The latter meets monthly to conduct the formal business of the Complex. Representatives come from the community, business industry, school administration, Wilkes Community College, State Department of Public Instruction, Regional Center and ASU.

Others Involved in the Complex. Consultants and organizations are peripheral to the two-member staff of the Complex. Around six of the consultants are professors in the College of Education at ASU. Others are master teachers in the various "model schools" or "training centers" (usually an elementary and high school in each county). The services of resource persons from the State Department of Public Instruction (from Raleigh) and university staff from other teachers' colleges throughout the United States are also tapped.

The characteristic features of this extended, informal Training Complex "staff" are that they offer on-site consulting services to schools requesting them.

The organization most closely linked with the Complex is the Northwest Regional Center, the service arm of the State Department of Public Instruction. From February, 1971 onward, six persons in the Regional Center have been located on the same premises as the Complex Director, to ensure closer ties between the two groups.
Programs Offered by the Complex

In-service Training for Teachers. The strategy for reaching regular teachers involves the choice of a "model school" that demonstrates a willingness to cooperate in curriculum development, i.e., Career Education, Special Education, Individualized Instruction, team teaching, peer teaching, learning activity packages, etc. On-site consultations, in-service sessions and workshops are then offered by the Complex to assist in the implementation of the new programs. Four of the eight counties in the region already have model schools functioning.

Other schools wishing to emulate the programs operating at the model schools follow a similar pattern of planning. The Complex Director works through the superintendent and the principal; the latter talks with teachers to determine the extent of their interest. If they wish to explore the idea further, they visit a number of schools on release time. Their visits are not necessarily restricted to just the schools in the eight county region.

Once excited with the idea of gearing up for a new program, the school staff forms a local staff development committee to assess its immediate and long range training needs.

A stream of consultants come in from ASU, neighboring schools, or from out of state to help teachers plan the stages of the process they want to work out in their school. Workshops are set up at the
university, a junior college or at another location for teachers to make the instructional materials needed for classrooms.

"Circuit-rider" for social studies teachers. For two months, the Complex enlisted an effective secondary school teachers of social studies to be a "circuit-rider" -- traveling to schools in a seven county area to help high school teachers with their instruction. This individual was, like other resource persons from ASU, a consultant in-residence, thereby allowing for the same kind of free exchange between teacher and resource person.

Training for administrators. A one-week workshop, coordinated by the Complex, the Regional Center, State Department of Public Instruction and local districts in the eight county region, was launched in June, 1971, and repeated again in 1972. The goal was to bring together superintendents, their staffs and the principals in a planning session for the coming school year.

A meeting in June, 1972 provided background for the initiation of the Training Complex effort at implementing competency based teacher education (CBTE).

In addition to this yearly workshop, superintendents have been meeting monthly with the Complex Director. Monthly meetings of high school principals have been initiated as well, with the idea of investigating new instructional programs and pooling information on solving common problems.
Training for Teacher Trainers. TTT, a program financed by the National Center for the Improvement of Educational Systems, in the U. S. Office of Education coordinated their project work in 1971-72 through the Complex.

Training for education students. The Complex also has a commitment to university education students. Several programs, with academic credit, increasing the University students' field experience have been fostered by the Complex: 1) Sophomore interns -- six hours a week in assigned schools, 2) Junior interns -- four hours a day in the classroom, and 3) Teacher Corps Graduate Intern Program.

Special Programs for Target "Student" Groups

The Community School. In Wilkes County, three community schools exist for adults. A fourth will be added next year. Their major function is to expand recreational and adult basic education for the poor Appalachian white residing in isolated areas. Classes run from 3-10 p.m. on weekdays. Four staff members run each school, with an assistant principal acting as director. The program grew out of the experience the first Training Complex Director had with community schools in Flint, Michigan and consequent exchanges.

Dropout Prevention. In Avery County, two schools, an elementary and high school, are involved in an effort to provide special attention to the potential dropout. A consultant-counselor has been employed with Complex assistance to help identify potential dropouts and to help
tailor programs for them. It is a notable fact that dropouts decreased by 22% in the first year of this effort to retain students.

The development of programs in Special Education, Early Childhood Education and Career Education have also been encouraged and assisted by the ASU Complex through consultants and institutes.

Facilities

Special efforts were made to ensure that the Complex program and activities were not centered too heavily in one place. The first Director said: "The emphasis is on training for the real world . . . using schools in the region as educational laboratories in place of the college campus." While schools are frequently used; junior colleges, community centers, and community colleges provide on-site locations for the majority of workshops and group discussions.

Finances

Although funding patterns vary from year to year, the Training Complex received less than half of its total budget (1970-73) from NCIES of OE (which includes $150,000). The balance of the budget comes from the Regional Center, local school districts, State Department, Wilkes Community College, foundation grants and ASU. All totalled, the Complex works with roughly $350,000 each year.

In the majority of cases, the Complex offers supplemental funds to an existing program. It has thereby facilitated the further development of Title I and Title III programs operating in the same schools where the Complex is attempting to coordinate such activities on a larger scale.
The projects the Complex has started and supports on its own are the instructional materials for teachers (which amounts to $15,000), pay for substitutes that replace teachers on release time for visits, the salary for the consultant counselor with the dropout prevention program in Avery county, salaries for teachers attending week-long workshops, fees for consultants, the junior intern program, and special workshops.

Generally speaking, the bulk of the Complex finances has gone toward personnel and workshops through the process of joint funding with the Local and State Education Agencies. Hence, the money issuing from the Complex has served to extend existing programs and coordinate new ones in cooperation with other funding sources.
Boston
The Greater Boston Teachers' Center
Judy Richardson
The Greater Boston Teacher Center was started as a response to the needs of teachers who had attended National Association of Independent Schools summer workshops in Open Education and wanted continuing help as they began to make changes in their classrooms. It is now involved in the creation of a consortium of teacher-training institutions in an attempt to influence not only in-service education but the larger field of pre-service as well.

In May 1971, Edward Yeomans, Associate Director of Academic Services of the National Association of Independent Schools, submitted to various foundations on behalf of that Association a three year project proposal "to establish a center in Greater Boston for the support and evaluation of open education."*

The three-year project described in this proposal is designed to demonstrate ways of encouraging and sustaining basic changes in teaching at the primary, elementary and junior high levels. Inspiration for these changes has come from work going on in many of the state-supported primary schools and a few secondary schools in England.

Since 1967 and the publication of the Plowden Report, great numbers of Americans visited the English schools using some form of the integrated day approach. There is now a whole body of literature and films on the integrated day, Leicestershire approach, open

*These quotes and the major ideas focusing on the development of the Centre are taken from Edward Yeomans, A Proposal to Establish a Center in Greater Boston for the Support and Evaluation of Open Education and the Integrated Day, 1971-74.
education or under some other descriptive term. In increasing numbers experimental programs are being established in public and non-public schools alike in an effort to emulate what is seen as the British success.

Mr. Yeomans expresses a note of caution since there are great differences in English and American children and their relationships to their families and schools. He points out that while some developing programs are well thought out, others are of the "instant Leicestershire" variety. To avoid failures and haphazard development, he proposed the establishment of a center that can gather information and focus resources and experience on what he sees as a significant change in education while it is still in its early stages.

In January 1972, the Greater Boston Teachers Center was organized and began with a series of six once-a-week after-school workshops for 15 to 25 teachers each. In the first series (Winter 1972) an enrollment of 300 teachers at twelve resource centers utilized existing facilities in a new way. Teachers, administrators and parents from both public and non-public schools participated.

From its inception, the Center has had as its purposes:
1) increasing the teachers' self-confidence, knowledge and ability to deal with classroom problems of instruction and management, and
2) extending the use of existing parent, teacher and community resources toward the direct improvement of schooling for children.

To achieve these purposes instructive programs, workshops and individual
sessions are planned to respond to the direct needs and interests of specific teachers or groups of teachers. Workshops are open to anyone for whom they would be helpful. The aim of the center is to encourage trust and the ability to share one's own experiences and to learn from others — in other words, to promote openness in dealing with the problems and experiences of education among teachers, administrators, parents, graduate students and others in the community.

The most recent undertaking includes the development of a small network of teachers centers which now receive partial support from Rockefeller Brothers Fund. These are GBTC, the center in Greenwich, Connecticut under Celia Houghton, the one in Cleveland under Penny Buchanan, the one in Storrs, Connecticut under Vincent Rogers, the one in Harlem under Lillian Weber and the one in San Francisco under Amity Buxton. It is hoped by these means to build a forum for communication of experiences within teachers centers.

Program and Participants

The Greater Boston Teachers Center, currently achieves its purposes through three kinds of activities. 1) a series of fall, winter and spring six-session workshops; 2) advisory services to specific schools and teachers; 3) the promotion of study and development of new and more comprehensive ways to evaluate student achievement than most standardized tests can accomplish.

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Workshops

The workshops are generally offered in the late afternoon during the week, although some Saturday morning offerings have been made. Sessions range from two to three hours. Participants pay $15 per course, or they may pay as much as $156 additional fees to one of several colleges if they arrange for graduate credit. Credit arrangements involve additional reading and seminar work for the participant who may work through Lesley, Simmons, Wheelock or Tufts University. There is an effort to create a larger consortium which will include Newton College and Clark Universities. At present, no attempt is being made to work with the largest institutions because of the complexity of working out such an arrangement.

Some of the workshop offerings have been: LANGUAGE ARTS IN OPEN CLASSROOMS, MAKING CLASSROOM MATERIALS FROM RECYCLED AND OTHER SOURCES (offered in the Children's Museum); ENVIRONMENTAL EDUCATION WORKSHOP (at the Habitat School of Environment); USING THE URBAN ENVIRONMENT IN TEACHING (Storefront Learning Center); GRAPHICS IN THE CLASSROOM, DRAWING AND WRITING FOR THOSE WHO THINK THEY CAN'T; MAKE-IT-YOURSELF CLASSROOM EQUIPMENT (Wheelock College Resource Center); THE MOVEMENT TOWARD COMMUNITY (Central School). Although many of these centers offer their own programs and workshops throughout the year, the Greater Boston Teachers Center contracts with the staff of the centers for the GBTC offerings, renting their space, or the GBTC may provide staff they have hired and rent space only.
In the first winter series in 1972, there were 300 participants. Most are working with elementary level students. However, some workshops are appropriate for people involved with any level of students. The workshop on Making Classroom Materials during the spring of 1973 attracted teachers from Kindergarten to High School, a teacher of the handicapped, graduate school students, and staff from other resource centers. The twenty participants came from twelve cities and towns in the Greater Boston area.

The Advisory. In its workshop and consortium activities, the Greater Boston Teachers Center plays a role that is somewhat aggressive in its attempts to make available opportunities for people to come together from different schools, communities, and levels in education. It is in the Advisory function that it plays a responsive role, adapting its resources to specific needs at a local school or classroom. Both the title and function of the five GBTC advisors are adapted from the British practice.

Each of the five advisors has had wide experience in the classroom and has demonstrated specific strengths in a particular area like music, art, language or in general curriculum as well as in workshop leadership. Their role is to build up self-confidence in teachers and they go into a classroom only at a teacher's request. It is a policy of the advisory never to suggest any opinion about individual teachers to other teachers or to the administration.
When a school has contracted for GBTC involvement, the director will set up with the schools a series of sessions -- (probably on a weekly basis) -- which serve to introduce the advisory members' strengths and methods.

**Evaluation Study**

One member of the GBTC advisory staff is hired in a trainee capacity in connection with an effort to work toward more adequate and comprehensive evaluation techniques and descriptive literature regarding student achievement. In open curriculum programs most standardized tests are inappropriate or less than adequate for the broadened goals of classroom activities. The GBTC's work in this area is in the early stages of development and the Center is cooperating with several individuals who have been developing descriptive and evaluative materials for a longer period.

**Staff and Administration**

The National Association of Independent Schools, as the parent organization and fiscal agent of the GBTC, appointed the Teachers Center project director who in turn appointed all other staff. Currently, in addition to the director, the staff consists of the five advisors and a secretary.

Executive Committee. The NAIS President named our executive committee which serves in an advisory capacity, to review budgets and reports, and to offer suggestions to the Center Director. The
committee includes two representatives of NAIS Committees on Teacher Training and Academic Affairs, representatives from public institutions and a representative of a teacher-training institute.

The director has great latitude and numerous roles to perform in making decisions about the Center's operations. One of the primary roles for the director is that of contact person for the Center. In this function the director explores potential (or continues existing) school contacts and contracts. After a contract for services has been made with a school district, the director will continue as a central figure throughout the introductory sessions with the school staff while relationships between the staff and advisory personnel are being established.

Another role of the director is to arrange workshops, find resource people and locations for the workshop sessions. The director is also the key individual in seeking foundation support and in the continuing effort to enlarge the consortium of teacher-training institutions.

Facilities

Administrative offices located in Cambridge are the extent of the Center's permanent facilities, while the Center's operations are dispersed throughout the Greater Boston Area in schools, colleges, museums, and community buildings.
Budget

Originally, most of the entire $150,000 budget came through foundation support. Now workshop fees, advisory service contracts, and publications are beginning to help the center work toward a self-sufficient status which it hopes to attain in time.

The chief source of funds is the Rockefeller Brothers Fund. Both Rockefeller and New World Foundation have made three year grants to the GBTC, while Merrill Trust, Blanchard Foundation and Carnegie Foundation have made one year grants. Money is received through NAIS who in turn receives a certain percentage for this administrative service. State money is being sought through the Council of the Arts and Humanities and federal funds have been requested from the Office of Education.

For the first series of workshops, participants paid only materials costs; since then a flat $18 charge has been made for the six session series. The charge for GBTC sponsored summer workshops ranges from $50 to $150.

It is the nature of the GBTC to try to provide assistance wherever it is sought. Consequently, informal arrangements may be worked out and service given before any kind of financial contract has been made. In general, one third of the advisory service is provided without compensation, with two thirds of its actually contracted for. An exception to this is the service of one advisor whose entire time is spent in the city of Cambridge, Mass. Foundation
money was sought and received specifically for this position, as it was for the 3/5 time advisor-trainee.
Philadelphia
The Philadelphia Teachers' Center
Frederick Locke
In 1967 the Teacher Center program began on a one day a week basis in a school basement with a staff of one. It grew steadily and in 1969 moved to its present location on the second floor of an old, expendable school building in an urban community which comprises a racial and socio-economic melting pot. The Center is funded jointly by Philadelphia School Board and Title I.

The Teacher Center has both a horizontal and a vertical structure. The vertical structure impresses one from the outset for it is housed in the Durham Child Development Center, a unique learning facility. Enrolled there are infants in a day care program, toddlers, ages 18 months to 3 years, 3 and 4 year olds in a Headstart Center, children of elementary school from K-7th grade and finally teenage mothers in an alternative junior high school program. Surrounding this expanded school program are the parents, teachers, paraprofessionals, and teachers-in-training who support and sustain the Durham Child Development Center. It is in this family-like setting that the Teacher Center operates and develops its classroom approaches and materials.

The horizontal structure of the Teacher Center includes services and contacts with teachers throughout the Philadelphia school system. The basic services include Open House Workshops, and Released Time Workshops. The Open House Workshops run from 3:00 to 8:00 p.m., after school on Wednesdays, Thursdays and again on Saturday mornings from 9:00 a.m. to 12:00 n. offering announced topics such as math activities...
for the improvement of basic skills, cooking in the classroom, puppetry, etc. and in addition providing on-going consultations about activity centers: shoebox labs, cardboard carpentry, science units, and handicrafts.

The Released Time Workshops are held during school hours on Wednesdays and Thursdays and are arranged by the staff in response to requests for workshops on specific topics. These requests come from district coordinators, curriculum supervisors, principals and teachers. Beyond these, requests for special workshops come in from Child Care and Get Set Program supervisors who wish in-service training and space utilization advice for their staff.

Finally the Teacher Center staff is involved in an out-reach program to Philadelphia Title 1 Schools and arrange for on-site consultations and mini-workshops when requested. In these cases staff members act as a liaison between a given school and the Teacher Center as a whole and in this way direct links are established between the resources of the Center and the specific needs of the school.

The Teacher Center occupies the space of five former classrooms and includes in this area the following:

math lab       arts and crafts center
pre-school center basic supplies unit
reading area    shoebox lab
tri-wall & wood workshop games unit
On the same floor there is one more classroom given to a language arts center adjacent to the school library. Workshops are generally limited to 25 people, but sometimes two and three distinct workshops running concurrently push the total up to 35. The staff numbers four full-time people and an auxiliary staff of eight who collaborate on the open house workshops and out-reach programs.

There are some "occasional" parts of the horizontal structure, too. Some courses for college credit meet at the Durham Child Development Center. In addition, courses at local universities in education, early childhood study, and other related subjects often include the Center as one useful model and therefore arrange a workshop there. Similarly, the school and community coordinators of the school system schedule their in-service training sessions so that we have direct contact with a sampling of parents who are interested in bettering school and community relations.

Among the important learning and human principles in evidence at the Philadelphia Teacher Center are the following:

- Support for the individual teacher's own initiative
- Provision for diverse learning experiences ranging all the way from proven models to be copied to brainstorming about new approaches and new materials
- Readiness to go the extra mile
Kanawha Valley Multi-Institutional Teacher Education Center

Kathryn Maddox
Introduction

Although an abundant supply of teachers is prevalent in today's society, one of the most pressing needs for the world today and tomorrow is that of training and retraining teachers who can upgrade educational procedures and practices for youth. One institution cannot do this alone. Improved programs and cooperative commitment of community, schools, colleges, and state departments can bring about new hope and new educational opportunities for the rural and urban child. These agencies can pool resources, human and material, in a concerted effort to give children a positive image of self and to give teachers and students of teaching expertise in teaching strategies as well as skills in interpersonal relations.

Teacher Education Center

Kanawha Valley Multi-Institutional Teacher Education Center (MITEC) has served as the pilot program for the center concept in West Virginia, in several other states, and in some instances, internationally. The center concept began when West Virginia was selected as one of seven states in 1966 to test innovative state-wide projects to improve teacher education. Kanawha County served as the pilot site, thus paving the way for the state-wide center network now in existence in West Virginia.

The Kanawha Valley Multi-Institutional Teacher Education Center is a concept based on the principle of parity. The term, "center," as used
in the MITEC model, is a concept rather than just a physical place. The center facilitates a cooperative teacher education program which includes both preservice and continuous inservice programs for students of teaching as well as clinical supervising teachers. Maximum cooperation is achieved as state departments of education, school/county districts, professions, communities, and multi-institutions strive to foster innovation and creativity in education and to improve teacher training and renewal education.

Kanawha Valley MITEC is composed of seven diverse West Virginia Teacher Education Institutions, four out-of-state associate universities, four school systems serving 69,000 children, the West Virginia State Department of Education, the professional organizations, and the community. All participants are committed to improving teacher education through cooperation.

MITEC operates without federal funds. Each of the seven colleges pays a base fee plus $25.00 per student teacher. The school systems invest $17,000 per year, plus inkind services. The state department, through legislative funding, invests $25,000 annually. MITEC feels this financial commitment plus the commitment of human resources of all participating members attributes to the success of the center. Each member has a personal vested interest.

The governing body of MITEC is a Board of Directors. The Board operates in a quasi-independent capacity having representatives from each participating
agent as voting, decision-making members. They meet once a month to establish guidelines and set policy for MITEC. The physical and human resources of all participating agents collaborate to provide a quality teacher education program which is relevant to tomorrow's needs -- today.

The primary aim of education is to help each child be an effective human being, developing and unfolding his human potential. This principle of parity directs the entire educational system to link all resources of teaching and teacher education to accomplish this goal.

Emerging Roles in Teacher Education

A center director, jointly hired by the MITEC Board of Directors, implements the program by performing the following duties: (1) places 500 students of teaching from all cooperative institutions (eliminating competition and emphasizing the selection of outstanding schools as centers); (2) designs cooperative inservice programs for students of teaching and building staff, thus utilizes human and physical facilities of colleges, schools, the state department, and community; (3) arranges and encourages inter- and intra-school observation and participation; (4) schedules optional modules of experience in other school districts and other states; (5) links community and regional projects to the teacher education programs; and (6) disseminates national teacher education materials and training and protocol materials developed through MITEC to schools designated as Learning Laboratory Centers.

MITEC has been in operation since 1968. As the program expanded to include pre-student teaching experiences, student teaching, and continuing
education, the need for additional MITEC staff also grew. In 1971 a Special Projects Coordinator was cooperatively identified and hired to assist the MITEC Director in placement and all center activities. In addition, the Special Projects Coordinator is responsible for identifying and arranging a variety of community and school-based enrichment experience modules for students of teaching.

MITEC's Optional Modules Program

The prime objective of the optional modules is to strengthen the student teacher conceptually and emotionally through direct participation in a broad spectrum of learning situations having these basic considerations: improvement of interpersonal relations, life-related curriculum, diverse teaching strategies, individualized instruction, and a wide range of cultural and socio-economic exposures.

This objective is implemented by a Special Projects Coordinator whose major responsibility is to identify and provide optional experiences in local, national, and international settings for MITEC student teachers. In orientation seminars student teachers receive detailed information concerning the values and availability of the options. Individual assistance is provided in selection and placement procedures. Consequently, a MITEC student teacher may be found redefining his own teaching style in such varied situations as:

- working with children in learning disabilities centers
- tutoring in a Job Corps Center
- teaching in community school settings
- living and working in an urban school setting
- working with and learning about the culture of Indian children
- traveling to another nation for an intercultural educational experience
- gaining insight in how to work with young and older adults in career and technical centers or in an Opportunities Industrial Center
- teaching in innovative, open schools
- spending a portion of summer working in creative programs
- teaching in another teacher education center within the state

MITEC believes in preparing world-minded prospective teachers who become decision makers in their professional preparation. Students of teaching may select enrichment experience from fourteen options based on their preference and need. MITEC sees schools of the future and education of the future not confined within the walls of the schools or even in schools without walls; but sees education as a life-long, world-minded process with many roads and many choices available.

Other MITEC staff members added during 1971 include a Pre-student Teaching Coordinator, who identifies in behavioral terms graduated levels of laboratory experiences for college sophomores and juniors, and a Research and Development (R & D) Coordinator. As MITEC continues to grow, it sees accountability as the vehicle through which direction, expansion, and needs assessment will take place.

Role of the College Supervisor

The role of the college supervisor through the center approach changes to one of consultant and resource specialist. He devotes much of his time
to in-service programs for clinical supervising teachers on site at the Learning Laboratory Centers. Thus, the college supervisor literally becomes a teacher of teachers. Although he may still teach graduate or undergraduate courses, a significant part of his job will be his work in the public schools.

**Inservice and Renewal Programs**

The Kanawha Valley Multi-Institutional Teacher Education Center is dedicated to professional development as a continuous process. The colleges and school systems of MITEC assume equal responsibility in implementing all components of teacher education; preservice, internship, and inservice. MITEC is committed to preparing prospective teachers and inservice teachers to become diagnosticians of students' needs and learning problems, innovators, planners, and implementors of ideas.

MITEC offers a variety of inservice activities for supervising teachers to enhance their professional growth and to improve their teaching competencies. Examples of some of these will be briefly described. Area meetings are jointly sponsored by MITEC's multi-institutions and school systems. The themes are identified by school-based teacher educators as to their needs. Examples are "Conference Which Stimulates Self-Evaluation," "A Critical Self-Analysis of My Teaching," and a "Humanistic Approach to the Teaching and Learning Process."

Luncheon workshops are sponsored each semester by MITEC to give special recognition to clinical supervising teachers. Other special guests include legislators, community representatives, state department and college representatives.
Special graduate courses have been cooperatively designed by MITEC universities at the request of supervising teachers, based on their needs as they relate to working with students of teaching. Graduate courses are offered on site at centrally located school centers, and are taught by a team of professors representing several of the institutions of MITEC.

One of the most exciting inservice programs sponsored by MITEC is the on-going meetings by discipline groups. A series of rap sessions involving student teachers, teachers, principals, county specialists, and college professors are scheduled. During these meetings by disciplines, specific concerns are voiced. Some of these are "What should the entry level college aide be able to do in the classroom, and what should he know? What competencies should the student teacher be able to demonstrate at both entry and exit levels of student teaching? Where can we find adequate materials? How can we assess performance of student teachers related to pupil progress?" As a result of these sessions, a much closer working relationship between schools and colleges is emerging.

To cite an example of the spin-off effects of the music discipline meeting the following suggestions have been made: Colleges are exploring ways to get music students preparing to teach involved in laboratory experiences at a much earlier level, possibly the freshman or sophomore year. School music specialists offer an inservice workshop for all elementary student teachers and for secondary music majors. County
staff are being invited to meet with college classes by special invitation from the music professors. Shared supervision among colleges is being discussed. Because of the enthusiasm generated from this session, MITEC will expand to other discipline areas to unite the schools and colleges in cooperative efforts to improve teacher education.

Examples of cooperative inservice opportunities for students of teaching offered through MITEC are: (1) a week-long orientation program in the fall for all students of teaching from the seven colleges. Opportunities are provided for get-acquainted sessions with other college students, with the school center, with MITEC, and with teachers and administrative staff in the school center to which he is assigned; (2) joint sessions arranged by MITEC for students from several colleges to meet and to explore mutual concerns in the study of teaching as a process and in the study of interpersonal relations; (3) cooperative meetings with school and college specialists in areas of academic interest; (4) visits to community agents, to career and technical schools, to learning disabilities schools, and youth centers; (5) interaction and observation in the other Learning Laboratory Centers; rural and urban, traditional and open spaced; and (6) cooperative two-day job interview opportunities sponsored by the seven colleges.

Student teacher representatives from each MITEC college meet throughout the semester to plan the activities for a retreat. This experience is reported by student teachers to be the highlight of their teacher preparation program. In this informal, stimulating encounter with nature and with one
another, students of teaching and college professors come to grips with the real world of teaching and learning.

Learning Laboratory Centers for Teacher Education

MITEC believes that by identifying special schools as "Learning Laboratory Centers for Teacher Education," the quality of the teacher training program can be enclosed. Twenty such schools have been identified and are operating as centers within the broad spectrum of the teacher education center concept. In each school center, a full range of professional and non-professional people engage in the pursuit of knowledge about how schools should operate.

Community aides, college aides, clinical professors, and students of teaching contribute to the differentiated staffing patterns of the centers. A Teacher Education Resource Center is an integral part of each Learning Laboratory. The Resource Center contains films, filmstrips, games, books, pamphlets, and stimulation materials on teacher education. Special viewing centers and a studio for video taping and micro teaching facilities are a part of each center. This arrangement provides a laboratory setting for the study of teaching. Preservice and in-service become one in a continuous educational setting where associate teams work together to analyze and explore ways of teaching/learning which evoke excitement and interest in children in a creative atmosphere.

A Coordinator is jointly identified by the universities and the schools in each of the Learning Laboratory Centers. This newly created
position of school-based Teacher Education Coordinator links institutions of higher learning even more closely with the school systems. The Coordinator first and foremost remains a teacher. He not only teaches children, but he is willing to have his teaching analyzed and evaluated by his teaching peers as well as students of teaching. He has two student teachers or intern teachers assigned to him each semester. This provides the opportunity for flexibility in his related assignment as Teacher Education Coordinator. It is anticipated that approximately one half of his time is spent teaching and one half coordinating all teacher education activities. As the principal and faculty request special inservice programs at the school building, the Coordinator may assist in these programs. He works closely with the county inservice director and with the colleges to draw upon their resources and staff in the inservice programs. The Coordinator also conducts seminars with professional aides, interns, and students of teaching in each Learning Laboratory Center.

Parity

The State Department of Education in West Virginia has assumed a strong leadership role in supporting and encouraging the center concept. Standards and policies have been adopted and guidelines established by the State Department of Education for the organization of cooperative centers throughout West Virginia.

In 1971 the West Virginia Legislature was convinced a cooperative approach to teacher education would benefit the entire state. It had
seen the results of the pioneering efforts of MITEC and was anxious to implement centers throughout West Virginia. One hundred and twenty-five thousand dollars was appropriated on a yearly basis to develop seven cooperative centers which would serve the entire state. Each of West Virginia's teacher education colleges is now a member of one or more of these centers.

By pooling resources through the teacher education center approach, both colleges and schools benefit. Colleges may share ideas and materials with one another as well as with the public schools. They may share in cooperative inservice programs and in cooperative methods. The colleges benefit by centralized placement facilities through the center and by services provided by school-based teacher education coordinators as they assume increased responsibility in Learning Laboratory Centers for all levels of students of teaching.

The school system benefits by having many college professors as resource staff to serve the schools. The greatest benefit of the center is to classroom boys and girls as they have many more "teachers" provided by all levels of college aides, college tutors, and student teachers who offer extra "helping hands" to meet their individual needs. The school system also benefits by being able to observe potential teacher candidates from several colleges, in-state and out-of-state, and to offer jobs to the very best prospective teachers for West Virginia's boys and girls.
For a more detailed description of the Kanawha Valley MITEC program, the reader may refer to: "In West Virginia It Is Working."

Madison
Teacher Liberation Core:
A Madison Mini-Teacher Center
LeNore Murray,
Bev Katter,
Kit Shimota
After many years of classroom teaching, I found myself feeling that however much experience, however many hours spent, books read, observations made, changes implemented, it was never enough! There was never enough time, energy, or creative power to meet the demands as I faced the challenges of working with youngsters in my classroom. I felt there must be an easier, more efficient, more comfortable way to help children learn. I began to feel very much as I think Gertrude Stein must have felt on her deathbed (of all places) when she was asked, "What is the answer?", and she replied, "What is the question?" I had always been seeking answers and now I was forced to wonder whether I was really asking the right questions.

What's going on in schools around the world? Across our nation? West Coast? East Coast? I had to know. I spent the next eight months on sabbatical leave traveling from one school and city to another studying the many new models; listening to Rogers, Holt, Weber, Silberman, Piaget, (his secretary-interpreter, really) Perone, Kozol and many more; reading the dozens of new-education books coming off the presses here and abroad. I came back to Madison to realize that we really don't know what's happening across the hall. Where was Madison on the struggle-for-change ladder? Were we just getting "the feeling?" Were we trying to have our schools be less as Silberman described them and more like the kind that Rogers and Weber had written about?

With hope of discovering, organizing and supporting a group of teachers interested in change and improvement of our gross national product,
education, I invited eleven Madison teachers as openers for the TLC. Thinking Tender Loving Care? Right! For what else is schooling all about? And it has to start with the teacher. If that teacher is to provide a child centered, individualized and personalized environment, and be able to move with the children's needs, teacher must be freed, liberated from the single textbook habit, the inflexible curriculum, manuals, tests which did not test our children's learning -- so Liberation. Certainly we were a central or essential part of this movement. So we became the Teacher Liberation Core.

Inviting five of the group was easy. Three had been student teachers of mine, the teacher who had taken my class while I was on leave, and Kit Shimota, a friend who had been making some very obvious changes in her classroom since she had visited the North Dakota Center for Teaching and Learning. To choose the others I visited one hundred fifty-eight Madison classrooms. I also thought it was important for each member to have another teacher from her building in the group, which was the way it worked out. This idea of having a support partner in your building facilitates change.

Every one accepted the invitation to come to my home on a Thursday evening in January of 1972. From then on every Thursday night great things began to happen by the dozen at my home which had overnight become our Mini-Teacher Center. It was a relaxing change from compulsory education. We began at 5:00, took turns cooking and serving dinner -- which varied from platters on the floor completely surrounded by instructional materials--
Nuffield, Random House, Fountain Valley Support Services, etc. -- to lace, crystal and silver. There was no getting acquainted time. We were off and running immediately. Between Thursdays the TLC'ers came in to check out books and work on projects which had been set up in the Center. We had looms for weaving, stitchery frames and yarns, puppetry fixings, sets of task cards, and much more. The general feeling of a group relating to one another and supporting the ideas of individuals was new for all of us. We were happy to have a center where we could share and learn together. That sharing included many activities:

Guest Speakers:
Vincent Rogers
Stoltzenberg and other University faculty
teacher who showed slides from tour of British Schools

Setting up TLC Professional Library in Mrs. Murray's home

Development of Student Record Keeping Systems

Discussing Involvement of Parents in Open Classrooms:
as volunteers assisting in the classroom
through informal meetings presenting philosophy

Sharing materials developed in individual classrooms

Meeting with elementary school principals to present slides of TLC activities

School visitation to TLC member's classrooms

Trips to Conferences on Open Education:
Minneapolis
Sheboygan
University of Wisconsin
C.E.S.A., held in Madison, on Learning Centers
Stevens Point Teacher Center Conference
"How-to" demonstrations by guest instructors or TLC members on:
- Weaving
- Stitchery
- Woodworking and Construction of Furniture
- Animated Film making
- Puppetry, Marionettes
- Creative Writing

Scrounging trips:
- Vacant Schools
- Surplus Warehouse
- Industrial Throwaways
- Auto salvage yards

Talks on Open Classroom by TLC members:
- Staffs of interested Madison elementary schools
- Area and outside state meetings

Planning and Implementing 2-credit in-service course:
- Course title "Open Classrooms-A Sharing Experience"
- Maximum enrollment in course by interested Madison teachers
- All TLC classrooms were utilized as vehicles for presenting similarities and differences inherent in Open Classrooms.

About three months after we got started, Dr. Jen McGrew, Assistant Superintendent in charge of innovations, was asked for funding for our Center projects which included money for files, books and building materials and a shop and instructor to help us make scenery changes in our classrooms. These included cubbies, bookcases, two-story carrels, workbenches, puppet stages, store fronts, etc. He asked no questions -- the needs list was evidence enough of our activities. Ed Colbert, central office Industrial Arts administration, helped us with our designs and plans and set us up with Roger Randall in his middle-school workshop. It was interesting to see the teachers-turned-carpenters when visitors came through the shop. They would lift their goggles, nod politely, but continue right on with their saber-saw, drill press, band saw, or whatever. The
unassembled parts were taken to our classrooms and painted and assembled there by our students.

Requests began coming in from interested teachers for us to do some sharing and so the second year round we provided an in-service course: "Open Education--A Sharing Experience." Twenty-seven teachers enrolled. Some of the sessions were open for all Madison teachers. All TLC classrooms were utilized for the classes. Each evening had a different focus: Getting Started, Changing the Scenery, Math, Learning Traps. The time with the larger group seemed short and we are doing the course again this semester. Our goals are the same, but the classes will be different because we will be sharing new experiences with a different group of teachers.

The present TLC focus is on a hands-on Industrial Arts in the Elementary Classroom course, funded from Ed Colbert's budget and taught again by Roger Randall. We are learning which tools, materials and kinds of building projects are appropriate for our children to use.

Dr. McGrew has again funded another classroom furniture building project. Most of the TLC'ers who did not build the two-story carrels (lofts, hideaways, forts, capsules are the names and uses our children give them) will be building those.

And what next? Who knows?
Appendix

ENGLAND

Mr. Peter Braithwaite, Director
Teacher's Centre
Burton-on-Trent, England

Miss Jennifer Coles
Center Technician
Teacher's Centre
Bath, England

Mr. Gordon Hamflett, Coordinator
Field Studies
Schools Council
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Mr. William Spouge
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Kzuo Inui  
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