This report, the first of four phases of an ESFA Title III study of five Pennsylvania counties, is devoted primarily to research, an examination of the educational systems at local and county levels, an analysis of system requirements, and the completion of a PPB system design to be used by intermediate units in Pennsylvania. Statistical data and a narrative report are included. Appendixes provide task descriptions, progress report meetings, a program planning study for the intermediate unit in Pennsylvania, and a University of Pennsylvania budget breakdown. (JF)
Intermediate Unit Planning Study

Phase I, Progress Report

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

Published by The Office of The Superintendent, Bucks County Public Schools, Pennsylvania, in cooperation with Pennsylvania Department of Public Instruction, Cameron, Elk, McKean, Montgomery and Potter Counties
INTERMEDIATE UNIT PLANNING STUDY

PHASE I PROGRESS REPORT

Application for ESEA, Title III, P.L. 89.10
Continuation Grant

Prepared by:
C. E. Brewin, Jr.
A. M. Neiman
J. K. Parker
R. L. Sisson
W. B. Castetter

Presented to:
United States Office of Education

March, 1968

Bucks, Cameron, Elk, McKean, Montgomery and Potter Counties and Pennsylvania Department of Public Instruction
March 27, 1968

Mr. Lewis Walker, Coordinator
Pennsylvania Title III Projects
United States Office of Education
400 Maryland Avenue
Washington, D. C.

Dear Mr. Walker:

Accompanying this letter is our "Application for Continuation Grant". This application contains the statistical data on the school districts and county offices involved in the study, progress report of the first phase of the work program, project activities for Phases II through IV and financial data for the coming fiscal year of the study. As you know, this study is one of three parts of the parent project entitled, "New Horizons for In-Service Training and Student Residency Program", #67-4280.

Dr. Albert M. Neiman has been designated as the Project Director for the coming fiscal year. Dr. Neiman will be assisted on the project by Dr. Van Wagner and Mr. Love. The time and effort of these three men will be devoted to pilot operations that will take place during Phases II and III of the study. Two pilot demonstrations will be run during these phases. One demonstration will involve at least one county office and one school district in Area 9. A second will involve the County Office and at least one school district in Bucks County.
When you examine Chapter II, I am sure you will agree with us that considerable work has been accomplished during Phase I of the work program. Upon reading Chapter III you will note the effort in Phase I has produced a viable Planning-Programming-Budgeting System. We have high hopes for this study. We believe the study will produce an effective PPB System for use by local school districts and intermediate units in allocating their resources.

Sincerely yours,

William A. Anderson
Elk County Superintendent of Schools

Christian F. Feit, Jr.
McKean County Superintendent of Schools

Allen Harman
Montgomery County Superintendent of Schools

Philip M. Jones
Cameron County Superintendent of Schools

George E. Raab
Bucks County Superintendent of Schools

John T. Rowlands
Potter County Superintendent of Schools
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November Progress Report MEeting
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<th>Page</th>
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<td>THE PROGRESS REVIEW PROCEDURE</td>
<td>13-b</td>
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</tbody>
</table>
CHAPTER I

STATISTICAL DATA
## ESEA TITLE III STATISTICAL DATA

**Elementary and Secondary Education Act of 1965 (P.L. 89-10)**

<table>
<thead>
<tr>
<th>PROJECT NUMBER</th>
<th>STATE CODE</th>
<th>COUNTY CODE</th>
<th>REGION CODE</th>
<th>STATE ALLOTMENT</th>
</tr>
</thead>
</table>

### SECTION A - PROJECT INFORMATION

1. **REASON FOR SUBMISSION OF THIS FORM (Check one)**
   - A [ ] INITIAL APPLICATION FOR TITLE III GRANT OR RESUBMISSION
   - B [X] APPLICATION FOR CONTINUATION GRANT
   - C [ ] END OF BUDGET PERIOD REPORT

2. **PROJECT NUMBER**
   - USOE 67-4280

### 3. MAJOR DESCRIPTION OF PROJECT (Check one only)
   - A [X] INNOVATIVE
   - B [ ] EXEMPLARY
   - C [ ] ADAPTIVE

### 4. TYPE(S) OF ACTIVITY (Check one or more)
   - A [ ] PLANNING OF PROGRAM
   - B [ ] PLANNING OF CONSTRUCTION
   - C [X] CONDUCTING PILOT ACTIVITIES
   - D [ ] OPERATION OF PROGRAM
   - E [ ] REMODELING

### 5. PROJECT TITLE (5 Words or Less)


### 7. NAME OF APPLICANT (Local Education Agency)

### 8. ADDRESS (Number, Street, City, State, Zip Code)

### 9. NAME OF COUNTY

### 10. CONGRESSIONAL DISTRICT

### 11. NAME OF PROJECT DIRECTOR
   - Dr. C. Edwin Brewin - Present Director
   - Dr. A. M. Neiman - Director for 1968-69

### 12. ADDRESS (Number, Street, City, State, Zip Code)
   - 110-A Chapman Lane
   - Doylestown, Pa. 18901

### 13. NAME OF PERSON AUTHORIZED TO RECEIVE GRANT
   - Dr. Allen C. Harman

### 14. ADDRESS (Number, Street, City, State, Zip Code)
   - Montgomery County Court
   - House Annex
   - Norristown, Pa. 19404

### 15. POSITION OR TITLE
   - Superintendent of Schools

### SIGNATURE OF PERSON AUTHORIZED TO RECEIVE GRANT

### DATE SUBMITTED
   - 4/1/68
SECTION A

16. List the number of each congressional district served

<table>
<thead>
<tr>
<th>A. Total number of counties served</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Total number of leas served</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Total estimated population in geographic area served</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

SECTION B - TITLE III BUDGET SUMMARY FOR PROJECT (Include amount from Item 2c below)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Previous OE grant number</td>
</tr>
<tr>
<td>A.</td>
<td>Initial Application or Resubmission</td>
</tr>
<tr>
<td>B.</td>
<td>Application for First Continuation Grant</td>
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<tr>
<td>C.</td>
<td>Application for Second Continuation Grant</td>
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<tr>
<td>D.</td>
<td>Total Title III Funds</td>
</tr>
<tr>
<td>E.</td>
<td>End of Budget Period Report</td>
</tr>
</tbody>
</table>

2. Complete the following items only if this project includes construction, acquisition, remodeling, or leasing of facilities for which Title III funds are requested. Leave blank if not appropriate.

<table>
<thead>
<tr>
<th>A.</th>
<th>Type of function (Check applicable boxes)</th>
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<tr>
<td>1</td>
<td>1. REMODELING OF FACILITIES</td>
</tr>
<tr>
<td></td>
<td>2. LEASING OF FACILITIES</td>
</tr>
<tr>
<td></td>
<td>3. ACQUISITION OF FACILITIES</td>
</tr>
<tr>
<td></td>
<td>4. CONSTRUCTION OF FACILITIES</td>
</tr>
<tr>
<td></td>
<td>5. ACQUISITION OF BUILT-IN EQUIPMENT</td>
</tr>
<tr>
<td>B.</td>
<td>1. TOTAL SQUARE FEET IN THE PROPOSED FACILITY</td>
</tr>
<tr>
<td></td>
<td>2. TOTAL SQUARE FEET IN THE FACILITY TO BE USED FOR TITLE III PROGRAMS</td>
</tr>
<tr>
<td></td>
<td>3. AMOUNT OF TITLE III FUNDS REQUESTED FOR FACILITY</td>
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</table>

SECTION C - SCHOOL ENROLLMENT, PROJECT PARTICIPATION DATA AND STAFF MEMBERS ENGAGED

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Pre-Kindergarten</td>
</tr>
<tr>
<td>A.</td>
<td>School Enrollment in Geographic Area Served (1) Public</td>
</tr>
<tr>
<td></td>
<td>Non-Public</td>
</tr>
<tr>
<td>B.</td>
<td>Persons Served by Project (1) Public</td>
</tr>
<tr>
<td></td>
<td>Non-Public</td>
</tr>
<tr>
<td></td>
<td>Not Enrolled</td>
</tr>
<tr>
<td>C.</td>
<td>Additional Persons Needing Service (1) Public</td>
</tr>
<tr>
<td></td>
<td>Non-Public</td>
</tr>
<tr>
<td></td>
<td>Not Enrolled</td>
</tr>
<tr>
<td>2.</td>
<td>Total number of participants by race (Applicable to figures given in item 1B above)</td>
</tr>
<tr>
<td></td>
<td>White</td>
</tr>
</tbody>
</table>
### SECTION C. continued

3. RURAL/URBAN DISTRIBUTION OF PARTICIPANTS SERVED OR TO BE SERVED BY PROJECT

<table>
<thead>
<tr>
<th>PARTICIPANTS</th>
<th>RURAL</th>
<th>METROPOLITAN AREA</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>FARM</td>
<td>NON-FARM</td>
</tr>
<tr>
<td></td>
<td>CENTRAL-CITY</td>
<td>NON-CENTRAL CITY</td>
</tr>
<tr>
<td></td>
<td>OTHER URBAN</td>
<td></td>
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</table>

| PERCENT OF TOTAL NUMBER | SERVED |

<table>
<thead>
<tr>
<th>RURAL</th>
<th>METROPOLITAN AREA</th>
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### SECTION D. PERSONNEL FOR ADMINISTRATION AND IMPLEMENTATION OF PROJECT

1. PERSONNEL PAID BY TITLE III FUNDS

<table>
<thead>
<tr>
<th>TYPE OF PAID PERSONNEL</th>
<th>REGULAR STAFF ASSIGNED TO PROJECT</th>
<th>NEW STAFF HIRED FOR PROJECT</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>FULL-TIME</td>
<td>PART-TIME</td>
</tr>
<tr>
<td>A. ADMINISTRATION/ SUPERVISION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. TEACHER:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) PRE-KINDERGARTEN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) KINDERGARTEN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) GRADES 1-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) GRADES 6-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) OTHER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. PUPIL PERSONNEL SERVICES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. OTHER PROFESSIONAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. ALL NON-PROFESSIONAL</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>F. FOR ALL CONSULTANTS PAID BY TITLE III FUNDS</td>
<td>3</td>
<td>9</td>
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<table>
<thead>
<tr>
<th>TYPE OF UNPAID PERSONNEL</th>
<th>REGULAR STAFF ASSIGNED TO PROJECT</th>
<th>NEW STAFF HIRED FOR PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FULL-TIME</td>
<td>PART-TIME</td>
</tr>
<tr>
<td>A. ADMINISTRATION/ SUPERVISION</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>B. TEACHER:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) PRE-KINDERGARTEN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) KINDERGARTEN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) GRADES 1 TO 6</td>
<td></td>
<td></td>
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<tr>
<td>(4) GRADES 7-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) OTHER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. PUPIL PERSONNEL SERVICES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. OTHER PROFESSIONAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. ALL NON-PROFESSIONAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. FOR ALL CONSULTANTS NOT PAID BY TITLE III FUNDS</td>
<td>(1) TOTAL NUMBER RETAINED</td>
<td>(2) TOTAL CALENDAR DAYS RETAINED</td>
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</tbody>
</table>

-4-
### Section E - Number of Persons Served or to Be Served and Estimated Cost Distribution

<table>
<thead>
<tr>
<th>Major Program or Services</th>
<th>Total Number Served or to Be Served</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRE-K</td>
<td>K</td>
</tr>
</tbody>
</table>

1. **Evaluative Programs**
   - A. Deficiency Survey (Area Needs)
   - B. Curriculum Requirements Study (Including Planning for Future Need)
   - C. Resource Availability and Utilization Studies

2. **Instruction and/or Enrichment**
   - A. Arts (Music, Theater, Graphics, Etc.)
   - B. Foreign Languages
   - C. Language Arts (English Improvement)
   - D. Remedial Reading
   - E. Mathematics
   - F. Science
   - G. Social Studies/Humanities
   - H. Physical Fitness/Recreation
   - I. Vocational/Industrial Arts
   - J. Special-Physically Handicapped
   - K. Special-Mentally Retarded
   - L. Special-Disturbed (incl. Delinquent)
   - M. Special-Dropout
   - N. Special-Minority Groups

3. **Instruction Addenda**
   - O. Vocational TV/Radio
   - P. Audio-Visual Aids
   - Q. Demonstration/Learning Centers
   - R. Library Facilities
   - S. Materiel and/or Service Centers
   - T. Data Processing

4. **Personal Services**
   - A. Medical/Dental
   - B. Social/Psychological

   - **26 School Districts and 5 County Offices in Bucks**

5. **Other**
   - Potter, Cameron, Elk and McKean Counties

---

**Poor Original Copy - Best Available at Time Filmed**
CHAPTER II
NARRATIVE REPORT

Background Information

The majority of local school districts in the Commonwealth of Pennsylvania completed reorganization during the 1965-66 school year. Since then, the State Board of Education has studied the reorganization problems involved in the consolidation of the 67 county superintendents of schools offices into 25 or 30 intermediate units as directed by Appropriations Act 83-A, December 1, 1965. This study resulted in the adoption in January, 1967, of "A State Plan of Intermediate Units."

Legislation is currently before the General Assembly to implement the Plan. Following the enactment of this legislation, the State Board of Education will adopt regulations to guide the establishment of intermediate units in the Commonwealth of Pennsylvania.

The program of services provided by each intermediate unit will vary according to the educational needs of the region served by the unit. The period of time between the establishment of the intermediate units and their first operational year will be devoted to carrying out two tasks:

1. Continuation of essential services by the staffs of the reorganized county superintendents of schools offices; and

2. Development by the reorganized staffs of a detailed "best" program of services structure for the coming
fiscal year and projection of this program structure for four additional years.

The satisfactory accomplishment of this second task is critical to the development and growth of the intermediate unit in Pennsylvania. Because of the importance of this task a number of educational organizations and institutions have joined forces to develop a "generalized" Planning-Programming-Budgeting System (PPB System) that can be effectively utilized by intermediate units throughout Pennsylvania.

The PPB System designed in Phase I of the study will help the intermediate unit administration and board make better decisions on the allocation of resources among alternative ways to attain the intermediate unit objectives. Its essence is the development and presentation of information as to the full implications, the costs and benefits of the major alternative courses of action relevant to major resource allocation decisions. It is not intended as a cure for all types of intermediate unit administrative problems.

The major functions of the PPB System are:

1. Identification of the basic objectives of the intermediate unit and relating these to all activities of the intermediate unit;

2. Consideration of the future implications of these objectives; and

3. Systematic analysis of the available alternative courses of action necessary to satisfy these objectives.
The third function involves the systematic identification of alternative ways of carrying out the basic objectives, an estimation of the total cost implications of each alternative and an estimation of the expected results of each alternative.

The county superintendent of schools offices and public school districts of Bucks, Cameron, Elk, McKeans and Potter Counties are participating in this study. Montgomery County Superintendent of Schools Office is acting as an observer.

The U. S. Office of Education is providing financial support. The Department of Public Instruction, Commonwealth of Pennsylvania, and Research for Better Schools, Incorporated, ESEA Title IV Regional Educational Laboratory, are providing assistance in the dissemination of information on the study.

The Government Studies Center of the Fels Institute of Local and State Government, University of Pennsylvania is responsible for the development of the general study direction, including planning and scheduling of all study activities, coordination of university research staff and outside participating research organizations and consultants. The Graduate School of Education, University of Pennsylvania is providing expert educational assistance. The Management Science Center of the Wharton School of Finance and Commerce, University of Pennsylvania is evaluating the potential of "simulation models" and is assisting in the development of the PPB System by providing expert statistics and operations research assistance.
Results of Phase I
Work Program

The study is divided into four phases. Phase I is devoted primarily to research, examination of the status of the educational systems at the local school district and county office levels, analysis of system requirements and completion of the over-all design of the PPB System. Phase I began on June 1, 1967, and will terminate in March, 1968.

Phase II, planned for completion in November, 1968, will be concerned with the development of the operating PPB system. This includes the experimental pilot operation of the PPB System prior to completion of system development and of plans for system implementation. Special methods for predicting the consequences of various program decisions will also be employed.

Phase III, planned for completion in March, 1969, represents the period during which one or more of the participating county offices and local school districts will employ the PPB System and related techniques in preparing their actual program and budgets for the subsequent fiscal year.

Phase IV, which extends to the end of the project in May, 1970, will be devoted to analysis of the experiences gained in Phase III and revision, as necessary, of the PPB System and related techniques. Also included will be the implementation of the revised system by selected county offices and local school districts in the preparation of their plans, programs and budgets.
for the fiscal year beginning in 1970. It is anticipated that Phase IV also will incorporate an extensive education and training program for county offices and local school districts throughout Pennsylvania, as well as completion of final reports and materials for broad dissemination.

This chapter contains a discussion of the planning activities of Phase I, results of these activities, dissemination of results, effects on participating and cooperating educational organizations and institutions, procedure for carrying forward the study following the termination of the federal grant and total cost for the 1968-69 fiscal year. The work program for Phase I has been divided into 25 separate tasks. These tasks are shown on "Phase I Task Network" on the following page. In the sections that follow each task is described and the results discussed.

**Task #1.0-1.2: Phase I Administration**

This task was concerned with organizing and carrying out accounting, reporting, planning, coordinating and clerical operations. The Study Coordinator, Dr. Charles E. Brewin, Jr., Assistant County Superintendent, assumed general responsibility for this task. Mr. John K. Parker, Director of Technical Support, of the University of Pennsylvania, coordinated university related administration. The documentation procedure developed under Task #2 provided documentation control for all other tasks in Phase I.
The Montgomery County Board of School Directors is the recipient of the funds of the parent project, "Exploring New Horizons for In-Service Training and Student Residency Programs" (#67-4280), and by virtue of this fiscal responsibility has received the moneys allocated to the Intermediate Unit Planning Study portion of the project. These moneys have been transferred during the current fiscal year to the Bucks County Board of School Directors in accordance with the procedure established by Mr. Sandler of Dreslin and Company, a local accounting firm. Dreslin and Company is presently employed by both Montgomery and Bucks County Boards of School Directors as their auditor. The accounting system employed to control the funds for the Intermediate Unit Planning Study has been keyed to the accounting system established for the parent project, "Exploring New Horizons for In-Service Training and Student Residency Programs." It is assumed this arrangement will continue for the next two fiscal years of the study.

The Bucks County Board of School Directors exercised general coordination of the study for the county offices and local school districts of Bucks, Cameron, Elk, McKean and Potter Counties and among cooperating educational organizations and institutions. The Bucks County Superintendent of Schools office arranged for financing of the study and administering of all funds for the study. The office also provided data or arranged for data collection, professional and non-professional assistance and printin- of study materials and reports. During Phases II, III and IV of the study it will be necessary for the Bucks County Superintendent of Schools Office to provide adequate professional
and non-professional assistance to the local school districts and county offices who will be participating in the PPB System pilot operations.

The Bucks County Superintendent of Schools Office has been assisted in the study by the Department of Public Instruction, Research for Better Schools, Incorporated, Fels Institute of Local and State Government, Management Science Center of the Wharton School and Graduate School of Education. The latter three organizations are affiliated with the University of Pennsylvania. The direction of the technical support of the study has been consolidated under John K. Parker, Director of Technical Support, University of Pennsylvania. This procedure provides for tighter management of the technical development, testing and alteration of the PPB System during Phases II, III and IV.

The organizational structure outlined in the addendum entitled, "Proposal for the Intermediate Unit Planning Study," has not functioned satisfactorily. The progress review and policy adoption process has been slow, even though the Steering Committee met nine times, County Superintendent of Schools Committee three times and Professional Advisory and County Board of School Directors Committee twice each during the period from August 1967 through March 1968. The PPB Systems pilot operations that will take place during Phases II, III and IV will require a faster progress review and policy adoption process.

The employment of a full time Study Manager should aid in improving the over-all effectiveness of the progress review and policy adoption process. A full time manager can devote his
undivided attention to the coordination of study activities in the field. Because the Phase II, III and IV PPB System pilot operations will probably not involve all local school districts and county offices in Bucks, Cameron, Elk, McKean and Potter Counties the membership of the Professional Advisory and County Board of School Directors Committees at policy review and adoption meetings will be limited. It may also be necessary to divide these committees by county or region so that field operations can be more effective. However, all local school district representatives and county board of school directors from the five participating counties and Montgomery County will be invited to progress review meetings. See Figures 1 and 2 for this procedure.

Task #2: Phase I Work Program

The activities involved in this task were concerned with the development of the Phase I task networks and task descriptions. The work program for Phase I shown in the document entitled, "Proposal for the Intermediate Unit Planning Study," was changed in August 1967 following the first two meetings of the Steering Committee. Study personnel were assigned specific tasks and completion dates were designated for these tasks. A documentation procedure was established which assisted the Technical Director and Study Coordinator in the monitoring of all Phase I tasks. All Steering Committee and County Superintendent of Schools Committee members have been provided with a documentation manual and copies of all documents.

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Figure 1: The policy review and adoption procedure.
Figure 2: The progress review procedure.
These documents provided the basis for discussion at all committee meetings.

During the period from September through March a number of tasks were revised and new completion dates were established. These changes were caused by the difficulty of gathering certain data types. Each time this occurred new task descriptions were written and task networks developed. Two revised sets of task descriptions are shown in Appendixes A and B.

**Task #3.0-3.2: Project Evaluation**

A plan has been established for evaluating the study. It consists of the following elements:

1. Management control evaluation, the purpose of which is to provide information for making decisions;
2. External Evaluation, a process to provide periodic feedback for continuous refinement of plans and procedures;
3. Field Evaluation, a product evaluation intended for determining the effectiveness of the study.

The management control evaluation is built into the work program. It is an inherent part of the procedure for accomplishing the work objectives, utilizing resources and meeting overall study goals.

The external evaluation is concerned with an analysis of the results of the tasks and end products of each phase. An evaluation team consisting of the following four persons has been
established for this purpose and met several times during Phase I:

Dr. James Becker, Executive Director
Research for Better Schools, Inc.

Dr. Joseph Froomkin, Director of Program Planning
and Evaluation in the U. S. Office of Education

Dr. Leon Cvsiew, Assistant Dean of the College of Education
Temple University

Dr. Albert Neiman, Coordinator of Research
Bucks County Public Schools

Field evaluation will be undertaken at the termination of
the study, which occurs on May 31, 1970. This evaluation will be
primarily concerned with how effectively the PPB System functions
in the real world and is intended to take place over several
years.

Task #4.0-4.1: Participant Training

This task was concerned with the development of a plan for
conducting a training program for Bucks, Cameron, Elk, McKean,
Montgomery and Potter County administrators and county board
members. The training program stressed specialized concepts and
knowledge essential to understanding PPB systems. Three meetings
were established for this purpose; however, because of changes in
the work program only two were held.

The November 10 meeting was held in Bucks County at the
Warrington Country Club. A copy of the agenda and the minutes
for this meeting are in Appendix C.
The March 14 meeting was held at the Buttonwood Inn, Emporium, Cameron County for the Cameron, Elk, McKean and Potter county office staffs, county boards and local chief school administrators. The March 15 meeting for the Bucks County Office Staff, County Board and Chief School Administrators, which covered the same material as the March 14 meeting, was held at the Warrington Country Club, Warrington, Bucks County. The program and minutes for the March meetings can be found in Appendix D.

The primary purpose of the November meeting was to bring the personnel together from the participating and cooperating educational agencies and institutions. This was necessary in order that all concerned with the study would have an opportunity to understand the problems peculiar to each of the counties and school districts involved. The secondary purpose was to provide the participants with background information concerning the study and the utilization of management science and operations research techniques in the study. The March meetings were devoted to providing the participants with a thorough knowledge of the PPB System designed during Phase I and the procedures to be followed during Phases II, III and IV.

The meetings for Phases II, III and IV may be subdivided by region or county. This anticipated change may be caused by the fact that not all county offices and local school districts may wish to participate in the PPB System pilot operations. The training program during the next two fiscal years will be very intensive for all participating personnel of county offices and local school districts.

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Task #5.0-5.3: Meeting of School Directors and Superintendents

A plan was established for arranging and conducting periodic meetings of county staffs, county school directors and local school district administrators of Bucks, Cameron, Elk, McKean and Potter Counties. Because Montgomery acted as an observer, only the County Superintendent and designated county staff members participated in these meetings. As mentioned above in Task # 4.0-4.1 these meetings were held in November 1967 and March 1968.

The County Superintendents of Schools Committee met three times from August 1967 through March 1968 and will meet at least one more time before the end of the present fiscal year. A new schedule of meetings will be established for Phases II and III at the last meeting for Phase I of the County Superintendents of Schools Committee.

Task #6.0-6.1: Information and Education Plan

The procedure outlined in this task provided for the Phase I information and education plan in detail and provides the basis for developing Phases II, III and IV portions of the plan during the latter part of Phase I activities. This plan has been established to communicate interim and final results of the project to the educational community within and outside the
Commonwealth of Pennsylvania. Because of the complexities now emerging from the study it is apparent that a detailed plan of information and education for Phase II through IV would be superfluous at this time. Following the completion of Phase I a clearer understanding will evolve concerning the future activities of the study. This understanding will form the basis for the development of future information and education activities.

Mailing lists are presently under development for the following groups:

1. Public school administrators of Pennsylvania (This list will contain administrators of local school districts, county or intermediate unit offices and the Department of Public Instruction.);

2. Public school administrators of the U. S. (This list will contain administrators of local school districts, county or intermediate unit offices and the Department of Public Instruction.);

3. U. S. Office of Education (This list will contain administrators who are interested in and concerned with the activities of the study);

4. ESEA, Title IV Regional Educational Laboratories;

5. Educational Research Information Centers (ERIC);

6. Research and Development Centers;

7. Professional Associations (Associations in the fields of education, public administration and management science.);
8. Universities (Departments of educational administration, public administration and management science.); and
9. Publications (educational administration, public administration and management science).

The mailing lists will be updated throughout the course of the study.

An information brochure was prepared for dissemination at the progress report meetings in March. See Appendix E for this brochure. Talks have been delivered on study activities at several professional meetings and an extensive treatment of the PPB System is planned for a May seminar. A more thorough discussion of the total dissemination procedure can be found in the "Dissemination" section of this chapter.

Task #7: Survey of Education Information Systems

This task set about to survey the present information systems in the following ways:

1. Determine current means of formal communication between local, county and state agencies. Communications to include reports, forms and other consistent, formatted data.
2. Determine the completeness and consistency of existing data within and among agencies.
3. Determine the capabilities of existing information processing groups.
Collect information on current or past studies of this nature.

The survey included the State, county and local jurisdictions of Area 9 and Bucks County. The survey also included interviews with other agencies working in the field of educational information systems. The types of information systems studied include:

1. Administrative record systems (accounting, budgeting, etc.);
2. Personnel record systems;
3. Student record systems;
4. Management and other information systems; and
5. External data sources used in planning educational activities (tax records, population data, etc.)

The primary method of study was personal interviews. The first interview was with Bucks County administrators and data processing personnel. This enabled an initial gathering of forms and report formats. After this data was analysed an interview conducted with Department of Public Instruction personnel helped to determine that the information gathered in Bucks County was typical of other school systems in the Commonwealth.

The above two sets of interviews gave a good guide as to what is actually being done in the information gathering process systems. This guide was then used to direct interviews in Area 9 and Bucks County to the more important features of information systems.
Task #3: Study of Decision Input Factors

The purpose of this task was to identify potential activities of intermediate units and begin to identify types of decision factors to be incorporated in the PPB System.

Six committees were formed representing the six services described in the "Report of the Pennsylvania State Board of Education," January 1967. Participants on the committees were solicited from Area 9 and from Bucks County.

The six committees were combined so that three groups totaling eight to ten persons each spent approximately five hours with a consultant who engaged them in dialogue to identify the following information:

1. Additional services not listed in the Report;
2. Action Programs, three (3) for each of the services; and
3. Decision information used to determine for the programs such factors as; yes or no, how much, when and where, etc.

The consultant performed the following functions:

1. Provided an orientation to the program. (The "big picture.")
2. Focused the groups attention to the concern for enumerating additional services.
3. Worked through at least one identified program and the decision factors related to that program so as to
demonstrate the task. (Group centered activity.)

4. Provided individual consultation to the individual participants in their effort to complete the task on their own and with their group.

Following the initial meeting, the groups met once more to consider the summarized results of the data collected at that first meeting. The purpose of this second conference was to generalize from the data and to examine decision concepts that may be employed to effectively determine the consequences for the alternate decisions that may be made for each program.

Task #9: Survey of Community Characteristics

In order to identify the ranges of community characteristics which will form the PPB System general environment in Area 9 and Bucks County through 1975, a survey of community characteristics was made. Using the available statistical data, the economic, geographic and demographic (emphasis on K-14 school age population) characteristics of Area 9 and Bucks County from 1960 through 1975 were described and analyzed.

1. Forecasts
   a. For 27 school districts
      (1) Enrollment (K-14) total and public, total population
      (2) Households and housing supply
      (3) Assessed value of real estate
b. For 5 counties
   (1) Total population and age distribution
   (2) Personal income
   (3) Labor force
   (4) Assessed value of real estate

2. Descriptive data - County basis
   a. Economic (2 censuses and changes number and
      percentage, generally in the period 1958-64)
      (1) U. S. Censuses of Agriculture, Businesses
          and Manufacturing
      (2) Income distributions 50-60, median income
          and total family income, 1950-60
      (3) Labor force by skill and industry, 1950-60
      (4) Pennsylvania Industrial Censuses:
          Industries by number of firms, employment,
          value added and payroll

b. Geographic
   (1) Land use forest and reserve; urban, suburban
       and rural; major highways, air ports and
       railroads
   (2) Topography areas of 25 percent slopes, ridge
       lines, rivers, lakes and sewer service areas
   (3) Areas of influence, rural trading areas and
       centers, major roads, population density,
       public schools (elementary, jr. and sr.) and
       private schools

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Task #10: Survey of Education System Characteristics

The objective of this task was to obtain comparable data to describe financial, staffing, physical facilities and educational characteristics of school systems in the proposed reorganized administrative units. The data was used in developing a base for linking the task to operations research.

The procedure was to survey, analyze and describe the local school administrative units in Bucks County and Area 9, with respect to finance, staffing, plant and educational program. Data was collected with the aid of five instruments which were distributed to the local administrative units in Bucks County and Area 9 as follows:

1. School Finance Study (Form 100)
2. Staff Personnel Data Form
3. Subject-Time Analysis, Grades K-6
4. Survey of Secondary School Course Offerings
5. School Plant Data Form

Treatment of the financial data takes into consideration budgeted revenue, expenditures, pupil membership, number of budgeted and non-budgeted personnel, staff salaries and tax parameters. Staff personnel data was used to analyze and compare numerical adequacy and deployment of personnel in each administrative unit who are engaged in administration, instruction and collateral service.

The educational program in the elementary grades was examined with regard to the average time distribution devoted to
program elements in the participating administrative units, while program data at the secondary school level was considered from the standpoint of breadth of course offerings available to students. An effort was made to relate relative adequacy of the program to such factors as school size and per pupil expenditures.

School plant data was used to describe provisions for housing the educational programs of participating districts. Consideration was given to the following:

1. Age of attendance units,
2. Site size,
3. Grade distribution and
4. Utilization relative to capacity.

Task #11: Survey of Education Performance Measures

The purpose was to identify measures of education performance potentially acceptable for incorporation in the PPB System.

The intention was to survey, describe and analyze education performance measures in use in Area 9 and Bucks County; explore, describe and analyze advanced education performance measures in use, under development and advocated in theory elsewhere in the United States; and define preliminary set of performance measures for use in project.

A literature search was conducted by two persons, one who listed performance measurement references in addition to other
education references, and one who concentrated specifically on education research literature, reading selected promising references in more depth.

A cursory survey was made of Bucks County schools and Area 9 schools, to determine what data each school collects routinely or has available on separate parts of the school and education system. The survey was jointly conducted by personnel from Fels, Bucks County, and Area 9. Parts of the system that were considered, and some of the categories used in finding the available data were:

1. Students
   a. Physical health (how, when and how often measured)
   b. Potential (maturity, intelligence and perception measures)
   c. Achievement (subjects, grades and special tests)

2. Teachers
   a. Qualifications - degrees, experience and certification
   b. Attrition rates and transfer data
   c. Pay scale and fringe benefits

3. Administration
   a. Personnel, staff - professional, clerical, maintenance, special services, planning and research, etc.
   b. School Board - how selected

4. Curricula

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5. Resources Available
   a. Financial - tax rates and revenues
   b. Buildings - age, condition and capacities
   c. Equipment - recreational, laboratory, audio-visual, transportation, etc.
   d. Materials - books, films, etc.

6. Community
   a. PTA
   b. Characteristics - socio-economic, population growth, etc.

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**Task #12: Survey of Education Program Taxonomies**

The purpose of this task was to identify education program taxonomies of potential utility in the PPB System.

The approaches to development of this classification system were obvious:

1. Present practice in the study area can be surveyed by means of interview and document collection; and
2. Current and emergent practice can be identified in a national perspective by means of a literature search.

The first approach, a deductive approach, organization charts and budget documents of school districts constituted the most readily available source of information. Some districts had
available as well, position guides and summary staffing statements. Analysis of such documents permitted a detailed analysis of functions assigned as the responsibilities of particular offices. By use of either supplementary instruments or by deduction, an itemization of school district activities was developed in classified form.

The second approach to this problem, an inductive one, involved extensive efforts to identify all of the programs or services presently offered within school systems, without regard to the grouping of these activities. Apparent natural groupings were then used as the key to construction of a classification scheme. Once constructed this scheme was evaluated by reviewing practice, by judgement of experienced administration or by applying the opinions of expert consultants.

Because it seemed possible that neither an inductive nor a deductive approach would yield as accurate a portrayal of structure desirable, a combination of the two approaches was used.

Task #13: Survey of Current Research

This task set about to identify and establish continuing communications with current research projects of direct significance to design and development of the PPB System. Current research projects in the United States related to this project, with emphasis on "intermediate unit planning," simulation of education systems, PPB Systems, education
performance measures, cost effectiveness techniques and evaluation of education systems were reviewed.

The objective was met by both direct surveys and by monitoring the work of other tasks, such as, the literature survey task. The task was carried out as follows:

1. All literature received by the project was monitored to identify the source of good, pertinent, current reports.
2. All project people who have taken trips were debriefed.
3. A list of relevant research projects were prepared and maintained.
4. The most relevant projects in the United States were identified by analysis of available documents.
5. A survey guide was prepared so that visits to other projects (Step 6) obtained as much information as possible. The guide used "inputs" from other tasks to determine what information was most useful.
6. The most relevant projects were visited and trip reports prepared.
7. All information was analyzed to identify those projects with which continuing liaison was desired.
8. Liaison with desired projects was established by: (a) seeing that appropriate people were hired as consultants; (b) seeing that symposia were scheduled and include appropriate people; and (c) arranging additional visits.
9. Incoming information was monitored to identify new projects and to continue the liaison process.

10. A report was prepared summarizing the "state-of-the-art" in ongoing research in relevant fields.

Task #14: Literature Review

The purpose of this task was to provide bibliographic resources for the project.

The task objective was to organize and establish an annotated bibliography which supported the different project tasks. In this respect, the scope of the bibliography needed to be as broad as the project tasks themselves. The classification system for structuring the bibliography was designed around the various component tasks of the project. Annotations were provided which indicate the general nature of the topic(s) covered by the source and other comments which were appropriate to identify some element of particular importance in the source. A condensed and representative bibliography was compiled for use by the project participants in reviewing general background material. A resource index file was established and available for searching. The bibliographical search was conducted using already compiled resources of such agencies as the Educational Information Research Centers and Research for Better Schools Incorporated, and the combined "input" of all project participants.
Task #15: Review of PPB System Applications

In order to make available relevant experience gained to date in the application of PPB Systems, applications of PPB Systems in education and relevant applications in other fields were reviewed.

The initial survey identified those national, state and local agencies which are now operating under some form of a planning-programming-budgeting system which has relevance to the Intermediate Unit Planning Study. From among those identified a representative number were chosen to visit in an effort to gain more detailed knowledge of their operation. Each of these applications were evaluated in terms of the elements in their system and the experiences they have encountered to date which could be considered important for the design of a PPB System for the intermediate unit project.

The types of information collected and evaluated included:

1. What are the boundaries of the system?
2. How is the planning function performed and what role does it play in the overall system?
3. How is the programming function performed and what role does it play in the overall system?
4. How is the budgeting function performed and what role does it play in the overall system?
5. What part of the system is mechanical?
6. How is the decision process structured?
7. What evaluation measures are employed and what has been the experience to date with their use?
The method of information collection was both by correspondence and by personal interview.

Task #16: Review of Cost-Effectiveness Applications

The object of this task was to make available relevant experience gained to date in the application of cost-effectiveness techniques.

To accomplish this a review of applications of cost-effectiveness analysis in education and relevant applications in other fields was undertaken. Pertinent techniques for consideration in this project were determined and evaluated.

The approach used consisted of library research and discussion with others in the field. An essential part of the discussion aspect was attendance at an Office of Education Symposium on "Operations Analysis of Education," held November 19 through 22, 1967, in Washington, D. C.

Task #17: Define Major System Components

This task described the major functional characteristics of the PPB System in relation to local school districts and intermediate units. It was based on project results to date: (1) review of local school district intermediate unit requirements for planning-programming-budgeting; (2) review of resources and constraints; (3) identification of major outputs to be produced.
by the proposed PPB System; and (4) definition of the major functional components of the PPB System, analysis of the principle considerations and development of the proposed PPB System.

An extended discussion of the results of this task can be found in Chapter III.

**Task #18: Plan Revenue Forecast Development**

The purpose of this task is to plan for the development of a method of forecasting local school district and intermediate unit revenues over a ten year period. The revenue forecast method will be operational by September 30, 1968, for use by local districts and intermediate units as inputs to the PPB System.

The identification of required outputs of a revenue forecasting method, development of a preliminary design for producing outputs, identification of required inputs, determination of information availability, preparation of a plan and work program for development of the forecasting method and preparation of cost estimates for each activity and for each agency who will be participating in the development of the method is currently underway. A preliminary plan for implementing the methods in local school districts and intermediate units will be prepared before the end of Phase I.
Task #19: Plan Student Forecast Development

This task's objective is to plan for the development of a method of forecasting student enrollment over a ten year period. This method will be operational by September 30, 1968, for use by local districts and intermediate units as inputs to the PPB System.

The identification of required outputs of a student forecasting method, completion of a preliminary design for producing outputs, identification of required inputs, determination of information availability, preparation of a plan and work program for development of the forecasting method, and preparation of cost estimates for each activity and for each agency who will participate in the development of the methods being prepared. A preliminary plan for implementing the methods in local and intermediate unit school districts will be completed before the end of Phase I.

Task #20: Define Program Taxonomy

The purpose of this task is to provide a generalized program classification which can be used in the PPB System to summarize program plans for all local districts and intermediate units.

Task #12 findings are being reviewed. This task was concerned with taxonomies of local districts. Following this review a proposed program taxonomy will be defined that will
embrace the major functional requirements of the proposed PPB System. This task will be completed before the end of Phase I.

Task #21: Plan Indicator Development

This task's purpose is to plan the development of an initial set of indicators representing characteristics of local school districts and intermediate units. Characteristics which are estimated to be of major importance to the chief administrative officers of these agencies in the conduct of long range planning and programming.

Project findings are being reviewed and potential indicators of significant changes in education system characteristics are being identified. After the indicators have been identified the methodology for measuring and forecasting indicators over a ten year period will be designed. A review of the availability of information for required inputs is also underway. A plan and work program for development of initial indicators for testing and use in Phase II of the study, including responsibilities and costs of participating agencies will be developed before the end of Phase I.

Task #22: Describe Planning-Programming-Budgeting Process

The aim of this task is to describe and relate the proposed planning-programming-budgeting system process and procedures to the ongoing operations of local school districts, county offices on proposed intermediate units.
An outline of the present schedule of activities of local school districts and county offices in the preparation of plans, programs and budgets is being developed. The outline of the schedule of activities for the proposed planning-programming-budgeting system will be compared to the first outline. An analysis of differences in process and procedure will be undertaken. The proposed PPB System process will also be related to the present requirements for preparation of long range plans and budgets in local districts. This task will be completed before the end of Phase I.

Task #23: Plan Analysis Development

The intent of this task is to define and plan for the development of all feasible analytical methods required for implementation of the proposed PPB System.

The identification of key points in the major functional components of the proposed PPB System which have a priority requirement for development of analytical methods is underway. The identification of outputs and inputs of each of these points will follow. A proposed methodology for performing these analyses will be designed. A plan and work program for developing these analytical methods during Phase II of the project, including costs to participating agencies will complete the work on this task. This task will be completed before the end of Phase I.
Task #24: Complete PPB System Design

The objective of this task is to describe the results of Phase I in terms of the complete general design of the planning-programming-budgeting system recommended for development and implementation in the study.

A description of the overall characteristics and functioning of the proposed PPB System design based on the findings of preceding tasks will be developed. The system outputs in relation to planning-programming and budgeting responsibilities of local school districts and county offices or intermediate units will be described. The study objectives in relation to development of the system and responsibilities of local school district, county offices or intermediate units will also be described. The task will be completed before the end of Phase I.

Task #25: Develop Phase II Work Program

The purpose of this task is to provide a revised plan and schedule for study activities to be accomplished during Phase II of the study and to revise the general plan and schedule for Phases III and IV of the study. This task will be completed before the end of Phase I.
Effect of the Study on Participating Educational Agencies

The impact of this study on the participating educational agencies will occur during Phases II, III and IV because pilot demonstrations will be carried out during these phases. Many local school districts, county offices or intermediate units will be involved. Training of the personnel of these agencies will be most intense. The concentration of efforts on the part of the study staff and the participating agencies should have an observable impact on the management of these agencies during the 1969-1970 fiscal year of the study.

The school districts in Bucks, Cameron, Elk, McKean and Potter Counties are in the process of developing long range development plans (ten-year). All long range plans must be completed by July 1, 1969. The Department of Public Instruction requires that these plans be up-dated every two years. The information contained in the long range plans will provide "input" to the PPB System. The Intermediate Unit Planning team has assisted a number of local school districts in the five participating counties in the development of their long range plans.

An outgrowth of the work conducted during the first phase of the study is a recognition on the part of the five participating county offices and a number of participating school districts for the need to develop an integrated management information system. A number of the interested county offices
and districts have joined to form an electronic data processing (EDP) center. This center is being developed in cooperation with the Bucks County Commissioners and will utilize the existing EDP facilities and staff of the Commissioners. A larger computer will be leased for the center. A separate systems and programming staff will be formed to service the county offices and schools. The center will develop a number of files. The data in these files will be utilized by the cooperating county offices and local school districts during the PPB System pilot operations.

Effect of the Study on Cooperating Educational Agencies and Institutions

The impact of the intermediate unit planning study on Montgomery County and the Department of Public Instruction is not likely to be evident until Phase IV. Sufficient experience will have been accumulated by this time to permit Montgomery County and the Department of Public Instruction to utilize some if not all the components of the PPB System. Research for Better Schools, Incorporated will be in a position to commence broad dissemination of the results of the study during Phase IV. At this time the PPB System and procedure manuals will be readily available for distribution.

The cooperative relationship established among the Government Studies Center of the Fels Institute, Graduate School of Education and the Management Science Center of the Wharton School of Finance and Commerce has provided an excellent
opportunity to attack an educational problem through an interdisciplinary approach. Because of this approach, an innovative solution has been found to the perplexing problems of developing a working procedure for allocating resources at a county office or intermediate unit level. This close association of these three major graduate schools will undoubtedly have a profound and lasting effect on the attitudes the staffs of these schools have toward one another and their recognition that educational problems can be solved through an interdisciplinary approach.

Dissemination

The dissemination of information during the first phase of the study has been dictated by the ebb and flow of the program. An information brochure, written for school directors, has been produced for wide distribution. It describes the emerging role of the intermediate unit in Pennsylvania, problems to be solved by the study, goals of the study, work program and time schedule of the study. A copy of this brochure can be found in Appendix E.

In addition to the information brochure, a number of working papers have been distributed among the participants of the study. Eleven detailed working papers were produced during Phase I.

Minutes and other relevant information growing out of various committee meetings were distributed to the members of the various committees. Members of the Steering Committee and County
Superintendents of Schools Committee have been provided with loose leaf binders for holding minutes of meetings and all other relevant documentation.

An average of five unsolicited response per month for information on the study have been received since August, 1967. A two-hour speech on the Study was delivered to the Metropolitan County Superintendents Committee in the Denis Hotel, Atlantic City, on February 17, 1968. This group meets every year at the AASA Convention, to discuss problems relevant to the operation of counties and intermediate units adjacent to large metropolitan areas.

A panel discussion, chaired by Dean William B. Castetter, Graduate School of Education, University of Pennsylvania, dealt with the Intermediate Unit Planning Study and its impact on the future development of educational administration. The panel discussion took place at the 1968 AASA Convention in Convention Hall on February 20, 1968. In addition to Dean Castetter, the following members of the study staff also participated on the panel: C. E. Brewin, Jr., Assistant Bucks County Superintendent of Schools; John K. Parker, Manager, Systems Division, Government Studies Center, Fels Institute of Local and State Government; Roger L. Sisson, Associate Professor of Statistics and Operations Research, Wharton School of Finance and Commerce.

Three reports on the progress of the study were delivered during the first phase of activities. The first report was given in Bucks County on November 10, 1967, to a combined groups of county office personnel, county board members and local school
administrators of Bucks, Cameron, Elk, McKean, Montgomery and Potter Counties. The second meeting was held on March 11 in Cameron County. The participants included county office staff, county board members and local school district administrators of Cameron, Elk, McKean and Potter counties. The third meeting was held on March 13, in Bucks County and also involved county office staff, county board members and local school district administrators of Bucks and Montgomery Counties.

A seminar is planned for May for dissemination of Phase I study results. Approximately fifty administrators from Pennsylvania school districts, county offices, Department of Public Instruction and a few from Delaware and New Jersey will attend. This will be the second organized effort to disseminate information on the study outside the participating counties. The first involved the use of the previously mentioned information brochure.

**Continuation of the Study Beyond the Grant Period**

If the intermediate units form of organization becomes a reality in Pennsylvania prior to May 31, 1970, the date this study is terminated, it is assumed these units will continue to improve on the PPB System in cooperation with the local school districts within their jurisdiction. However, if the intermediate units are not formed prior to the conclusion of the study, it is assumed that interested county offices and local
school districts will continue to improve on the PPB System developed in the study.

The PPB System developed in the study provides a planning-programming-budgeting procedure for local school districts and county offices or intermediate units. It does not provide a similar procedure for the Department of Public Instruction. The Department of Public Instruction can, if it desires, develop such procedure; however, it is hoped that the PPB System developed by Department of Public Instruction will be compatible with the one developed in the study. Long range improvement of the PPB System will not only depend on the support of local school districts and county offices or intermediate units, but also on technical support provided by the Department of Public Instruction and other public and private agencies.

**Estimated Cost of the Budget**

from June 1, 1967 through May 31, 1968

- $290,516.42 Total Cost
- $30,600.00 Total non-federal support (Salaries only)
- $259,916.42 Total federal support under Title III, P.L. 89-10
- Total federal support other than Title III, P.L. 89-10
CHAPTER III
PROJECTED ACTIVITIES

Goals of the Study

In Pennsylvania, local school districts have the major responsibility for the provision of public education through the twelfth grade for children residing within their boundaries. Local districts derive their authority from the State, which exercises general regulatory power and provides financial support in varying amounts depending on the characteristics of the local districts.

At the present time, county superintendent of schools offices exist in each of the sixty-seven counties of Pennsylvania. These county offices are now in a state of transition. Originally formed when there were far greater numbers of local school districts, many of them quite small, these county offices once served primarily to assist the State Department of Public Instruction in obtaining compliance with its administrative regulations on the part of local districts. In recent years there has been a distinct trend by county offices toward provision of vital support services to local school districts. The importance of a unit capable of augmenting the educational capabilities of local districts has been recognized, as mentioned in Chapter II, by the Department of Public Instruction in its proposed plan for intermediate units. In the
plan, intermediate units would be formed for one or more counties with explicit responsibility for providing supporting services to local school districts. The intermediate unit plan would endeavor to extend to all local districts in the Commonwealth the types of services now provided by some of the more progressive county offices.

The proposed intermediate unit plan would not alter the basic responsibility of local school districts for providing public education within their districts. It would provide a unit capable of augmenting the capabilities of local districts by providing services which it would not be feasible for each local district to supply for itself. Thus, intermediate units would share with local districts the responsibility for achieving educational objectives common to local districts within the area served by the intermediate unit. While both local districts and intermediate units would be subject to regulation by the State, the primary responsibility of the intermediate unit would be to the local school districts which it would serve.

The application of PPB System concepts in this study will take into account this inseparable relationship of intermediate units and local districts to the single constituency of students which they jointly serve.

Through the development of a PPB System, this study is designed to achieve two goals:

1. The primary goal is concerned with improving the quality of the capabilities of the intermediate unit to effectively accomplish its planning and
administrative responsibilities. It is equally intended to strengthen the quality and the quantity of the services the intermediate unit provides to the local school districts.

2. The secondary goal is designed to assist the local school districts in Bucks, Cameron, Elk, McKean and Potter Counties to more effectively accomplish their own planning and administrative responsibilities, and to increase the value of their own services to their own pupils through a more efficient utilization of their own existing resources.

The development and use of the PPB System involves the county boards of school directors, county superintendents, county staffs and local school district chief school administrators. This group reflects the interests of the local school district by assuring that the PPB System will provide an intermediate unit service structure to accommodate the continually growing needs of the local school districts.

**Characteristics of the PPB System**

PPB System concepts provide a framework for relating administrative activities in a systematic way that will help public school administrators clarify objectives and make better decisions on the allocation of resources among different ways of obtaining objectives. The PPB System approach has several
distinctive characteristics which are discussed in the following sub-sections.

**Objectives and Programs**

The PPB System focuses on identifying the major objectives of the school district and intermediate unit and determining ways of measuring or estimating progress toward these objectives. All activities of the organization, regardless of their placement in the organization, are then related to these broad objectives. A set of activities which contributes toward the achievement of an objective is designated a program or sub-program. Both objectives and programs may be thought of as hierarchies proceeding from the most general to the most specific. The degree to which these hierarchies of objectives and programs are defined depends mainly on the size of the organization, i.e., very large organizations require much more detailed specification of objectives and programs than very small organizations.

**Future Implications**

The PPB System approach explicitly considers the implications in future years of action which is planned today. This requires forecasts of future demands on the organization, future resources available and the capability of current plans and programs to meet the objectives of the organization in terms of the foreseeable conditions of the future. Plans are revised or
new plans originated as necessary to overcome perceived obstacles and to achieve changing objectives.

Multi-Year Programs and Financial Plans

Programming is an essential part of the PPB System approach. Long range plans are broken down into specific groups of activities or programs to be accomplished during each of the next five years. Both capital and operating costs are shown in each year for each program. The five-year program includes the financial plan for providing revenues and other resources needed to accomplish the activities included in the program. The first year of the five-year program and financial plan becomes the basis for the detailed budget which implements the first year of the five-year program.

Analysis of Program Alternatives

The PPB System approach provides the framework for analyzing the relative merits of alternative activities for achieving program and sub-program objectives. First setting out measurable objectives for each major program, the administrator and his staff are then able to assess the degree to which different alternative activities would meet these objectives. By estimating the total costs of each course of action in comparison with the results that would be achieved by each course of action, the administrator is aided in choosing the alternative to implement, with increased understanding of the effects of his
action not only in the present but over the five years of the multi-year program and financial plan.

Annual Revision

The process of planning, programming and budgeting is repeated annually in the PPB System so that planned action is regularly revised in light of actual experience in carrying out the first year of the multi-year program. Thus the PPB System approach provides a systematic way of helping the school district and intermediate unit keep their plans and actions up to date.

It should be noted that the PPB System approach is not a "total management system." The PPB System does not deal with problems of budget implementation, efficiency of operating units, manpower selection, cost control of operations, cost accounting or performance measurement and reporting. Functions such as these are complimentary to the PPB System approach but are not directly a part of it. It is also worth noting that the PPB System approach is not a mechanical system for replacing policy leadership and administrative judgment, but rather provides an improved process through which policy leaders and administrators can increase their effectiveness in meeting their objectives with limited resources.

General Design Considerations

As noted earlier, local school districts have full responsibility for the conduct of public education through the eleventh grade within their respective attendance areas.
The existing county offices and the proposed intermediate units are responsible for providing services to augment the capability of local districts to achieve their educational objectives. The State Department of Public Instruction exercises, for the Commonwealth, the ultimate authority for all public education in Pennsylvania and establishes regulations governing the local districts, county offices and proposed intermediate units. In addition, the Department of Public Instruction retains responsibility for providing certain services to support local school districts.

Because of the above mentioned circumstances, the preferred concept for applying the PPB System approach in this study is an integrated three-component system: the first cycle of planning, programming and budgeting will be conducted by the local district; the second cycle will be conducted by the county office or intermediate unit; and the third cycle will be conducted at the Department of Public Instruction level. Feedback would take place among the three components of the overall system. However, as a practical matter, the goals of the study and the high degree of interdependence between local districts and counties mandates that a two component PPB System be developed for use by these organizations. The development of the PPB System component for the Department of Public Instruction should be pursued separately from this study.

Therefore, the general design concept to be pursued in this study will be that of a PPB System to serve both local districts
and county offices or intermediate units. This system will be designed so that the first cycle of planning, programming and budgeting is conducted by the local districts and the second cycle is conducted by the county offices or intermediate units. The results of the local districts efforts will be an "input" to the county office or intermediate unit cycle. After the first year of operation, an existing five-year program for the intermediate unit and for the local districts will be available to each at the beginning of the planning, programming and budgeting cycles. This approach will permit county offices or intermediate units to focus their efforts with maximum effectiveness on those needs of greatest concern to local districts within their boundaries.

The PPB System design must be sufficiently flexible to serve all types of local districts and county offices in the five counties participating in the study. The result is expected to be a general system design applicable throughout Pennsylvania.

It is assumed that technical manpower will continue to be in short supply for the foreseeable future and therefore, certain technical functions such as forecasting and advanced analytical capabilities will be provided by county offices or intermediate units for some or all of the local districts which they serve.

In order to allow for completion of the pilot operation of the study, it is assumed that at least one county office and one local school district in that county will cooperate and participate in the development, pilot testing and implementation of the PPB System during Phases II and III. If experience gained
through this initial implementation suggests that local districts are unlikely to uniformly implement the PPB System, modifications in the county office or intermediate unit component will be made during Phase IV of the study to facilitate use without complete inputs from local school districts.

Requirements of Local School Districts and Intermediate Units

Local school districts are now required to prepare ten-year comprehensive plans which must be revised every two years. In addition, of course, they prepare annual budgets. Therefore, the local district component of the PPB System will provide for a means of translating long range plans to five-year capital and operating programs and from five-year programs to annual budgets. In addition, emphasis will be placed on increasing the accuracy and value to local districts of the overall planning process within the framework of the State requirements.

Intermediate units, to the extent to which they are represented by existing county offices, now prepare annual budgets. The emphasis in the intermediate unit component of the PPB System will be on providing a means of preparing five-year plans and programs related to local district needs as indicated by local district plans and programs and on providing a transition from the five-year programs to the annual budget.
Resources and Limitations

Resources available during the first, second, third and fourth phases are primarily restricted to those provided in the current study, including cooperation from participating school districts, county offices, educational institutions and agencies. A training program will be developed by the study staff for use by interested school districts and county offices or intermediate units who may wish to institute the PPB System. Local school districts and intermediate units who choose to use the PPB System following the conclusion of the study must rely on the available resources within their own organizations. It is considered likely that some added capability in the form of technical support will be provided at the intermediate unit level when intermediate units are placed in operation.

The principal limitations during the design phases for the PPB System are determined by the time schedule and funding provided in this study. During operation, the most significant limitation is expected to be the willingness of local school districts and county offices or the succeeding intermediate units to employ the PPB System.

Major Elements of the PPB System

At this stage of preliminary design, tentative identification has been made of major functional elements of the PPB System. These elements apply to the general PPB System design for both the local school district component and the
county office or intermediate unit component. The detailed design and functioning of each element will vary somewhat for the local school district as compared with the intermediate unit. These differences will be clarified in the system design which will be completed prior to the end of Phase I of the study.

The system design will focus on the functions, relationships and development of the following major PPB System elements:

1. Input forecasts of students and revenues,
2. Program structure,
3. Indicators of major controllable variables,
4. Operational forecasts of program implementation,
5. Multi-year plans,
6. Multi-year programs and
7. Budgets.

For discussion purposes and to facilitate design activities these major elements are discussed in the following sub-sections.

**Input Forecasts**

Given current laws and policies under which a school district is operating, forecasts of expected student enrollment by grade and of expected revenue by major source represent extremely important factors affecting each planning-programming-budgeting cycle. These forecasts of student and revenue input to the school district must be made for each year of the PPB System period, which is considered to be five years for the purpose of
system design. While all school districts make some formal or informal projections at present, the two-cycle PPB System procedure requires regular, comparable forecasts covering the same factors and the same five-year period for each school district. It is expected that standard forecasting methods for student enrollment and revenues will be developed as part of this project. The methods are likely to include statistical procedures and judgmental estimates by school administrators in arriving at forecasts. An example of a judgment estimate would be a calculation of special revenues contingent on state or federal funding of a proposed program.

Program Structure

The way in which activities are grouped into broad program categories is of considerable importance in systematic planning and programming. The general program structure which will be developed as part of the PPB System must take into account common activities of school districts as well as allow for differing activities among school districts. Program structures do not attempt to duplicate organizational structure or accounting and budgeting classifications, but are specifically related to the purposes of the school district and the activities which are conducted in achieving those purposes.
Based on preliminary analysis, it is expected that a common program structure will be developed for use by all school districts, but it is also expected that experience during the second and third phases of the study will result in some modifications of the initial structure. Changing requirements over the years may result in further modifications. The program structure should be kept current to be compatible with changing objectives.

Indicators

One of the most difficult elements to design in any PPB System is that element which provides measures of effectiveness in relation to objectives. Theoretically, the ideal would be to find a single measure of the output of the system and to relate all activities to the final measure of effectiveness. In the case of education and other complex public programs, there is reason to question the validity of this ideal. However, as a practical matter, there is no known way to produce a single, valid measure of educational output. Under these circumstances, the more worthwhile approach is to identify indicators of major variables subject to control of the school district which, when interpreted by experienced administrators and policy officials, indicate possible needed action. Examples of such indicators now in use by school administrators include variations of pupil/teacher ratios, pupil/classroom ratios and grade achievement scores.

Indicators, not necessarily those mentioned above, will be
identified or developed for each major program area included in the PPB System program structure. These indicators will serve as general reference points for estimating the present and future implications of present or planned programs. They are also expected to be of value in terms of setting general objectives by allowing school districts to designate desirable levels which they wish to achieve for each indicator. It is highly likely that school districts will also set more specific objectives for each important program or sub-program to facilitate their evaluation of alternative activities.

Operational Forecasts

Forecasting the financial and operational (staffing, facilities, equipment, etc.) implications of continuing and planned programs is an essential part of the PPB System approach. Operational forecasts provide a means of testing the practicality of tentative decisions and allow estimates to be made of the effect on indicators of plans, in the light of input forecasts of probable enrollments and revenues. As with input forecasting methods, operational forecasting methods to be developed as part of this project are expected to include both judgmental estimates by school administrators and statistical procedures.

Multi-Year Plans

General five-year plans, setting out policy guidelines and broad objectives, along with major action to meet the objectives,
provide the overall picture of where the school district expects to be in the future and how it intends to get there. These plans include all major programs and sub-programs and take into account input forecasts, operational forecasts and estimates of indicators in the future. Because these plans represent major policy decisions, they do not include details of operations or finances, but focus on major results to be achieved and on major program changes, including changes in capital facilities as well as operations.

**Multi-Year Programs**

Five-year programs outline the means of implementing the five-year policy plans. The five-year programs show the broad allocation of resources among major programs and sub-programs in each of the five years and identify results to be achieved in each year. Action to be taken in each year is also outlined for each major program and sub-program area, so that the five-year program shows a financially and operationally feasible series of steps needed to carry out the policy plans. Relationships between capital facilities and operations, such as, staffing and maintenance requirements for new facilities, are made clear in the five-year program as are changes in fixed costs, such as, debt service and price-indexes. The first year of the five-year program becomes the basis for preparation of the annual budget, which can be prepared with confidence that budgeted activities will contribute to accomplishment of policy plans and objectives.
and will be compatible with the steps to be taken in following years.

**Budgets**

The annual budget accomplishes implementation of the first year of the five-year program. The approved budget provides specific authority to take action and expend resources, while the five-year plan and program represent policy guidelines and do not give specific authorization. The format of the annual budget is not of direct importance to the PPB System. The annual budget may be either a line item budget or a program budget; however, it will be necessary to relate the particular type of budget in use to the first year of the five-year program. It is not intended to develop a special budget format as part of the study.

Each of the foregoing major PPB System elements will be further defined and analyzed prior to completion of the general design. Emphasis will be given to the overall process and the relationships among the components, both for local districts and for county offices or intermediate units.
Project Outputs

While considering the major aspects of the PPB System design, it is necessary to keep in mind the means through which the system will be communicated to school districts and implemented by those which choose to adopt the system. The outputs of the project will be oriented primarily toward the implementation requirements of county or intermediate unit and local school districts participating in the study, and secondarily toward other school districts in Pennsylvania and other states. Project outputs include the following:

1. General reports describing the overall design and operation of the PPB System, including the functioning of major components and elements and the relationships among them;

2. Manuals and instructions for use by local school districts and counties or intermediate units in operating the PPB System, including procedures, forms and computer programs as appropriate;

3. Training programs for school administrators in the participating counties and local districts to facilitate implementation and operation of the PPB System, including orientation for school board members and technical training for staff personnel where required;
4. Advice and assistance by project staff to school district personnel during initial implementation of the PPB System;
5. An evaluation by project staff and participants of the utility of the PPB System for use by local school districts and intermediate units, including conditions required for effective utilization of the system, and;
6. Recommendations by project staff for further research and development, if any, related to PPB Systems for local school districts, intermediate units and, if appropriate, the Commonwealth of Pennsylvania, Department of Public Instruction.

Work Program, Fiscal Years 1968-69 and 1969-70

Introduction

The work program for the remaining two years of the project has been revised in view of the results obtained during the first year of the project. Consideration has been given to the capabilities and requirements of the participating agencies and institutions in regard to their project responsibilities. While specific aspects of organization and scheduling of the work program have been modified from the initial work program, the general structure and components remain essentially as originally planned. As during the first year of the project, the work program will undergo continuing monitoring, revision and detailed development as the project progresses.
**Intermediate Unit Planning Study**

**Work Program Network**

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### Phase II

1. **Conduct Phase II Information Program**
   - Plan Phase II Info. Program
2. **Assist School Districts in Long Range Development Planning**
   - Continue Planning Assistance
3. **Assist School Districts in Analysis and Planning for EDP Implementation**
   - Assist in Development of Initial EDP Application

### Develop Initial Student Enrollment

1. **Develop Initial Review Forecasting**
2. **Develop Initial Review Forecasting**

### Develop Initial Review Forecasting

1. **Develop Initial Review Forecasting**
2. **Develop Initial Review Forecasting**

### Modify Initial

1. **Modify Initial Simulation Model**
2. **Modify Initial Simulation Model**

### Conduct Phase II

1. **Conduct Phase II Training Program**
2. **Conduct Phase II Training Program**

### Conduct Phase III

1. **Conduct Phase III Training Program**
2. **Conduct Phase III Training Program**

### Monitor Progress and Evaluate

1. **Monitor Progress and Evaluate Phase II**
2. **Monitor Progress and Evaluate Phase III**

### Conduct Phase II Administration

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2. **Conduct Phase III Administration**
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<td>49</td>
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**Notes:**
- Conduct Phase IV Information Program
- Assist in Developing and Implementing Continuing Long Range Planning for Project Participants
- Assist in EDP Implementation for Project Participants
- Conduct Phase IV Administration
- Monitor Progress and Evaluate Phase IV
- Prepare Final Report
Phasing of the Work Program

The "Work Program Event Network" shows the major activities included in each of the three remaining phases of the project. Phase II, which is planned for completion by the end of November, 1968, is concerned with development and testing of the initial operating PPB System. Phase III, planned for completion by the end of March, 1969, is devoted to implementation of the PPB System by pilot local school districts and counties or intermediate units. Phase IV, which extends to the conclusion of the project in May of 1970, emphasizes system revision and assistance to participating school districts in implementation of the PPB System, as well as pilot operation of the simulation model. Additional information about outputs and activities for each of these phases is given below.

Phase II

Outputs to be produced during Phase II include the following:

1. The initial general design report explaining the overall functioning of the PPB System;

2. Initial drafts of instructions and forms for operation of the PPB System, including program classification, indicators, enrollment and revenue forecasts and analytical techniques.

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3. General training activities for all project participants and specialized training for personnel of pilot districts;

4. Assistance to participating districts in long range development planning, electronic data processing planning, and to pilot districts in testing of the PPB System and;

5. Evaluation of Phase II progress.

Major activities scheduled for Phase II include the following:

Phase II April 1 - November 30, 1968

1. Conduct Phase II Information Program
2. Plan Phase III Information Program
3. Assist School Districts in Long Range Development Planning
4. Assist School Districts in Analysis and Planning for EDP Implementation
5. Develop Initial Student Enrollment Forecasting Methods
6. Develop Initial Revenue Forecasting Methods
7. Develop Initial Indicators
8. Prepare PPB System Design Report
9. Select Pilot School Districts
10. Develop Initial Procedures
11. Develop Initial Analytical Techniques
12. Modify Initial Simulation Model
13. Plan Staff Application of PPB System
14. Collect Data in Pilot Districts
15. Staff Application of PPB System Using Pilot Districts Data
16. Revise Procedures and Instructions
17. Plan Test of PPB System by Pilot Districts
18. Implement Test of PPB System by Pilot Districts
19. Test Initial Simulation Model
20. Design Advanced Simulation Model
21. Conduct Phase II Training Program
22. Plan Training Program for Pilot District Personnel
23. Continue Phase II Training Program
24. Conduct Training Program for Pilot District Personnel
25. Plan Phase III Training Program
26. Monitor Progress and Evaluate Phase II
27. Conduct Phase II Administration

**Phase III**

Outputs to be produced during Phase III include:

1. A revised general design report incorporating revisions based on pilot test results;
2. Revised instructions and forms for operation of the PPB System during pilot implementation;
3. General training activities for all project participants;
4. Assistance to pilot districts in implementation of the PPB System and continuation of assistance in long range planning and electronic data processing and;

5. Evaluation of Phase III progress.

Major activities scheduled for Phase III include:

Phase III - December 1, 1968 - March 31, 1969

28. Conduct Phase III Information Program
29. Plan Phase IV Information Program
30. Continue Planning Assistance
31. Assistance in Development of Initial EDP Applications
32. Revise Procedures and Instructions
33. Plan Implementation by Pilot Districts
34. Implement PPB System in Pilot Districts
35. Develop Advance Simualtion Model
36. Conduct Phase III Training Program
37. Monitor Progress and Evaluate Phase III
38. Conduct Phase III Administration

Phase IV

Outputs to be produced during Phase IV include:

1. The final general design report incorporating revisions based on operating results and including the results of pilot implementation of the simulation model;
2. Revised instructions, forms and computer programs as appropriate, and manuals required for operation of the PPB System;

3. Training programs for school administrators in the participating counties and local districts to facilitate implementation and operation of the PPB System, including orientation for school board members and technical training for staff personnel where required;

4. Assistance to school district personnel during initial implementation of the PPB System, assistance to counties or intermediate units in developing a continuing long range planning program, and assistance to participating districts in implementation of initial electronic data processing applications;

5. Evaluation of the utility of the PPB System for use by local school districts and intermediate units, including conditions required for effective utilization of the system and including evaluation of the utility of computer-based simulation models in PPB Systems and;

6. Recommendations by project staff for further research and development, if any, related to PPB Systems for local school districts, intermediate units and, if appropriate, the Commonwealth of Pennsylvania Department of Public Instruction.

Major activities scheduled for Phase IV include:
Phase IV - April 1, 1969 - May 30, 1970

39. Conduct Phase IV Information Program
40. Assist in Developing and Implementing Continuing Long Range Planning for Project Participants
41. Assist in EDP Implementation for Project Participants
42. Review and Revise Student Enrollment Forecasting Methods
43. Review and Revise Revenue Forecasting Methods
44. Review and Revise Indicators
45. Plan for General Implementation Assistance
46. Review and Revise Procedures
47. Review and Revise Analytical Techniques
48. Revise Instructions
49. Assist in PPB System Implementation by Project Participants
50. Test and Modify Advanced Simulation Model
51. Pilot Implementation of Simulation Model
52. Plan Implementation Training Program
53. Conduct Implementation Training Program
54. Monitor Progress and Evaluate Phase IV
55. Conduct Phase IV Administration
56. Prepare Final Report

Evaluation Procedure

Evaluation for the Intermediate Unit Planning Study consists of three elements:
1. Management control evaluation, the purpose of which is to provide information for making decisions.

2. External evaluation, a process to provide periodic feedback for continuous refinement of plans and procedures.

3. Field evaluation, a product evaluation needed for determining the effectiveness of the project.

Management Control

The management control evaluation is built into the work program. It is an inherent part of the procedure for accomplishing the work objectives, utilizing the resources and meeting program goals.

The detailed work program for each phase of the project is undergoing continuing monitoring, revision and detailed development as the project progresses. This procedure is used to assess the human and material resources, determine available strategies for meeting program goals and the identification of procedural designs delineated in terms of resource, time and budget requirements.

Each task of the work program is listed. A description of the task is given in the form of a narrative statement including the scope and limitations, objectives, assignment of responsibility and completion date.

The procedure for accomplishing each task includes a
summary description, event network (when necessary), resources required (men, material, etc.), educational data processing equipment, travel expenses and the consultants that are an integral part in the task development.

Written reports were submitted upon the completion of each task. These reports included a historical statement of the activities leading to the task's accomplishment and a description of the end product result.

The evaluation of each task, based upon the written report, was concerned with the satisfaction of objectives set forth in the task description. An assessment of the weaknesses and strengths in the approach to the task and its relationship to the overall project goals was also an integral part of the appraisal.

The evaluation attempted to focus attention on theoretically important variates, and yet remain alert to any unanticipated, but significant events, in order to provide project decision-makers information needed for anticipating and overcoming procedural difficulties.

John Parker, Study Director for the research group and C. E. Brewin, Study Coordinator assumed responsibility for the management control evaluation.

**External Evaluation**

The external evaluation was concerned with a thorough analysis of the results of the project activities, based on established criteria.
The objective of the external or process evaluation was to detect or predict defects in the design or its implication. The overall strategy was to identify, on a continuous basis, the potential sources of failure in the project, assess their relevance to program objectives, their potential procedural barriers and the consequences of not overcoming these procedural impediments.

The method was to define and measure criteria associated with the objectives of each activity and to make rational analysis and interpretations of the outcomes of the recorded context.

The external evaluation was conducted by an evaluation team consisting of independent, unbiased technical and professional experts in the field of educational administration, general education, educational research and management sciences. The team was established and directed by the Steering Committee. The evaluation team had complete freedom to examine and assess all aspects of the study and met on a regularly planned basis.

The evaluation team consisted of the following four persons:

- Dr. James Becker, Executive Director
  Research for Better Schools, Inc.

- Dr. Joseph Froomkin, Director of Program Planning and Evaluation in the U. S. Office of Education

- Dr. Leon Ovsiew, Assistant Dean of the College of Education
  Temple University
Dr. Albert Neiman, Coordinator of Research
Bucks County Public Schools

Dr. Neiman will serve as executive secretary for the evaluation team.

On January 22, 23 and 24, an evaluation team representing the Pennsylvania Department of Public Instruction examined the procedures and progress of the "Exploring New Horizons For In-Service and Student Programs" project. The "Intermediate Unit Planning Study" is one division of this three-part project.

The Department of Public Instruction team consisted of the following members: Dr. Clifford Burket, Dr. Kenneth Stuck, Mr. John Binney, Mr. Paul Beals and Mr. Kenneth Rounds. Dr. Burket served as chairman for the team.

Because of the magnitude and complexity of the "Exploring New Horizons For In-Service Training and Student Residency Programs" project, it was evaluated as three individual projects. Dr. Burket and Mr. Binney assumed the responsibility for the evaluation of the Intermediate Unit Planning Study.

They made the following commendation in their report to the Department of Public Instruction.

We commend the various school agencies for their foresight, planning and particularly for their discernment of the obvious need to implement a program of this nature and magnitude. With the involvement of the Management Science Center, Fels Institute of Local and State Government and the School of Education at Pennsylvania University it appears that significant contributions
are possible which will probably go beyond our current understanding of the nature and scope of an effective and efficient Planning-Programming-Budgeting System.

It is also worthy of note that the Area 9 counties are involved in the project. This is a geographic area which needs assistance in realizing its potential and this project must have a strong commitment to these counties.

A third commendation is directed toward the extensive recordkeeping system which is being done. The collating of the massive amounts of materials is essential to assist in evaluations, both local and DPI. The wealth of information which is readily available and exceptionally well organized was of unmeasurable assistance during our evaluation. This organization of materials must be continued to insure continuity to the program as it progresses beyond Phase I. The material is necessary since the possibility always exists, in all projects, of personnel changes during a three-year period.

We would further commend the project staff in their constant attempts to evaluate. This is particularly true in the feedback loops which have been established in the management area. This is essential in an undertaking which involved such a diverse group, each working on various segments of the total project.

Field Evaluation

The third element, field evaluation, will be undertaken at
the termination of the study and will be primarily concerned with
how effectively the management system, developed during the
study, functions in real world settings. This evaluation will
concern itself with such items as: (1) what management
techniques or methods exist in the real world that could improve
the management system developed in the study; (2) whether the
design of the PPB System can be utilized and implemented by the
Intermediate Units in Pennsylvania; (3) an examination of the
appropriateness and relevancy of a system presently in actual
operation with a PPB simulation model and the opinion and
decisions of a panel of educational management and management
science experts on a set of pre-determined questions and
management problems.

Procedure for conducting field evaluation will be
established in Phase II.
CHAPTER IV
FINANCIAL
### Proposed Budget Summary: Expenditure Report of Federal Funds

**Title III, Elementary and Secondary Education Act of 1965 - Supplementary Centers and Services Program**

**Montgomery Co. Bd. of Sch. Dir., Courthouse Annex**

| Date: 1944 | Location: Pennsylvania | Budget Period: 6/1/68 - 5/31/69 |

#### Expenditure Accounts

<table>
<thead>
<tr>
<th>Functional Classification</th>
<th>Professional</th>
<th>Non-Professional</th>
<th>Contracted Services</th>
<th>Materials and Supplies</th>
<th>Travel</th>
<th>Equipment</th>
<th>Other Expenses</th>
<th>Total Expenditures</th>
<th>Negotiated Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
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<td>14,570.00</td>
<td>160,196.50</td>
<td>3,845.57</td>
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<td>229,318.17</td>
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<tr>
<td>Instruction</td>
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<td>Student-Body Activities</td>
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<td>Community Services</td>
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<td>Remodeling</td>
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<td>Capital Outlay (Equipment Only)</td>
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<td>1,417.10</td>
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<td>7,706.10</td>
<td>1,417.10</td>
<td>11,517.05</td>
<td>245,904.32</td>
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<td>C REMODELING OF $2,000 OR LESS ENTERED IN PART II</td>
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**PART IV - CUMULATIVE TOTALS - GRANT AWARDS AND CASH RECEIVED SINCE INCEPTION OF PROJECT**

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>CUMULATIVE TOTAL TO DATE</th>
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<tr>
<td>1 GRANT AWARDS</td>
<td>$259,918.42</td>
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<tr>
<td>2 CASH RECEIVED</td>
<td>$237,705.13</td>
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</table>

**TOTAL**

$497,623.55

This fiscal report is correct and the expenditures included herein are deemed properly chargeable to the grant award.

Signature of Project Director

[Signature]

This page includes a table with budget information, including amounts authorized, negotiated budgets, and expenditures for various categories such as sites, buildings, and administrative expenses. The table also indicates cumulative totals and cash received since the inception of the project.
PROPOSED BUDGET SUMMARY
FOR THE INTERMEDIATE UNIT PLANNING STUDY

Applicant: Montgomery County Board of School Directors, Court House Annex, Norristown, Pa. 19404

Grant Period: June 1, 1968 to May 31, 1969

<table>
<thead>
<tr>
<th>Expenditure Account</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td></td>
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<td>Salaries</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Professional</td>
<td>Nonprofessional</td>
<td>Contracted</td>
<td>Materials &amp; Supplies</td>
<td>Travel</td>
<td>Equip.</td>
<td>Other Expenses</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>1. Administration</td>
<td>100</td>
<td>$43,000.00</td>
<td>$14,570.00</td>
<td>$160,196.50</td>
<td>$3,845.57</td>
<td>$7,706.10</td>
<td></td>
<td></td>
<td></td>
<td>$229,318.17</td>
</tr>
<tr>
<td>2. Operation</td>
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<td></td>
<td></td>
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<td>$6,667.90</td>
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<tr>
<td>3. Fixed Charges</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>8,501.15</td>
</tr>
<tr>
<td>4. Capital Outlay (Equip. only)</td>
<td>1230</td>
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<td></td>
<td></td>
<td>$1,417.10</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td>$43,000.00</td>
<td>$14,570.00</td>
<td>$163,848.50</td>
<td>$3,845.57</td>
<td>$7,706.10</td>
<td>$1,417.10</td>
<td>$11,517.05</td>
<td>$245,904.32</td>
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</table>
### INTERMEDIATE UNIT PLANNING STUDY

**Expenditure Account No. 100 - Administration**

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Quantity</th>
<th>Salary Rent or Unit Cost</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>1. Neiman, A.M., Study Manager - Coordinate all study activities and all research activities at county and local school district level with research activities of outside agencies and organizations.</td>
<td>x</td>
<td></td>
<td></td>
<td>$17,000.00</td>
<td>$16,000.00</td>
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<tr>
<td></td>
<td>2. VanWagner, R., Coordinator of Local School District Planning Activities and Area 9 Coordinator. Responsible for aiding local school districts in developing long range plans and coordinating these plans with IU long range plans and work with Area 9 county offices and local school districts during Phases II, III and IV.</td>
<td>x</td>
<td></td>
<td></td>
<td>$16,000.00</td>
<td>$16,000.00</td>
</tr>
<tr>
<td></td>
<td>3. Haughay, C., Director ESEA Title III Bux-Mont Planning Activities - Coordinate Intermediate Unit Planning Study Activities with Montgomery County's Intermediate Unit Planning Activities. (20%)</td>
<td>x</td>
<td></td>
<td></td>
<td>3,200.00</td>
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### INTERMEDIATE UNIT PLANNING STUDY

**Expenditures Account No. 100 - Administration (cont'd)**

3/18/68

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Quantity</th>
<th>Salary Rental or Unit Cost</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional (cont'd)</td>
<td>4. Love, R., Senior Programmer-- Assist in systems development and write, test, document and supervise programs for portions of study requiring EDP applications.</td>
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<td></td>
<td>$10,000.00</td>
<td>$10,000.00</td>
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<tr>
<td>Nonprofessional</td>
<td>1. Rynd, C., Secretary-Class II- Assigned to secretarial pool for study.</td>
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<td></td>
<td></td>
<td>4,850.00</td>
<td>4,850.00</td>
</tr>
<tr>
<td></td>
<td>2. Minteer, S., Secretary-Class II- Assigned to secretarial pool for study.</td>
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<td></td>
<td></td>
<td>4,850.00</td>
<td>4,850.00</td>
</tr>
<tr>
<td></td>
<td>3. Not identified, Secretary-Class II- Assigned to secretarial pool for study.</td>
<td>x</td>
<td></td>
<td></td>
<td>4,850.00</td>
<td>4,850.00</td>
</tr>
<tr>
<td></td>
<td>4. Seltzer, J., Bookkeeper - Responsible for all bookkeeping.</td>
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<td>4,850.00</td>
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<tr>
<td></td>
<td>5. Not identified, Secretarial assistance</td>
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<td>68 da.</td>
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<td>1,020.00</td>
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**Contracted Services**

<table>
<thead>
<tr>
<th>Services</th>
<th>Fels Institute of Local and State Government of the Wharton School, University of Pennsylvania - Responsible for general study directions, including planning and scheduling of all study activities, coordination</th>
</tr>
</thead>
</table>
### Expenditures Account No. 100 - Administration (cont'd)

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Quantity</th>
<th>Salary, Rental or Unit Cost</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracted Services (cont'd)</td>
<td>of university research staff and outside participating research organizations and consultants. See Appendix for detail responsibilities and use of funds.</td>
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<td></td>
<td></td>
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<td>$86,000.00</td>
</tr>
<tr>
<td></td>
<td>a. Graduate School of Education, University of Pennsylvania - Provide expert educational assistance in accomplishing the design, development, implementation and evaluation of the Intermediate Unit Planning-Programming-Budgeting System (PPB System). See Appendix for detail and responsibilities and use of funds.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>b. Management Science Center of the Wharton School, University of Pennsylvania - Assume major responsibilities for designing, testing experiment with and evaluating the potential of computer-based simulation models for prediction and evaluation of alternatives in the PPB System. The Center will also provide expert statistics and operations research</td>
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<td></td>
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<td>$20,000.00</td>
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## Expenditures Account No. 100 - Administration (cont’d)

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<th>Part Time</th>
<th>Quantity</th>
<th>Salary, Rental or Unit Cost</th>
<th>Budgeted Amount</th>
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</thead>
<tbody>
<tr>
<td>Contracted Services</td>
<td>assistance in designing, developing, implementation and evaluation of the Intermediate Unit PPB System. See Appendix for detailed responsibilities and use of funds.</td>
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<td></td>
<td>$35,000.00</td>
<td>$141,000.00</td>
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</table>

2. **Independent Evaluation Committee**

Provide continuing evaluation on a quarterly basis of study for the purpose of providing the Steering Committee, County Superintendents of Schools Committee, DPI and USOE with accurate information concerning the overall effectiveness of the study. Three evaluators are required from the following fields: educational administration, general education and educational research. They will spend approximately three days on the evaluation.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>9 days</th>
<th>$100.00</th>
<th>$ 900.00</th>
</tr>
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</table>

3. **Electronic data processing services** - a cooperative EDP center has been established among counties and local school districts involved in the study and Bucks County...
<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Part Time</th>
<th>Quantity</th>
<th>Unit Cost</th>
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<tr>
<td>Contracted Services (cont'd)</td>
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<td>1</td>
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<td>(2) Adv. Programming (010)</td>
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<td>(5) Secondary Tape Drive (2048-2)</td>
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<td>4</td>
<td>1</td>
<td>315.00</td>
</tr>
<tr>
<td></td>
<td>(6) Card Reader &amp; Control (214-1)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>155.00</td>
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<tr>
<td></td>
<td>(7) Direct Transcription (223)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>315.00</td>
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<tr>
<td></td>
<td>(8) High Speed Skip (066)</td>
<td>1</td>
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<tr>
<td></td>
<td>(9) Printer (22-3)</td>
<td>1</td>
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<tr>
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<td>(10) Extension of Print Pos. (032)</td>
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<tr>
<td></td>
<td>(11) Console (220-3)</td>
<td>1</td>
<td>1</td>
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<td>315.00</td>
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</table>

Education Discount:
- Net Monthly Rental: $5,167.00
- 50% of Net Monthly Rental: $2,584.00

Expenditures Account No. 100 - Administration (cont'd)
3/18/68
### Contracted Services (cont'd)

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Quantity</th>
<th>Salary, Rental or Unit Cost</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Cost of Computer Operation-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 50 hours @ $4.00</td>
<td></td>
<td></td>
<td></td>
<td>$200.00</td>
</tr>
<tr>
<td></td>
<td>c. EAM Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Keypunch and key verify -</td>
<td></td>
<td></td>
<td></td>
<td>$200.00</td>
</tr>
<tr>
<td></td>
<td>- 1086 hours @ $3.50</td>
<td></td>
<td></td>
<td></td>
<td>$651.00</td>
</tr>
<tr>
<td></td>
<td>(2) Sorter - 20 hours @ $4.50</td>
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<td>$110.00</td>
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<tr>
<td></td>
<td>(3) Collator - 10 hours @ $5.00</td>
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<td></td>
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<tr>
<td></td>
<td>(4) Reproducer - 83 hours @ $5.50 (Mark sense capability)</td>
<td></td>
<td></td>
<td></td>
<td>$456.50</td>
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<tr>
<td></td>
<td>(5) Interpreter - 30 hours @ $5.00</td>
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<td>$150.00</td>
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<tr>
<td></td>
<td>(6) Control costs - 150 hours @ $2.50</td>
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<td><strong>MONTHLY COSTS</strong></td>
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<td></td>
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<td></td>
<td><strong>$1,792.50</strong></td>
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<tr>
<td></td>
<td>d. Monthly Costs</td>
<td></td>
<td></td>
<td></td>
<td>$4,576.50</td>
</tr>
<tr>
<td></td>
<td>e. Monthly Costs for Six Months</td>
<td></td>
<td></td>
<td></td>
<td>$27,459.00</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$17,359.00</td>
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</table>

4. Accounting services - Dreslin and Co., Inc. will develop a complete bookkeeping system, train and supervise bookkeeper and perform one complete audit per year. Services shared with the Bux-Mont In-Service and Fine Arts sections of parent project (67-4280).

#### Materials and Supplies

<table>
<thead>
<tr>
<th>1. Office Supplies</th>
<th>2. Office Supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Scissors</td>
<td>3</td>
</tr>
<tr>
<td>b. Steno pads</td>
<td>3 doz.</td>
</tr>
<tr>
<td>c. Carbon Ribbons Films</td>
<td>61</td>
</tr>
<tr>
<td>d. Carbon paper</td>
<td>2 box</td>
</tr>
</tbody>
</table>
## INTERMEDIATE UNIT PLANNING STUDY

### Expenditures Account No. 100 - Administration (cont'd)

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Quantity</th>
<th>Salary Unit Cost</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials and Supplies</strong> (cont'd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Erase Bond</td>
<td></td>
<td>12 rms.</td>
<td></td>
<td>$ 4.00</td>
<td></td>
<td>$ 48.00</td>
</tr>
<tr>
<td>f. Onion Skin</td>
<td></td>
<td>6 rms.</td>
<td></td>
<td>2.20</td>
<td></td>
<td>13.20</td>
</tr>
<tr>
<td>g. Manifold copy</td>
<td></td>
<td>15 rms.</td>
<td></td>
<td>1.50</td>
<td></td>
<td>22.50</td>
</tr>
<tr>
<td>h. Paper Clips</td>
<td></td>
<td>8000</td>
<td></td>
<td>.90</td>
<td></td>
<td>7.20</td>
</tr>
<tr>
<td>i. Pencils</td>
<td></td>
<td>1 gross</td>
<td></td>
<td>4.75</td>
<td></td>
<td>4.75</td>
</tr>
<tr>
<td>j. Ball Point Pens</td>
<td></td>
<td>2 doz.</td>
<td></td>
<td>3.50</td>
<td></td>
<td>7.00</td>
</tr>
<tr>
<td>k. Dictionary</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>7.00</td>
<td>7.00</td>
</tr>
<tr>
<td>l. File Folders (pendaflex-letter size)</td>
<td></td>
<td>9 box</td>
<td></td>
<td>3.95</td>
<td></td>
<td>35.55</td>
</tr>
<tr>
<td>m. Ruled pads - 8½ x 11</td>
<td></td>
<td>10 doz.</td>
<td></td>
<td>2.50</td>
<td></td>
<td>25.00</td>
</tr>
<tr>
<td>n. Rubber bands - #18</td>
<td></td>
<td>1 lb.</td>
<td></td>
<td>2.25</td>
<td></td>
<td>2.25</td>
</tr>
<tr>
<td>o. Book mailing labels</td>
<td></td>
<td>4</td>
<td></td>
<td>.15</td>
<td></td>
<td>.60</td>
</tr>
<tr>
<td>p. Scratch pads - 4&quot; x 6&quot;</td>
<td></td>
<td>2 doz.</td>
<td></td>
<td>1.15</td>
<td></td>
<td>2.30</td>
</tr>
<tr>
<td>q. File cards - 3&quot; x 5&quot;</td>
<td></td>
<td>100</td>
<td></td>
<td>.30</td>
<td></td>
<td>.30</td>
</tr>
<tr>
<td>r. Masking tape - 3/4&quot;</td>
<td></td>
<td>6</td>
<td></td>
<td>1.35</td>
<td></td>
<td>8.10</td>
</tr>
<tr>
<td>s. Cone - 10lb. jute twine</td>
<td></td>
<td></td>
<td></td>
<td>7.50</td>
<td></td>
<td>7.50</td>
</tr>
<tr>
<td>t. White envelopes #10</td>
<td></td>
<td>8000</td>
<td></td>
<td>3.00</td>
<td></td>
<td>24.00</td>
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<tr>
<td>u. Kraft envelopes 11½&quot; x 14½&quot;</td>
<td></td>
<td>1000</td>
<td></td>
<td>22.00</td>
<td></td>
<td>22.00</td>
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<tr>
<td>v. White mimeo paper</td>
<td></td>
<td>400 rms.</td>
<td></td>
<td>1.46</td>
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<td>584.00</td>
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<tr>
<td>w. Stencils</td>
<td></td>
<td>60 quires</td>
<td></td>
<td>3.75</td>
<td></td>
<td>225.00</td>
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<tr>
<td>x. Cans - mimeo ink</td>
<td></td>
<td>40 cans</td>
<td></td>
<td>2.73</td>
<td></td>
<td>109.20</td>
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<td>y. Correction fluid</td>
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<td>10</td>
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<td>.40</td>
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<td>4.00</td>
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<tr>
<td>z. Stencil file folders</td>
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<td>600</td>
<td></td>
<td>3.25</td>
<td></td>
<td>19.50</td>
</tr>
<tr>
<td>aa. Kraft envelopes - 9&quot; x 12&quot;</td>
<td></td>
<td>500</td>
<td></td>
<td>11.00</td>
<td></td>
<td>11.00</td>
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<tr>
<td>bb. Forms for bookkeeping system</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(1) Checks - Blue</td>
<td></td>
<td>5000</td>
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<td>$124.00</td>
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<td>$124.00</td>
</tr>
<tr>
<td>(2) Ledgers - Buff</td>
<td></td>
<td>300 -@</td>
<td></td>
<td>$8.43</td>
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<td>25.29</td>
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<tr>
<td>(3) Ledgers - Buff</td>
<td></td>
<td>300 -@</td>
<td></td>
<td>7.44</td>
<td></td>
<td>22.32</td>
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<tr>
<td>(4) Ledgers - Green</td>
<td></td>
<td>75 -@</td>
<td></td>
<td>1.77</td>
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<td>5.31</td>
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<tr>
<td>(5) TOTAL</td>
<td></td>
<td></td>
<td></td>
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<td>$176.92</td>
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### Materials and Supplies (cont'd)

<table>
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<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Quantity</th>
<th>Part Quantity</th>
<th>Time</th>
<th>Time</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>cc.</td>
<td>Toner for Zerox</td>
<td>2 car.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ 58.00</td>
<td>$ 116.00</td>
</tr>
<tr>
<td>dd.</td>
<td>Cleaning fluid for Zerox drum</td>
<td>1</td>
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<td></td>
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<td>$12.00</td>
<td>$ 12.00</td>
</tr>
<tr>
<td>ee.</td>
<td>Magnetic tapes</td>
<td>10-1200 ft.</td>
<td></td>
<td></td>
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<td>$18.00</td>
<td>$ 180.00</td>
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<tr>
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<td>15-2400 ft.</td>
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<td>$28.00</td>
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<tr>
<td>ff.</td>
<td>Card stack for EDP</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$ 300.00</td>
</tr>
<tr>
<td>gg.</td>
<td>Special forms</td>
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<td></td>
<td></td>
<td></td>
<td>$1000.00</td>
<td>$ 1000.00</td>
</tr>
<tr>
<td>hh.</td>
<td>Stock forms</td>
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<td></td>
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<td></td>
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<td>$250.00</td>
<td>$ 250.00</td>
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<tr>
<td>ii.</td>
<td>Name tags</td>
<td>3 box</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2.50</td>
<td>$ 7.50</td>
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<tr>
<td>jj.</td>
<td>Calendar refills</td>
<td>7</td>
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<td></td>
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<td>$.70</td>
<td>$ 4.90</td>
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<tr>
<td>kk.</td>
<td>Transparent tape</td>
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<td>$.94</td>
<td>$ 9.40</td>
</tr>
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</table>

2. Professional publications -
   a. References - total cost include the following:
      (1) Testing Problems in Perspective
      (2) Non-Parametric Statistics for the Behavior Sciences
      (3) Foundation of Behavior Research
      (4) Unobtrusive Measures: Non-Reactive Research in Sciences
      (5) Statistics - A New Approach
      (6) TOTAL - 5 @ $10.00 avg. $ 50.00
### Materials and Supplies

**b. Journals** - total cost includes the following:

1. Review of Educational Research
2. Journal of Educational Research
3. Journal of Experimental Education
4. Educational and Psychological Measurement
5. Journal of Creative Behavior
6. TOTAL - 5 @ $10.00 avg.  

### Travel and Subsistence

1. Travel and subsistence for following individuals and committee members:

   a. **Study Manager** - 12 Area 9 trips  
      - 8,179 miles within and outside state  
      - 12 days per diem  
      - @ $33.58  
      - $402.96

   b. **Coord. Loc. Dist. Plan Act & Area 9**  
      - 12 Area 9 trips  
      - 8,000 miles within and outside state  
      - 12 days per diem  
      - @ 33.58  
      - 402.96

   c. **Sr. Programmer** - 3 Area 9 trips  
      - 2,500 miles within and outside state  
      - 8 days per diem  
      - @ 33.58  
      - 100.74

   d. **Steering Committee** (9 members x 10 meet. = 90 trips)  
      - 15 trips between Area 9 & B.C.  
      - 4,000 miles within and outside state  
      - 15 days per diem  
      - @ 33.58  
      - 503.70

   - **TOTAL** - 5 @ $10.00 avg.  
     - $50.00

---

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salary,</strong></td>
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<td></td>
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<tr>
<td><strong>Rental or</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Budgeted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Amount</strong></td>
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</tbody>
</table>

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### Table Example

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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Note:** All costs are in dollars ($).
### Expenditures Account No. 100 - Administration (cont'd)

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Quantity</th>
<th>Salary</th>
<th>Rental or Unit Cost</th>
<th>Amount</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Travel and Subsistence</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(cont'd)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Ad Hoc Working Committee (3 com. x 6 members = 18 members x 6 meet. = 108 trips)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10 trips between Area 9 &amp; B.C</td>
<td>@ $33.58</td>
<td>$335.80</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,000 miles within &amp; outside state</td>
<td>@ .10</td>
<td>200.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 days per diem</td>
<td>@ 16.00</td>
<td>160.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Co. Supt. of Sch. Com. (6 mem. x 4 meet. = 24 trips)</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>15 trips between Area 9 &amp; B.C</td>
<td>@ 33.58</td>
<td>503.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2,000 miles within and outside state</td>
<td>@ .10</td>
<td>200.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 days per diem</td>
<td>@ 16.00</td>
<td>240.00</td>
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</tr>
<tr>
<td>g. Prof. Adv. Com. (27 mem. x 3 meet. = 81 trips)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 trips between Area 9 and B.C</td>
<td>@ 33.58</td>
<td>335.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1,000 miles within and outside st.</td>
<td>@ .10</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 days per diem</td>
<td>@ 16.00</td>
<td>160.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>h. Co Bd. of Sch. Dir. Com. (27 mem. x 3 meet. = 81 trips)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 trips between Area 9 and B.C</td>
<td>@ 33.58</td>
<td>335.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000 miles within and outside st.</td>
<td>@ .10</td>
<td>100.00</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10 days per diem</td>
<td>@ 16.00</td>
<td>160.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$7,261.36</td>
<td></td>
</tr>
<tr>
<td>j. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Independent Evaluation Committee - 3 members - 9 consultant days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. 3 trips between Area 9 &amp; B.C</td>
<td>@ 33.58</td>
<td>100.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 2,000 miles within and outside st</td>
<td>@ .10</td>
<td>200.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 9 days per diem</td>
<td>@ 16.00</td>
<td>144.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>444.74</td>
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</tr>
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</table>

Total budgeted amount $229,318.17
### INTERMEDIATE UNIT PLANNING STUDY

**Expenditure Account No. 600 - Operation of Plant**

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Quantity</th>
<th>Salary, Rental or Unit Cost</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Expenses</td>
<td>1. Telephone charges</td>
<td>12 mo.</td>
<td></td>
<td></td>
<td>$230.66</td>
<td>$2,767.90</td>
</tr>
<tr>
<td></td>
<td>2. Postage</td>
<td>12 mo.</td>
<td></td>
<td></td>
<td>$150.00</td>
<td>1,800.00</td>
</tr>
<tr>
<td></td>
<td>3. Copy machine - Zerox 914</td>
<td>12 mo.</td>
<td></td>
<td>100.00</td>
<td></td>
<td>1,200.00</td>
</tr>
<tr>
<td></td>
<td>4. Electricity charges - Phila. Electric</td>
<td>12 mo.</td>
<td></td>
<td>75.00</td>
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<td>900.00</td>
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**Tot'1 Budgeted Amount** $6,667.90
# INTERMEDIATE UNIT PLANNING STUDY

Expenditure Account No. 800 - Fixed Charges

<table>
<thead>
<tr>
<th>Expense Class</th>
<th>Name and Title, Purpose or Item</th>
<th>Part</th>
<th>Part</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contributions to Employee Retirement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Social Security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Study Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$7,800.00</td>
</tr>
<tr>
<td>b. Coordinator of Local School District Planning Activities and Area 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$7,800.00</td>
</tr>
<tr>
<td>c. Senior Programmer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$7,800.00</td>
</tr>
<tr>
<td>d. 3 Secretaries - Class II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$13,550.00</td>
</tr>
<tr>
<td>e. TOTAL</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>$36,950.00</td>
</tr>
<tr>
<td>2. Retirement contribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Study Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$17,000.00</td>
</tr>
<tr>
<td>b. Coordinator of Local School District Planning Activities and Area 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$16,000.00</td>
</tr>
<tr>
<td>c. Senior Programmer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$10,000.00</td>
</tr>
<tr>
<td>d. 3 Secretaries - Class II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$13,550.00</td>
</tr>
<tr>
<td>e. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$56,550.00</td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Workmen's Compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Study Manager</td>
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<td></td>
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<td></td>
<td>$17,000.00</td>
</tr>
<tr>
<td>b. Coordinator of Local School District Planning Activities and Area 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$16,000.00</td>
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</table>
**Expending Account No. 800 - Fixed Charges (cont'd)**

<table>
<thead>
<tr>
<th>Expense Class (cont'd)</th>
<th>Name and Title, Purpose or Item</th>
<th>Full Salary</th>
<th>Part Rental or Budgeted</th>
<th>Time</th>
<th>Amount</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance (cont'd)</td>
<td>c. Senior Programmer</td>
<td>$10,000.00</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. 3 Secretaries - Class II</td>
<td>13,550.00</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>e. TOTAL</td>
<td>56,550.00</td>
<td></td>
<td>2%</td>
<td>$113.10</td>
<td></td>
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</table>

**Contracted Services**

1. Rental of office space at 110 A Chapman Lane, Doylestown to house the work areas of the IU Study. The rental includes cleaning, minor repairs and alterations. 1,700 sq. ft. $2.06 @ sq. ft. $291.00 per month $3,492.00

2. Service contract for mimeograph 40.00 $40.00

3. Service contracts for three typewriters 120.00 120.00

Total Budgeted Amount $8,501.15
<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Budgeted Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. IBM Typewriter, electric</td>
<td>2</td>
<td>$405.00</td>
<td>$405.00</td>
</tr>
<tr>
<td>2. Folding work table</td>
<td>1</td>
<td>50.00</td>
<td>50.00</td>
</tr>
<tr>
<td>3. Calculator, Friden, Model RSR</td>
<td>1</td>
<td>1195.00</td>
<td>597.50</td>
</tr>
<tr>
<td>4. Toll 'n' Tape Kit</td>
<td>1</td>
<td>29.95</td>
<td>29.95</td>
</tr>
<tr>
<td>5. Planalog</td>
<td>1</td>
<td>669.30</td>
<td>334.65</td>
</tr>
</tbody>
</table>

Total Budgeted Amount $1,417.10
Education Intermediate Unit Study
Phase I Work Program

(Refer to Phase I Work Program Network)

1. - 1.2 Task: Phase I Administration

Purpose: Provide necessary administrative support for Phase I activities.

Description: Organize and carry out accounting, reporting, planning, coordinating, and clerical operations.

Responsibilities: Ed Brewin assume general responsibilities of grant administration, John Parker coordinate University related administration, other participants' responsibilities in accordance with project proposal and work program.

Completion Date: Continues through Phase I, with completion on March 29, 1968.

2. Task: Phase I Work Program

Purpose: Provide means of controlling the accomplishment of Phase I Tasks.

Description: Define tasks required to be accomplished in Phase I, allocate resources, assign responsibilities, set completion dates, monitor accomplishment, and revise as necessary to assure successful completion.

Responsibilities: John Parker carry out with assistance of Ed Brewin.
Phase I Work Program
Intermediate Unit Planning Project

Completion Date: August 15, 1967 with subsequent revision as required.

3. - 3.2 Task: Project Evaluation

Purpose: Provide internal and external project evaluation.

Description: Determine evaluation criteria, plan and procedures, arrange for evaluation team.

Responsibilities: Ed Brewin prepare proposal and arrange with Department of Public Instruction.

Completion Date: Proposal to Steering Committee by August 31, 1967; program established by October 1, 1967; Phase I evaluation on or about March 29, 1968.

4. - 4.1 Tasks: Participant Training Programs

Purpose: Increase the ability of Area 9 and Bucks County educators to contribute to development and effective utilization of the PPBS.

Description: Plan and conduct a training program for Area 9 and Bucks County educators participating in the project (and other selected educators), stressing specialized concepts and knowledge essential to the project, and including major interim findings resulting from the project. Regularly scheduled Directors' and Superintendents' meetings (Task 5. - 5.3) are one potential vehicle for elements of the program.

Responsibilities: Bill Castetter plan and arrange program to be conducted with the assistance of Ed Brewin, John Parker and Roger Sisson.

Completion Date: Preliminary proposal to Steering Committee as soon as practical, final program by September 10, 1967 for conduct of initial session late October 1967. Completion of Phase I program by March 29, 1968.
5. - 5.3 **Task:** Meeting of School Directors and Superintendents

**Purpose:** Obtain policy guidance at regular intervals.

**Description:** Plan, arrange and conduct periodic meetings of Area 9 and Bucks County superintendents, school directors, and local district superintendents. Agenda items to include progress summaries, project policy questions as appropriate, and selected elements of participant training (Task 4. - 4.1).

**Responsibilities:** Ed Brewin and staff.

**Completion Date:** General plan by September 15, 1967.

6. - 6.1 **Task:** Information and Education Plan

**Purpose:** To communicate interim and final results of the project to the educational community within and outside of the Commonwealth of Pennsylvania.

**Description:** Plan the information and education program (excluding project participants) for the entire term of the project, and conduct Phase I components of the program.

**Responsibilities:** Ed Brewin (Bucks Co.) plan and conduct with close cooperation of Jack Davis (RBS), and DPI as appropriate.

**Completion Date:** Draft plan to Steering Committee by 9/15/67.

7. **Task:** Survey of Education Information Systems

**Purpose:** Determine formal information systems currently available as possible inputs to the PPBS.
Phase I Work Program
Intermediate Unit Planning Project

Description: Conduct preliminary survey, description and analysis of present information systems of county and local school districts in Area 9 and Bucks County.

Responsibilities: Dan Glanz (GSC) plan and conduct with assistance of Bucks County staff (system analyst).

Completion Date: Complete draft by 10/1/67.

8. Task: Study of Decision Input Factors

Purpose: Identify specific potential activities of intermediate units and begin to identify types of decision factors to be incorporated in the PPBS.

Description: Form small ad hoc committees (five) of Area 9 and Bucks County educators, each with an expert consultant and Bucks County staff assistance, to explore decision input factors related to the five substantive program areas of intermediate unit responsibility as enumerated on pps. 4, 5 and 6 of "An Intermediate Unit for Pennsylvania", D.P.I., January, 1967. Describe five typical action programs for each "service" enumerated and identify input factors (information) which would be needed to decide yes or no, how much, when and where, etc. for each of the described typical action programs.

Responsibilities: Ed Brewin plan and conduct.

Completion Date: Complete draft by 10/15/67.

9. Task: Survey of Community Characteristics

Purpose: Identify the ranges of community characteristics which will form the PPBS general environment in Area 9 and Bucks County through 1975.

Description: Using available statistical data, describe and analyze the economic, geographic and
phase I work program
intermediate unit planning project

demographic (emphasis on k-14 school age population) characteristics of area 9 and bucks county from 1960 through 1975.

responsibilities: arnie post (gsc) plan and conduct with assistance of bucks county staff (planner).

completion date: complete draft by 11/1/67.

10. task: survey of education system characteristics

purpose: to identify the range of local and county school district characteristics in area 9 and bucks county which will constitute the initial context of the ppbs.

description: conduct preliminary survey, description and analysis of organization, administration and education programs of county and local education systems in area 9 and bucks county.

responsibilities: dick heisler (schl. ed.) plan and conduct with assistance of ed brewin and staff.

completion date: preliminary drafts as early as practical with complete draft by 11/1/67.

11. task: survey of education performance measures

purpose: identify measures of education performance potentially acceptable for incorporation in the ppbs.

description: survey, describe and analyze education performance measures in use in area 9 and bucks county. explore, describe and analyze advanced education performance measures in use, under development and advocated in theory elsewhere in the u. s. define preliminary set of performance measures for use in project.

responsibilities: roger sisson (msc) plan and conduct with assistance of boyd palmer (gsc) and bucks county staff.
Phase I Work Program
Intermediate Unit Planning Project

Completion Date: Complete draft by 11/1/67.

12. Task: Survey of Education Program Taxonomies

Purpose: Identify education program taxonomies of potential utility in the PPBS.

Description: Survey, describe and analyze education program classification structures in use in Area 9, Bucks County and elsewhere in the U.S. with emphasis in the latter case on advanced structures under development or advocated in theory as advantageous in PPB systems.

Responsibilities: Chuck Haughey (Mont. Co.) plan and conduct with assistance of Bucks County staff.

Completion Date: Complete draft by 11/15/67.

13. Task: Survey of Current Research

Purpose: Identify and establish continuing communications with current research projects of direct significance to design and development of the PPBS.

Description: Review current research projects in the U.S. related to this project, with emphasis on "I.U. Planning", simulation of education systems, PPB systems, education performance measures, cost effectiveness techniques, and evaluation of education systems. Visit, describe and analyze relevance of selected projects. Arrange continuing liaison as appropriate.

Responsibilities: Roger Sisson plan and conduct in close cooperation with John Parker (GSC) and Ed Brewin (Bucks Co.).

Completion Date: Complete draft by 11/15/67.

14. Task: Literature Review
Phase I Work Program
Intermediate Unit Planning Project

**Purpose:** Provide bibliographic resources for project.

**Description:** Conduct literature search and prepare project bibliography (annotated) including input from all project participants.

**Responsibilities:** Robert Cantine (GSC) plan and conduct with assistance of graduate student (GSC).

**Completion Date:** Complete draft by 12/1/67 with maintenance thereafter.

15. **Task:** Review of PPBS Applications

**Purpose:** Make available relevant experience gained to date in the application of PPBS.

**Description:** Review applications of PPBS in education, and relevant applications in other fields. Evaluate selected systems and determine elements of consideration in this project.

**Responsibilities:** Robert Cantine (GSC) plan and conduct.

**Completion Date:** Final draft by 12/15/67.

16. **Task:** Review of Cost/Effectiveness Applications

**Purpose:** Make available relevant experience gained to date in the application of cost/effectiveness techniques.

**Description:** Review applications of cost/effectiveness analysis in education, and relevant applications in other fields. Evaluate and determine pertinent techniques for consideration in this project.

**Responsibilities:** Boyd Palmer (GSC) plan and conduct.
Phase I Work Program
Intermediate Unit Planning Project

Completion Date: Final draft by 12/15/67.

17. Task: Research Questions and Revised Objectives

Purpose: Provide basis for revised planning of Phases II, III and IV.

Description: Define specific objectives and related major research questions for each of the remaining phases of the project, based on evaluation of the results of tasks completed.

Responsibilities: John Parker (GSC) prepare statement of objectives and questions in close cooperation with Ed Brewin, Bill Castetter and Roger Sisson. All participants with Phase I task responsibilities prepare lists of proposed research questions during conduct of their tasks and provide proposed questions to John Parker.

Completion Date: Complete discussion draft to Steering Committee by 12/1/67.

18. Tasks: Define PPBS Requirements

Purpose: Define the specifications which must be met by an acceptable PPBS design.

Description: Identify, describe and assess the relative significance of design criteria for the PPBS, including major system objectives, constraints, required and desired capabilities, and acceptable modes of operation.

Responsibilities: John Parker, with assistance of all U. of Pa. participants and Ed Brewin and staff.

Completion Date: Complete draft by February 1, 1968.

19. Task: Define Taxonomy and Measures
Phase I Work Program
Intermediate Unit Planning Project

**Task 19**

**Purpose:** Design the program taxonomy and effectiveness measures module of the PPBS.

**Description:** Select and refine that program taxonomy and those program measures which most closely meet the PPBS requirements.

**Responsibilities:** Boyd Palmer with assistance of Roger Sisson, Ed Browin, and Bill Castetter.

**Completion Date:** Preliminary design by February 15, 1968, revised design by February 28.

**Task 20**

**Purpose:** Design the information system module of the PPBS.

**Description:** Determine input and output requirements, general flows, general file descriptions, and general processing methods for the information system module of the PPBS, within the PPBS requirements.

**Responsibilities:** Dan Glanz (GSC) with assistance of Bucks County staff (system analyst).

**Completion Date:** Preliminary design by February 15, revised design by February 28.

**Task 21**

**Purpose:** Determine C/E techniques to be incorporated in PPBS.

**Description:** Select, adapt and define those cost/effectiveness techniques available and required to meet the PPBS requirements.

**Responsibilities:** Boyd Palmer (GSC).

**Completion Date:** Preliminary definition by February 15, revised definition by February 28.
Phase I Work Program
Intermediate Unit Planning Project

22. Task: Define Simulation Techniques

Purpose: Define the simulation techniques that will be incorporated in the PPBS.

Description: Analyze the current state of educational system simulation capabilities at the MSC, U. of Pa. in terms of the PPBS requirements, select and define those techniques proposed for incorporation in the PPBS.

Responsibilities: Roger Sisson and staff (MSC) with assistance of John Parker and staff (GSC).

Completion Date: Preliminary proposal by February 15, revised proposal by February 28.

23. Task: PPBS Design

Purpose: Define the PPBS proposed for development and implementation.

Description: Determine and describe the overall characteristics and functioning of the proposed PPBS, including an analysis of the proposed system in terms of the requirements established in Task 18.

Responsibilities: John Parker.

Completion Date: Complete draft by March 8, 1968.

24. Task: Revised Work Program

Purpose: Provide plan and schedule for Phase II and revision of general plan and schedule for Phases III and IV.

Description: Define tasks, responsibilities, and set dates for detailed Phase II work program, revising subsequent phases as appropriate.
Phase I Work Program
Intermediate Unit Planning Project

Responsibilities: John Parker (GSC) prepare in close cooperation with Ed Brewin, Bill Castetter and Roger Sisson.

Completion Date: Complete discussion draft to Steering Committee by 1/1/68.
its meeting of January 15 the Steering Committee approved a revision to the Phase I work program. Tasks 17-24 inclusive of the work program previously in effect have been deleted and replaced by new tasks 17-25 which are described in this paper. This revision is based on a general review of results obtained to date in the study and a general re-planning of Phase I activities.

Those individuals participating in the study who are assigned responsibilities for one or more of the tasks described below are requested to prepare an outline plan for the accomplishment of the task and submit it for review and approval by the research director (John K. Parker) not later than February 5, 1968. The outline plan for each task will include an identification of major problems expected to be encountered in accomplishing the purpose, a discussion of the approach to be utilized, a review of the methodology to be employed, identification of persons or agencies whose assistance and cooperation will be required, a schedule of activities to be carried out in performing the task, and estimated costs for completing the task.

Following are the general descriptions of the revised tasks required for the completion of Phase I.

17. Task: Define Major System Components

Purpose: To describe the major functional characteristics of the proposed PPB system in relation to local and intermediate unit school districts.

Description: Based on project results to date, review local and intermediate unit school district requirements for planning-programming-budgeting, review resources and constraints, identify major outputs to be produced by the PPB system proposed, define major functional components of the PPB system, and analyze principal considerations and the development of the proposed PPB system.

Responsibilities: John Parker accomplish and review working paper with Ed Brewin, Bill Castetter and Roger Sisson.
18. Task: Plan Revenue Forecast Development

Purpose: To plan for the development of a method of forecasting local and intermediate unit revenues over a 10 year period to be operational by September 30, 1968 for use by local districts and intermediate units as inputs to the PPB system.

Description: Identify required outputs of revenue forecasting methods, complete preliminary design for producing outputs, identify required inputs, determine information availability, prepare a plan and work program for development of the forecasting methods, and prepare cost estimates for each activity and for each agency to participate in development of the methods. Prepare a preliminary plan for implementing the methods in local and intermediate unit school districts.

Responsibilities: Dan Glanz accomplish with assistance of Boyd Palmer and project staff in Bucks County and Area 9.

Completion Date: Report to be submitted to research director by March 4, 1968.

19. Task: Plan Student Forecast Development

Purpose: To plan for the development of a method of forecasting student enrollment over a 10 year period to be operational by September 30, 1968 for use by local districts and intermediate units as inputs to the PPB system.

Description: Identify required outputs of student forecasting methods, complete preliminary design for producing outputs, identify required inputs, determine information availability, prepare a plan and work program for development of the forecasting methods, and prepare cost estimates for each activity and for each agency to participate in development of the methods. Prepare a preliminary plan for implementing the methods in local and intermediate unit school districts.

Responsibilities: Dan Glanz accomplish with assistance of Boyd Palmer and project staff in Bucks County and Area 9.

Completion Date: Report to be submitted to research director by March 4, 1968.
20. **Task:** **Define Program Taxonomy**

**Purpose:** To provide a generalized program classification which may be used in the PPB system to summarize program plans for all local districts and intermediate units.

**Description:** Review Task #12 findings on program taxonomies of local districts and define a proposed program taxonomy in view of the major functional requirements of the proposed PPB system.

**Responsibilities:** John Parker accomplish with close cooperation of Ed Brewin, Bill Castetter, Roger Sisson, Chuck Hockey, and other project participants and consultants as required.

**Completion Date:** Preliminary draft by March 4, 1968 for subsequent review with local and county superintendents in Bucks County and Area 9.

21. **Task:** **Plan Indicator Development**

**Purpose:** To plan the development of an initial set of indicators representing characteristics of local and intermediate unit districts which are estimated to be of major importance to local and intermediate unit superintendents in the conduct of long range planning and programming.

**Description:** Review project findings to date and identify potential indicators of significant changes in education system characteristics. Define indicators and design general methodology for measuring and forecasting indicators over a 10 year period. Review availability of information for required inputs. Prepare plan and work program for development of initial indicators for testing and use in Phase II of the project, including responsibilities and costs of participating agencies.

**Responsibilities:** Boyd Palmer accomplish with close cooperation of Ed Brewin and staff, Roger Sisson, Bill Castetter and Dick Heisler, and other project participants and consultants as required.

**Completion Date:** Report to research director not later than March 4, 1968 for subsequent review by county and local superintendents in Bucks County and Area 9.
22. Task: Describe Planning-Programming-Budgeting Process

Purpose: To describe and relate the proposed planning-programming-budgeting system process and procedures to the ongoing operations of local school districts, county districts, and proposed intermediate units.

Description: Outline the present schedule of activities of local and county school districts in the preparation of plans, programs and budgets. Outline the schedule of activities for the proposed planning-programming-budgeting system and analyze major changes in process and procedure. Relate the proposed PPB system process to the present requirements for preparation of long range plans and the preparation of budgets in local districts.

Responsibilities: Bob Cantine accomplish with assistance of Bucks County project staff and other project participants as required.

Completion Date: Report to research director by March 4, 1968.

23. Task: Plan Analysis Development

Purpose: To define and plan for the development of all feasible analytical methods required for implementation of the proposed PPB system.

Description: Identify key points in the major functional components of the proposed PPB system at which there is a priority requirement for development of analytical methods, identify outputs and inputs at each of these points, design a proposed methodology for performing these analyses, and prepare a plan and work program for developing these analytical methods during Phase II of the project, including costs to participating agencies.

Responsibilities: Roger Sisson accomplish with close cooperation of John Parker and staff, Ed Brewin, Bill Castetter and Dick Heisler, and other project participants and consultants as required.

Completion Date: Draft to research director by March 11, 1968.
24. **Task:** Complete PPBS Design

**Purpose:** To describe the results of Phase I in terms of the complete general design of the planning-programming-budgeting system recommended for development and implementation in the project.

**Description:** Describe the overall characteristics and functioning of the proposed PPBS system design based on the findings of preceding tasks. Describe system outputs in relation to planning-programming and budgeting responsibilities of intermediate units of local and county school districts. Describe project objectives in relation to development of the system and responsibilities of local, county and intermediate unit districts.

**Responsibilities:** John Parker accomplish, with close cooperation of all project participants.

**Completion Date:** Report to be completed by March 18, 1968.

25. **Task:** Develop Phase II Work Program

**Purpose:** To provide a revised plan and schedule for project activities to be accomplished during Phase II of the project, and to revise the general plan and schedule for Phases III and IV of the project.

**Description:** Define tasks, responsibilities, and set dates for detailed Phase II work program, revising subsequent phases as appropriate.

**Responsibilities:** John Parker prepare with close cooperation of Ed Brewin, Bill Castetter and Roger Sisson.

**Completion Date:** To be completed by April 1, 1968.
APPENDIX C
INTERMEDIATE UNIT PLANNING STUDY

Progress Report Meeting (1)

Date: 10 November 1967
Time: 12:00 to 5:30 P.M.

Present:

Area 22 (Bucks County)
George E. Raab
Sidney Popkin
C. E. Brewin, Jr.
Richard Strayer
Robert Shafer
Knute Larson
Mrs. Tinsman
H. Ronald Huber
Melvin G. Mack
Dorothy Wurst
Paul Phillips
Frank E. Groff
Joseph Fink
Robert Rosenkranz
Robert VanWagner
Raymond Bernabei
Warren Groff
Rev. C. Frederick Billmyer
David Hertzler
Don Mattern

Area 9 (Cameron, Elk, McKean and Potter Counties)
Christian Feit
Robert Stromberg
Michael Lombard
James Klees
Albert Skelton
William Stavisky
Merle Bliss
Philip Jones
Philip Labella
Theodore Moths
Mrs. Sweet
William Gallagher
Peter Romig
Arvid Baker
John Rowlands
Richard Luke
Basil Harris
Clarence Walker
Mrs. Bertha Lewis
Mrs. Marie Kolbe

University of Pennsylvania
Neal Muamanno
Pat Toole
Don Carroll
Ken Bowman

Research for Better Schools, Inc.

Area 23 (Montgomery County)

Charles S.aughey
Allan Harman
John Coulson

Secretaries

Kathi Kohler
Anne Brewin

MINUTES

1. Richard E. Strayer, Superintendent of Quakertown Community School District, presided over the meeting as chairman. The meeting was opened by Sidney Popkin, President of the Bucks County Board of School Directors. Mr. Popkin welcomed the chief school administrators from Areas 9, 22 and 23 and other guests from the Department of Public Instruction, University of Pennsylvania and Research for Better Schools, Inc. Mr. Popkin mentioned the impending legislation concerning the establishment of the Intermediate Unit in the Commonwealth. He further indicated the importance of this study as it relates to the impending development of the intermediate unit.

2. Rev. C. Frederick Billmyer, President of the Pennridge School Board said grace. Luncheon was served at 12:15 P.M. and terminated at 1:15 P.M.
3. Dr. George E. Raab spoke on the problems of developing planning and management systems that have in their primary purpose the improvement of education for each pupil. He further stated that this project should provide the basis for more effective regional cooperation in many areas that will provide a sounder educational environment for the pupil. Dr. Raab further highlighted the problems that are brought about by the intrusion of the federal government into education at the local district level. This intrusion plus the desires of many people throughout the country may in time generate a movement towards bigger and bigger school systems that will remove the policy decisions farther and farther from the people.

4. Dr. Brewin spoke on the basic goals of the study. Dr. Brewin emphasized the fact that education is now considered national policy and that for good or bad it has become the concern of all thinking people both within and outside the public sector of our economy. The very serious problem we have to face is to devise methods and techniques that will enable us to more effectively marshall the resources at our disposal so that we can "maximize" their impact on the learning processes for the individual pupil. The two major goals to be accomplished in the study are:

a. The primary goal is concerned with improving the quality of the capabilities of the intermediate unit to effectively accomplish its planning and administrative responsibilities. Of equal importance, is to strengthen the quality and the quantity of the services the intermediate unit provides to the local school districts.

b. The secondary goal is designed to assist the local school districts in Bucks, Cameron, Elk, McKean and Potter Counties to more effectively accomplish their own planning and administrative responsibilities and to increase the value of their own services to their own pupils through a more efficient utilization of their own existing resources.

5. Mr. Strayer introduced Dr. Neal-Musmanno, Acting Assistant Commissioner for Programs and Services, Department of Public Instruction; Dr. Jack Davis, Research for Better Schools, Inc.; Mr. Christian Feit, Superintendent of McKean County; Dr. Allan Harman, Superintendent of Montgomery County, and Dr. George E. Raab. Each of these men introduced the participants from their respective agencies or counties.

6. Mr. John Parker, Manager, Systems Division Government Studies Center, Fels Institute of Local and State Government, University of Pennsylvania, discussed the relationship of the intermediate unit planning study to public administration and to public and non-public education. Mr. Parker stressed that more and more decisions made in education are having greater implications for the future. This fact is now forcing more and more administrators and board members to spend more time in planning than has previously been the case in the past. Much of this planning cannot be done by local educational agencies but must be done in concert with other agencies that have developed a high degree of planning capability. Mr. Parker also noted that there has been a marked interest in the development of planning-programming-budgeting systems and relevant aspects of cost-benefits and cost-effectiveness. Mr. Parker
further pointed out that the study should be beneficial in two ways: (1) it will help develop a common language of communication for all so that they can act cooperatively in devising ways of maximizing resource allocations and (2) it will help in resolving more effectively the very difficult problem of determining whether or not a program should be retained, modified or eliminated.

7. Mr. Roger Sisson, Associate Professor of Statistics and Operations Research, Wharton School of Finance, University of Pennsylvania delivered a talk on the relationship of the study to management science and to education. A copy of his abstract is enclosed for your information.

8. Dr. Richard S. Heisler, Lecturer, Graduate School of Education, University of Pennsylvania discussed the relationship of the project to educational administration and to education. A copy of his speech is enclosed for your information.

9. Drs. Albert Skelton and Knute Larson summarized the meeting for the participants. Dr. Skelton pointed out that he and many of his colleagues feel they are gaining a great deal of information and insight into management science and its possible applications in the field of educational administration.

Dr. Larson felt that the study should provide a basis for developing equality of opportunity to reach people in the intermediate unit through the devise of developing more effective planning and management techniques.

10. A buffet supper was served to the participants. The meeting was adjourned at 5:30 P.M.

Respectfully submitted,

C. E. Brewin, Jr.
Assistant County Superintendent

CEB:ab
Encs.
Speech delivered by
Dr. Richard Heisler
November 10, 1967

My assignment today is to develop an overview of the Intermediate Unit Planning Study. More specifically, I should like to deal briefly with each of the following questions:

1. What is there of value in the intermediate study for the county office?

2. What is there of value in the intermediate study for the local board of education and its executive officer?

I want to take a few minutes to examine each of these questions. The first question, which deals with the role of the county office in this study, is an interesting one. For some years now the function of the county superintendent in the state structure for administering public education has been under fire. It has been observed, for example, that the office of the county superintendent:

- Has become obsolescent with the virtual completion of the Pennsylvania School Reorganization Act of 1963.

- Should not be expected to continue to perform the housekeeping functions which this office has performed for more than a century.

- Should not be maintained in its present form because of social and administrative changes which are relegating it to functions which do not contribute in any way to the effectiveness of local school districts.

Because of these and other criticisms the Pennsylvania legislature has received a variety of proposals to change the form and function of the office of the county superintendent of schools. While the outcome of present legislative efforts concerning the county office is still in doubt, the intermediate unit planning study is based upon the assumption that there will be some form of middle layer in the administrative cake between the Department of Public Instruction and the local district. Another assumption of the study is that whatever form of intermediate or regional unit that the legislature decides, it will perform vastly different kinds of functions than it has in the past. In the future, one of its primary functions will be to assist local districts to make wiser decisions about public education at the local level. This means that the future function of the intermediate unit will be more closely associated with long-term planning for local districts and helping to implement these plans so that the local school district can realize its objectives more readily.

Hence, the intermediate unit is attempting to take a long view of the relationship between this office and the local districts with which it is associated to the end that better decisions can be made. In short, this study is attempting to apply scientific methods to the problems of the intermediate unit so as to provide optimum solutions. And it is because the problems of education are related to other aspects of society -- such as government, economics, social organization and human behavior in general that our research team consists of people other than educators.
The second question -- what is in this study for the local board and the local superintendent is also an interesting one. As all of us know, public education is not what it used to be. As a matter of fact, nothing seems to be like what it used to be because of our changing society.

It is precisely because every major change in our society has implications for education that local school systems must be constantly adapting their purposes, programs, plans, procedures, and personnel to cope with the several kinds of revolutions with which we are confronted. A list of outstanding social trends in the nation would include the following:

1. Increased leisure time made possible by technological efficiency. (Some people blame our increasing drug addiction and immorality on this factor)
2. Social lay of institutions behind material changes (can home, school, and church inculcate spiritual values to keep pace with material changes?)
3. Increased necessity for cooperative action (nuclear weapons)
4. Increased necessity for long-range planning (air pollution)
5. Increased dependence on social control (government action)
6. Increased remoteness of social control (isolation between voters and representatives)
7. Increased need for specialization (medicine)
8. Increased differentiation in providing for individuals
9. Weakening of traditional controls over human conduct
10. Increased strains and tensions
11. American in a position of world leadership
12. Atomic energy and automation

It is no secret that these and other social forces have created educational problems of serious proportions. We have three kinds of revolutions going at us--a technological revolution, a human revolution, and an economic revolution. Because of these revolutions and their effects upon society, local school systems have new problems and decisions constantly thrust upon them. This is one of the by-products, then, which we hope will come out of the intermediate unit study.

We hope that we can provide some kinds of experiences for directors and superintendents which will broaden their perspective and give them new insights into educational problems and hopefully better solutions to them. Boards of education, for example, will need guidance on such questions as the following:
1. What kind of education will be needed in a society in which it is predicted that one-half of the population will have to support the other half?

2. What kind of education will be needed in a society where the service functions now exceed all other types of employment?

3. To what extent should education attempt to cultivate moral and spiritual values? How should the curriculum be changed to help youth to choose and order value patterns?

4. If social change has rendered traditional programs of vocational education obsolete, along what lines should they be reorganized?

5. What curriculum changes are implied by youth's changing economic, community, and family roles?

6. To what extent should the school assume responsibility for preparing youth to improve the effectiveness of social institutions?

7. What are the educational implications of automation? Should the school assume responsibility for helping adults to acquire new skills and competencies to replace those which have become obsolete as a result of automation?

8. What are the core values in our social heritage which should form the basis for education in civic competence?

9. What are the educational implications of the trend toward conformity in our society? Is the ideal of free minds for free men inconsistent with present realities?

10. Should schools intensify their efforts to improve international understanding?

11. In an era of increasing specialization, should the schools attempt to develop more specialists?

To the extent that these and other issues of equal significance can be solved satisfactorily depends upon people like yourselves and the decisions you make in your local districts concerning them. We hope we can give you some insights in making these decisions.
Abstract of Speech by
Roger L. Sisson
November 10, 1967

CAN WE MODEL THE EDUCATIONAL PROCESS?

Operational analysis has not yet made a contribution to the improvement of the educational process. There are several reasons for this. First, relative to the magnitude of the job of teaching our youth, financial support for educational research and analysis has been much smaller than for other problem areas; e.g., health.

The second difficulty is in the relationship between operational analysis and theory. The more complete the theory, the better the system designs resulting from the analysis. For education there is no theory. Worse, there are few efforts to develop such theory. It must be recognized, however, that the phenomena called learning is very complex.

The lack of theory means that the system design proceeds with more uncertainty. Large "safety factors" must be built in. This means that educational systems have to be expensive.

Large, continuing financial support is required; first, to build up present school systems, so that they perform well under existing, changing circumstances; and second, to support research that will provide theories and models which in turn will lead to more effective school designs.

***    ***    ***
PROGRAM

INTERMEDIATE UNIT PLANNING STUDY

BUCKS, CAMERON, ELK, MCKEAN, MONTGOMERY, AND POTTER COUNTIES

(County Superintendents, County School Boards, and Local District Superintendents)

Friday, November 10, 1967

Time: 12:00 Noon - 5:30 p.m.

Place: Warrington County Club
       Almshouse Road & Rt. 611

12:00 Noon - 1:00 p.m. Lunch

12:15 p.m. Introductory Remarks:
            Mr. Sidney Popkin, President
            Board of School Directors, Bucks County

1:00 p.m. - 1:20 p.m. The Relationship of the Study to Local and
                       Intermediate School Districts:
                       Dr. George E. Raab, County Superintendent
                       of Schools, Bucks County

1:20 p.m. - 1:40 p.m. Goals of the Study:
                       Dr. C. Edwin Brewin, Jr., Assistant Superintendent
                       of Schools, Bucks County

1:40 p.m. - 2:10 p.m. Introduction of Participants:
                       Mr. Richard E. Strayer, Superintendent, Quakertown
                       Community School District
                       Dr. Neal V. Musmanno
                       Asst. Commissioner for Basic Education
                       Programs and Services
                       Department of Public Instruction
                       Dr. James Becker
                       Research for Better Schools, Inc.
                       Mr. Christian F. Feit
                       Cameron, Elk, McKean and Potter Counties
                       Dr. George E. Raab
                       Bucks County
                       Dr. Allen C. Harman
                       Montgomery County

2:10 p.m. - 2:30 p.m. COFFEE BREAK
2:30 p.m. - 3:00 p.m.  
**Relationship of the Study to Public Administration and to Education:**  
John K. Parker, Manager  
Systems Division  
Fels Institute of Local and State Government  
University of Pennsylvania

3:00 p.m. - 3:30 p.m.  
**Relationship of the Project to Management Science and to Education:**  
Roger Sisson, Associate Professor of Statistics and Operations Research  
Wharton School of Finance  
University of Pennsylvania

3:30 p.m. - 3:45 p.m.  
**Relationship of the Project to Educational Administration and to Education:**  
Dr. Richard S. Heisler, Lecturer  
Graduate School of Education  
University of Pennsylvania

3:45 p.m. - 4:00 p.m.  
**Summarisation:**  
Dr. Albert Skelton  
Superintendent  
Port Allegany School District  
Dr. Knute G. Larson  
Superintendent  
Bristol Township School District

4:00 p.m. - 4:30 p.m.  
**Social Period**

4:30 p.m. - 5:30 p.m.  
**Buffet**

5:30 p.m.  
**Adjournment**
APPENDIX D
INTERMEDIATE UNIT PLANNING STUDY

Bucks, Cameron, Elk, McKean, Montgomery and Potter Counties

Progress Report Meeting (2)

Date: March 14, 1968
Time: 12:00 Noon - 4:00 P.M.
Place: Buttonwood Inn
Emporium, Pennsylvania

Area 9

W. A. Anderson          Tyson C. Kiersell
H. Bowers                James P. Klees
C. E. Brewin, Jr.        Michael F. Lombard
T. A. Carpin             James B. Miller
D. Wilson Clark          Paul R. Miller
Gordon T. Davies         Theodore M. Moths
Arden E. Davis           Albert M. Neiman
John R. Davis            Wilford Ottey
Wayne Durandetta         John K. Parker
M. J. Eberl              William L. Roberts
C. F. Feit               John T. Rowlands
Francis A. Gausman       James C. Shoup
Arlton G. Grover         Roger Sisson
Basil E. Harris          Albert Skelton
Richard Hessler          William Stavisky
Russell Hofer, Jr.       Robert P. Stromberg
P. T. Jenkins            Mary Swar
Vern Johnson             R. L. Sweitzer
George S. Joiner         Robert Van Wagner
Phil Jones               L. E. Weissenfluh

Minutes

1. The meeting was opened by Mr. William Anderson, Elk County Superintendent of Schools. Participants were introduced to each other and lunch was served.

2. A report of the status of the work program was given by Dr. Brewin. Chapter II of the Continuation Grant Request, which outlines the progress on the 25 tasks of Phase I, was handed out. The information brochure, entitled "Program Planning Study for the Intermediate Unit in Pennsylvania", was discussed and each member at the meeting received a copy.
3. The working paper for Task #17, entitled, "Definition of Major Planning-Programming-Budgeting System Elements", was discussed by Messrs. John Parker and Roger Sisson. The characteristics of the Planning-Programming-Budgeting System (PPB System) were examined in detail. The characteristics included the following: objectives and programs, future implications, multi-year programs and financial plans, analysis of program alternatives and annual revisions. During the course of the discussion it was pointed out that the PPB System is a framework within which a superintendent, his staff and board can plan, program and budget in a systematic manner over an extended period of time. The PPB System is not a total management system. The system designed for this study contains a separate PPB Sub-System for both the intermediate unit and the local school district. It will also contain a major forecasting input system. The PPB Sub-Systems for the intermediate unit and local school district will be cycled simultaneously. The forecasting system will input to both of the PPB Sub-Systems. The PPB System will contain the following elements: (1) input forecasts of students and revenues; (2) program structure; (3) indicators of major controllable variables; (4) operational forecasts of program implementation; (5) five-year plans; (6) five-year programs; and (7) one-year budget.

4. The project outputs were discussed and are expected to include:

   a. General reports describing the design and operation of the PPB System.

   b. Manuals and instructions for use by local school districts and intermediate units in operating the PPB System.

   c. Training programs for the school administrators in the five counties participating in the study which will enable them to utilize the PPB System.

   d. An evaluation of the utility of the PPB System for use by local school districts and intermediate units.

   e. Recommendations for further research and development, if any, related to PPB Systems for local school districts, intermediate units, and, if appropriate, the Commonwealth of Pennsylvania.
5. A general discussion followed concerning the comments of Dr. Brewin and Messers. Parker and Sisson. Each of the participants were informed that they will receive a copy of the "Continuation Grant Request" which will outline the progress to date on the study and the work program for Phases II through IV.

6. Dr. Richard Heisler and Mr. Wilford Ottey discussed the results of their survey of the educational characteristics of the school districts in Area 9. Extra copies of this report were given to Dr. Stromberg.

7. Mr. Christian Feit, McKean County Superintendent of Schools, summarized the meeting. Mr. Feit emphasized the fact that the study has received a favorable evaluation from the state evaluation committee and has been recommended for continued funding. He also stressed the fact that Area 9 county offices and local school districts wish to be involved in the pilot activities that will take place during Phases II and III. Mr. Feit believes that the study supports the assumption that the county office or intermediate unit has one primary function, i.e., to support the local school district in its effort to provide a sound basic education for its pupils. He concluded by emphasizing that the study should provide an effective planning and management tool for use by local school districts and county offices throughout Pennsylvania.

8. Mr. Anderson adjourned the meeting at 4:10 P.M.

Respectfully submitted,

[Signature]

C. E. Brewin, Jr.
Assistant Superintendent
The meeting was opened by Mr. Richard Strayer, Superintendent of Quakertown Community Schools. Participants were introduced to each other and lunch was served.

Dr. Brewin began by explaining the suggested reorganization of the state into intermediate units. He pointed out that the intermediate unit planning study is following the recommendations made in the state report on the reorganization of the county offices into an intermediate unit system.

The current status of the study, including the first phase conceptualization activities and the first stage of the development of the Planning-Programming-Budgeting Study was explained. Copies of the second chapter of the Continuation Grant were distributed. Reference was made to the task network and it was suggested that those interested review the documentation of the
2. It was explained that the massive amount of written material that has been produced by the study staff thus far was both necessary and important to this phase of the project.

The reason given for the lack of involvement with the local educators was the result of the planning and conceptual nature of the first phase of the project. It was pointed out that the second and third phases would result in a more intimate involvement of local educators because of the pilot program.

Dr. Brewin pointed out benefits and support the intermediate unit planning study has thus far been able to accomplish for the local school districts. The most important are assistance to their long range development planning required by the state and the assistance in development of a regional educational data processing center.

3. Mr. Parker explained the original concept of the intermediate unit planning study and pointed out that the primary intention of the study was to develop a management approach for the five counties directly involved in the study's activities. However, he emphasized the importance of the study as a model system that could be used throughout the state.

Working paper #17 was distributed and in reviewing this task, Mr. Parker was able to define the general elements of the Planning-Programming-Budgeting System (PPBS). He accentuated the fact the PPBS is not a total management system, but a framework for policy judgment for use by decision makers and not a mechanical way of running school districts or intermediate units.

Mr. Parker observed the second and third phase of the study would give an overall picture of the Planning-Programming-Budgeting System to the local school district staff. It would also provide forms, instruction and instructional manuals for training programs in the development of the pilot program.

He stated an evaluation of the Planning-Programming-Budgeting System would help determine its usefulness to local districts, intermediate units, the State Department of Public Instruction and possibly to the whole nation. Recommendations would be dependent on the outcome of the evaluation as would the determination of any further research and development.

4. Dr. Brewin emphasized that the basic premise of the intermediate unit was to support the local school district's effort. It was made clear the services rendered should be predicated on the priorities and values each school district sets on their responsibilities. Hence, the PPB System developed in the intermediate unit, in order to provide a maximum flexibility in the system, must be able to adjust to the needs of the school
district within its boundaries.

5. Professor Sisson and Mr. Parker discussed the implications and involvement of local school districts and the study staff in planning for the pilot program. They pointed out the study's responsibility to recommend possible ways to implement more feasible working arrangements between intermediate units and local school districts.

6. From a school board member's point of view, Mr. Mattern indicated the valuable insights for the community and possible resources for every form of local civic and governmental planning agency. The plan and system of dissemination by the study staff was explained in answer to Dr. Harman's question on the possible distribution of results of the study.

7. A discussion followed in the form of an inter-action between the study staff, local district and county staff representatives concerning the importance of performance indicators on teachers, students and local school district goals. The possibility of cooperatively working with on-going federal projects in the county, i.e., "Quality Education" and "Intensification of Learning Projects" were examined. It was reasoned there would be indicators developed for goals common to most of the individual school districts as well as indicators for goals particular to the circumstances of each district, in order to provide the setting necessary for making proper decisions on allocation of resources.

8. Dr. Richard Heisler and Mr. Wilford Ottey distributed and reviewed their survey of educational characteristics. They summarized and interpreted the existing differences in the educational characteristics among the school districts in the five counties involved in the study.

It was explained that the reason this data was collected was to get a picture of the schools as they are now, so that at some future date a comparison can be made with any changes that may have taken place. It was also stated that the difference between school districts would help determine the different types of indicators necessary for giving consideration to the various school districts participating in the study.

9. In summary, Dr. Raab commended the study staff for their fine progress report and reiterated the necessity for cooperation between the local school districts, county offices and the Department of Public Instruction in the development of a successful Planning-Programming-Budgeting System for the intermediate unit.
10. Mr. Strayer adjourned the meeting at 4:15 P.M.

Respectfully submitted,

A. M. Neiman
Coordinator of Research
PROGRAM
INTERMEDIATE UNIT PLANNING STUDY
BUCKS, CAMERON, ELK, McKean, MONTGOMERY, AND POTTER COUNTIES
(County Superintendents, County School Boards, and Local District Superintendents)

AREA 9
Thursday, March 14, 1968
Time: 12:00 Noon - 4:00 p.m.
Place: Buttonwood Inn
Emporium, Pa.

12:00 Noon - 1:00 p.m.
Opening Remarks and introduction of Participants:
Area 9 - Mr. William Anderson, County Superintendent of Schools, Elk County
Area 22 - Mr. Sidney Popkin, President, Board of School Directors, Bucks County
and
Mr. Richard E. Strayer, Superintendent, Quakertown Community School District

1:00 p.m. - 1:30 p.m.
Status Report:
Dr. C. Edwin Brewin, Jr., Assistant Superintendent of Schools, Bucks County

1:30 p.m. - 2:10 p.m.
Discussion of PPBS Elements:
Mr. John K. Parker, Manager, Systems Division Fels Institute of Local and State Government, University of Pennsylvania

Mr. Roger Sisson, Associate Professor of Statistics and Operations Research, Wharton School of Finance, University of Pennsylvania

2:10 p.m. - 2:30 p.m.
COFFEE BREAK

2:30 p.m. - 3:15 p.m.
Further Discussion of PPBS Elements

3:15 p.m. - 3:45 p.m.
Summary Report on Educational Characteristics
Dr. Richard S. Heisler, Lecturer, Graduate School of Education, University of Pennsylvania

Mr. Wilford L. Ottey, Teaching Fellow, Graduate School of Education, University of Pennsylvania

3:45 p.m. - 4:00 p.m.
SUMMARIZATION:
Area 9 - Mr. Christian Felt, County Superintendent of Schools, McKean County
Area 22 - Dr. George E. Raab, County Superintendent of Schools, Bucks County

ADJOURNMENT
PROGRAM PLANNING STUDY FOR
THE INTERMEDIATE UNIT
IN PENNSYLVANIA
ACKNOWLEDGEMENTS

Participating Counties
County superintendent offices and public school districts of Bucks, Cameron, Elk, McKean and Potter Counties. Montgomery County is acting as an observer.

Cooperating Agencies and Institutions
U. S. Office of Education
Department of Public Instruction, Commonwealth of Pennsylvania
Research for Better Schools, Inc., ESEA Title IV Regional Educational Laboratory
Contribution of technical assistance for all study activities and assistance in the dissemination of information on the study.

Government Studies Center of the Fels Institute of Local and State Government, University of Pennsylvania
Development of the general study direction, including planning and scheduling of all study activities, coordination of university research staff and outside participating research organizations and consultants.

Graduate School of Education, University of Pennsylvania
The expert educational assistance required in undertaking this study.

Management Science Center of the Wharton School of Finance and Commerce, University of Pennsylvania
Evaluation of the potential of "simulation models" and assistance in the development of the planning, programming and budgeting system by providing expert statistics and operations research assistance.
PROGRAM PLANNING STUDY FOR
THE INTERMEDIATE UNIT
IN PENNSYLVANIA

PROLOGUE

The majority of local school districts in the Commonwealth of Pennsylvania completed reorganization during the 1965-66 school year. Since then, the State Board of Education has studied the reorganization problems involved in the consolidation of the 67 county superintendents of schools offices into 25 or 30 intermediate units as directed by Appropriations Act 83-A, December 1, 1965.

This Program Planning Study for the Intermediate Unit is based upon the emerging long range objectives of local school districts. Funded by ESEA Title III, the study is intended to develop management tools for use by the administrations and boards of intermediate units and local school districts. These tools will enable the intermediate unit to provide a more effective program of services to the local school districts.

In essence, however, and discounting the multiple complexities in such an undertaking, the study's net purpose is to produce a positive impact on the quality of education for the individual pupil in the classroom. It is self-evident to those connected with this study that this problem becomes increasingly critical as school populations continue to rise dramatically with each passing year.

Thus, this study is viewed as a necessary accommodation for the future of quality education in Pennsylvania.
The recommended Plan for Intermediate Units of the Pennsylvania State Board of Education views an intermediate unit as the middle-level of a three-level state educational system consisting of local school districts, intermediate units, and Department of Public Instruction. Thus, the intermediate unit is designed to replace the present county office.

The plan further states that the intermediate unit is intended solely for the benefit of local school districts through the furnishing of vital services such as curriculum and instruction, research and planning, instructional materials, continuing professional education, pupil personnel, and management.

In effect, the intermediate unit is a local educational resource service unit created to assist the local school district in the development of a sound educational system—one that is capable of orderly growth as it moves into the future.

With Montgomery County as an observer, the State Board of Education invited the county superintendents of Bucks, Cameron, Elk, McKean, and Potter Counties to cooperate in this study. The results of this study will enable an intermediate unit board and its administrator to make sound judgments concerning the effective utilization of all available resources.

To accomplish this, the five county superintendents appointed a steering committee comprised of representatives of their offices and cooperating agencies and institutions. This group began work on June 1, 1967. The Study is expected to be completed by May 31, 1970.

Through research, study, and evaluation, the steering committee of this Intermediate Unit Planning Study has adopted the following basic principles as a working definition of the role of the intermediate unit.

1. Provide assistance and sensitive leadership to local school districts without interference in the local administration of those districts.
2. Aid each district to develop the highest possible degree of independence through suggested refinements of their local organization and operation.
3. Assist all districts within the intermediate unit to develop optimum cooperation among themselves when mutual benefits are obtainable through such cooperation.
4. Act in the role of liaison agent between the local school districts and the Department of Public Instruction, thus allowing those districts maximum concentration on their local situation.
5. Cooperate with the Department of Public Instruction in promoting maximum cooperation among all the intermediate units in the state for the purpose of realizing significant benefits otherwise unobtainable.
6. Seek to improve the working relationships of the combined districts of the individual intermediate unit with other organizations and agencies serving the children and youth in its local area.
7. Keep abreast of and initiate leadership in the constantly changing and expanding world of new educational development.
8. Reinforce the public concept of our democratic procedure by serving as an example of the value of working cooperatively with districts and other agencies and organizations.
PROBLEMS TO BE SOLVED BY THIS STUDY

The study of the county superintendent of schools office reorganization, conducted by the State Board of Education, resulted in the adoption of a state plan for intermediate units.

Legislation is under consideration by the General Assembly to put the plan into action. Once the legislation is enacted, the State Board of Education will adopt regulations to guide the establishment of the intermediate unit.

The program of services to be rendered by each intermediate unit will vary according to the educational needs of the local school districts served by the unit. During the first year, following their establishment, two operational objectives must be met by each intermediate unit.

1. All essential services, formerly supplied by county offices, must be continued during the transition period to insure no interruption in these services.

2. Development of a detailed program structure for the first fiscal year of operation, plus a projected program structure for the four succeeding fiscal years.

The latter activities of the intermediate unit staffs during the first year of operation are critical to the development and continued growth of the intermediate unit in the Commonwealth of Pennsylvania. These critical aspects represent the reason why the Department of Public Instruction, Bucks, Cameron, Elk, McKean and Potter Counties, with Montgomery County as observer, have joined forces in conducting this study.

It is their assignment to develop a Planning-Programming - Budgeting System — hereafter referred to as PPB System—that will serve as a highly flexible working model for intermediate unit planning throughout the entire commonwealth.

The PPB System model will be designed to help the intermediate unit administration and board make better decisions on the allocation of resources among alternative ways to attain the intermediate unit objectives. Its essence is the development and presentation of information as to the full implications, the costs and benefits of the major alternative courses of action relevant to major resource allocation decisions. It is not intended as a cure for all types of intermediate unit administrative problems.

The major elements of the PPB System models are:

1. Identification of the basic objectives of the intermediate unit and relating these to all activities of the intermediate unit.

2. Consideration of the future implications of these objectives.

3. Systematic analysis of the available alternative courses of action necessary to satisfy these objectives.

The third element involves the systematic identification of alternative ways of carrying out the basic objectives, an estimation of the total cost implications of each alternative and an estimation of the expected results of each alternative.

If the intermediate unit legislation is delayed, however, the PPB System model to be designed as a result of this study can be used profitably by all county offices in their future operations.
GOALS OF THE STUDY

Through the development of a PPB System model, this study is designed to achieve two goals:

1. The primary goal is concerned with improving the quality of the capabilities of the intermediate unit to effectively accomplish its planning and administrative responsibilities. It is equally intended to strengthen the quality and the quantity of the services the intermediate unit provides to the local school districts.

2. The secondary goal is designed to assist the local school districts in Bucks, Cameron, Elk, McKean and Potter Counties to more effectively accomplish their own planning and administrative responsibilities, and to increase the value of their own services to their own pupils through a more efficient utilization of their own existing resources.

The development and use of the PPB System model will involve the county boards of school directors, county superintendents, county staffs and local district chief school administrators. This group will reflect the interests of the local school district by assuring that the PPB System model will provide a program service structure to accommodate the continually growing needs of the local school districts.

Many of this study's findings, particularly those occurring during the initial phases, will be useful to local school districts in the preparation of their long range development plans. The Department of Public Instruction now requires each local school district in the Commonwealth to prepare a long range development plan by July 1, 1969.

Similarly, reports evolving from the study on the use of management techniques and methods will be readily available to the local school districts. And the resulting PPB System model that will be developed for use by the intermediate unit will also be available for intensive study by local school districts over an extended period of time.

If a local school district desires to adopt the PPB System model for its own use, it will be able to do so after modification to fit its own preferences and needs.
WORK PROGRAM AND TIME SCHEDULE FOR THE STUDY

The work program has been divided into four major phases to aid in project planning, coordination, and evaluation.

PHASE I—planned for completion March, 1968—is devoted primarily to research, analysis of system requirements and completion of design elements of the PPB System. Included are completion of the overall plans for disseminating project information and the conduct of appropriate education and training efforts. The detailed design of methods to be used for evaluation of the project itself is also included, as well as subsequent evaluation of the effectiveness of the PPB System developed. The latter in terms of results achieved after implementation of the system by intermediate units.

PHASE II—planned for completion November, 1968—is concerned with the development of the operating PPB System. This includes the experimental pilot operation of the PPB System prior to completion of system development and of plans for system implementation. At this point, a systematic use of techniques for comparing the cost benefits for different courses of action will be utilized. Special methods for predicting the consequences of various program decisions will also be employed.

PHASE III—planned for completion March, 1969 —represents the period during which one or more of the participating intermediate units will employ the PPB System and related techniques in preparing their actual program and budgets for the subsequent fiscal year.

PHASE IV—which extends to the end of the project in May, 1970—will be devoted to analysis of the experiences gained in Phase III and revision, as necessary, of the PPB System and related techniques. Also included will be the implementation of the revised system by selected intermediate units in the preparation of their plans, programs and budgets for the fiscal year beginning in 1970.

It is anticipated that Phase IV also will incorporate an extensive education and training program for intermediate units throughout Pennsylvania, as well as completion of final reports and materials for broad dissemination.
EPILOGUE

It is a matter of emphasis to state that this Program Planning Study for the Intermediate Unit is the first, intensive, long range attempt in public education to use the tools of management science in the planning, development and evaluation of educational programs.

Creative in nature, the study will establish the guidelines for the intermediate unit board, administration and professional advisory committee to effectively respond to the increasingly complex needs and problems of the local school districts within the intermediate unit's boundaries through the use of the resulting, detailed PPB System model.

The major point for re-emphasis, however, is that the study, while aimed at developing a prototype for an intermediate unit, is primarily and deeply concerned with the future quality of the education of the individual pupil in the classroom.

To this end, the time, energy and talents of all those involved in this study have been directed.
For further, detailed information contact:
Dr. C. E. Brewin, Jr.
Director of Research and Planning
Bucks County Superintendent of Schools
110-A Chapman Lane
Doylestown, Pennsylvania 18901
## Budget Breakdown: June 1, 1960 to May 31, 1969

### Government Studies Center, Fels Institute, University of Pennsylvania

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