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ABSTRACT

The purposes, organization, and services of the curriculum resources center are discussed in detail. (See TM 001 363 for a description of the total project; for other related documents, see TM 001 160, 364-372, 374.) (MS)

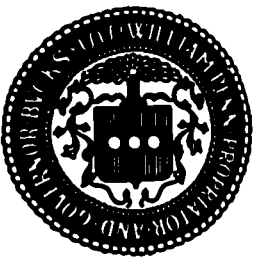
ED 063353

**INTENSIFICATION  
of the  
LEARNING PROCESS**

**A SERIES OF REPORTS  
DESIGNED FOR CLASSROOM USE**

TM 001 373

**REPORT NO. 9  
CURRICULUM RESOURCES**



**AN ESEA TITLE III PROJECT**

**BUCKS COUNTY PUBLIC SCHOOLS  
DIVISION OF CURRICULUM AND INSTRUCTION SERVICES**

**FEBRUARY, 1970**

**1**

PERSONALIZING EDUCATIONAL PRESCRIPTIONS



AN ESEA TITLE III PROJECT  
PRODUCED BY  
BUCKS COUNTY PUBLIC SCHOOLS  
COUNTY ADMINISTRATION BUILDING  
DOYLESTOWN, PENNSYLVANIA 18901

## PREFACE

Traditionally the Bucks County Schools have been in the forefront of promising educational practices. Therefore, it came as no surprise that the PEP Program was funded by the Federal Government; it was equally reassuring that the NATION'S SCHOOLS identified Bucks County's "Intensification of the Learning Process" as one of the twelve most innovative proposals in the Country.

While this Program may have used a new approach, educators the World over have been giving lip-service for years to the need for personalizing education. In a day and age when we are surrounded by mechanized inventions of all sorts, it becomes even more important for us to preserve the human element related to the teaching-learning process.

The primary goal of the PEP Program is the development of educational prescriptions--prescriptions which are the result of bringing diagnostic services and multi-media services into harmonious relationship as they focus on the individual needs of youth. The success of the venture is tied to our most important educational product--the child himself. With this focus we believe administrative and other supportive services can aid the teacher so that she can directly fit the educational diet to the needs of individual students.

Dr. George E. Raab  
Superintendent  
Bucks County Public Schools

## REQUESTING THE REPORTS

The following reports reflect the views, principles, processes and products used in the dissemination of information about the Bucks County Project for the Intensification of the Learning Process. These reports may be used as a framework for schools developing personalized educational prescriptions for its primary elementary children.

There are ten individual reports. Rather than combine all into one, it was decided to disseminate individual reports. In this way, persons interested in any one individual report may request and receive it without going through a larger document.

Each report is described below by report number, title, and content summary:

Report No. 1	<b>Project Description</b>  Describes the project goals, objectives, and team involved. Explains briefly the PEP approach to learning diagnosis and use of multi-level stimuli. Also includes a final summary report as well as changes in retrospect.
Report No. 2	<b>Research Findings</b>  Part A     Design to Measure the Effectiveness of Personalized Educational Prescriptions in a Pilot Second Grade Classroom  Part B     Design to Measure the Effectiveness of Personalized Educational Prescriptions in the Second Year of a Pilot Study  Part C     Analysis of Pre-Test and Post-Test Data

Report No. 2  
cont'd.

Part I An Analysis of Data

Part II Homogeneity/Heterogeneity  
of Group Variances on  
Pre and Post Tests

Report No. 3

Gross Motor Performance Scale

Introduction  
Test Administration  
Reliability of Test Items  
Interpretation of Test Scores  
Suggested Circuits for  
Improving Performance in  
Tested Areas  
Physical Education Curriculum  
Guide

Report No. 4

Diagnostic Instruments

Learner State Check List  
Behavioral Objectives Evaluation  
Response Form

Report No. 5

Pupil Description Worksheet

Introduction  
User's Manual  
The Worksheet  
Response Sheet  
Class Pupil Profile Grade 2  
Class Pupil Profile Grade 3  
Initial Personalized Educational  
Prescription  
Data Collection and Processing

Report No. 6

Educational Grouping Questionnaire

A Classification of Children  
of Elementary School Age  
EGQ Manual  
EGQ Instrument  
Reports Provided by Computer  
Programs for the EGQ System  
Psychological Categories  
Sample Print-Out  
Recommendations for Future  
Development

Report No. 7	Diagnostic Instruments
	Visual Performance Screening Test Observing the Learner Questionnaire - Parent
Report No. 8	Automated Instructional Resources Retrieval System
	How to Use the AIRRS Thesaurus The Thesaurus
Report No. 8a	AIRRS Supplement
	Preface Why a Thesaurus Format of Document Record Present Status
Report No. 9	Curriculum Resources Center
Report No. 10	Prototype Curriculum Guides
	Mathematics Language Arts Science Social Studies

Each of the above reports are products related to the two objectives of the Intensification of the Learning Process, better known as Personalizing Educational Prescriptions (PEP) project.

1. The improvement of the diagnostic process with primary emphasis on the development of personalized educational prescriptions for all pupils.
2. The improvement and expansion of multi-media services for all pupils.

Bucks County Public Schools

Project for the

I N T E N S I F I C A T I O N   O F   T H E   L E A R N I N G   P R O C E S S

Report No. 9

Curriculum Resources Center

**ACKNOWLEDGEMENT**

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## CURRICULUM RESOURCES CENTER

### Foreword

The CRC has been in a developmental stage since February 15, 1967, and is an adjunct of the Division of Curriculum and Instruction.

Located in the Annex Building, (the old Doylestown Elementary School), the facility includes curriculum publications, a professional library, workshop area, media development center, and consultant services.

In developing a Curriculum Resources Center, we have been guided by recurring questions: What is a curriculum resources center? What does it do? How is it organized? We have attempted to answer these questions in as much detail as possible, stressing those aspects of the Center that seem most pertinent to an understanding of its operations.

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## THE CURRICULUM RESOURCES CENTER

### What Is It?

The Curriculum Resources Center is a joint activity of the thirteen local school districts in Bucks County, established to serve the County as the primary center for design and development in selected areas of the curriculum and for demonstration and evaluation of local, national, and international curricula. It has the secondary purpose of providing a site for research on curriculum problems and of stimulating and supporting curriculum-related activity throughout the County and State.

Historically, the Curriculum Resources Center is an outgrowth of the federally sponsored ESEA Title III program, The Intensification of the Learning Process. More directly it represents a convergence of several significant developments in education which are reflections of trends evident nationally and even worldwide. Among them are 1) the growing recognition of the essential role of education in a modern society; 2) the increasing demand for quality in the face of rising educational costs; 3) the greater collaboration of scholars and local district personnel on curriculum problems; 4) the new role of service sought by the local educational agencies; and 5) the curriculum development efforts in English, science, math, social studies, international education, reading, early childhood education, practical and fine arts.

As a cooperative undertaking with specific purposes, the Center is organized for maximum use of funds, personnel, plant, and equipment of the supporting local educational agencies. Equally important is the involvement of specialists in the activities of the Center. Scholars from local colleges and universities are regularly at work on Center projects. The services of researchers, evaluation specialists, curriculum specialists, and a Director for the Center are also provided.

2.

Another important contribution is the participation of the districts and individual schools in the trial and evaluation of new curricula. Teachers and principals in local schools give valuable administrative support and feedback as materials are tested; this involvement will become increasingly important as the Center's production activities accelerate.

What has been achieved in the Curriculum Resources Center is a unique mechanism to organize for systematic change, founded on a recognition that a continuing institutional arrangement is necessary if curriculum improvement is to be effected on a scale adequate to the need. The strength of the Center lies in a structure which bridges the university, the schools, and the community. Within this structure, teachers, scholars, researchers, and artists can come together to plan and study, write and experiment. Only within a framework that allows this systematic collaboration can solutions be found to the persistent problems of education.

#### What Does It Do?

With the general purpose of improving county-wide instructional programs, the Center operates to design, develop, demonstrate, evaluate, and assist in designated areas of the curriculum.

The Center is designed to give the optimum in 1) help and direction to teachers; 2) carefully-designed materials of instruction; 3) assistance in developing individualized instruction and independent study; 4) continuous evaluation of student progress; and 5) model equipment and media collections in support of programs.

The Center performs another major function: it carries on a continuing survey and analysis of significant trends and developments in curriculum, assesses their efficacy and applicability and assists schools in using these programs.

### 3.

A number of secondary activities are carried on by the Center. It 1) provides an environment for faculty research and observation; 2) develops and evaluates small-scale innovations for possible future expansion; 3) cooperates with other branches of the Department of Education, University, and the professional community to stimulate and maintain a continuous dialogue on curricular problems; 4) issues and supports curriculum publications for teachers and administrators as part of the curriculum dialogue; 5) assists in the preparation of curriculum specialists by providing internship opportunities; and 6) provides consultation services.

#### How Is It Organized?

##### Material and Equipment Review:

School staffs are continuously seeking curriculum materials and equipment to augment their on-going programs or to incorporate into planning for new programs. If the curriculum of a school is to achieve maximal effectiveness, it is essential that every potential aid to its implementation be considered. The local school, however, finds it increasingly difficult to canvass the array of available media, for there is an overwhelming quantity of new products, both book and non-book, being offered on the market.

The Bucks County Curriculum Resources Center in Doylestown has as one of its basic purposes the collecting of currently available curriculum resources.

4.

Publications received are not subjected to arbitrary evaluation, but are reviewed and analyzed to observe trends in programs.

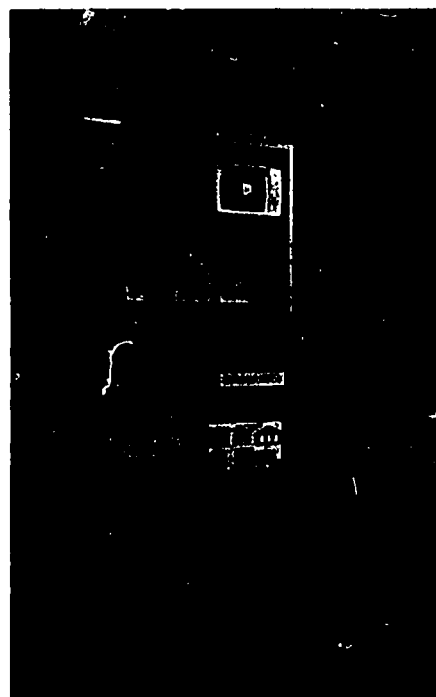


Materials received are acknowledged by card, cataloged and filed, thus providing a large central collection available to all who wish to use this service facility.

5.

In the first two years of its existence, the collection of materials has become quite extensive.

Books are kept on open shelves for easy access and to encourage browsing.



Learning kits, language and reading labs, pictures, charts and readiness programs may be examined. Areas are provided for examining equipment designed to provide the student with multi-sensory learning experiences.

These include such items as: several devices using the tachistoscope or controlled reading technique, machines which enable the student to both hear and record on taped cards, listening lessons using tapes and workbooks, and a machine that combines film strips, sound recordings and workbooks to teach reading.

The obvious advantage of assembling these materials in one place for all districts to use is essentially the kind of service the county schools office can render best.



### Production Services

The knowledge explosion is so rapid that it sometimes takes a year, or more, for the commercial market to produce the materials needed by today's education. It is to meet this problem, and the idea that local conditions require special items that the CRC has entered into a program of local media development. These services are coordinated by the RIMC Director.

This program includes the following:

1. Microfilming:

Production Center equipment includes a Camera Processor to produce in the Aperture Card format; a Uniprinter for duplicating original aperture cards; a Reader for inspection purposes; and a Reader-Printer for production of 8½" x 11" hard copies of records on roll film or aperture cards.

A Rotary Camera, circulated to school districts, is used to reproduce records on 100 foot reels of 16mm film.

2. Loop Film Loading:

8mm and S8mm single concept films (50 feet or about 4 minutes.) are loaded into cassettes.

3. Slide Duplicating:

This machine enables us to copy slides, enlarge frames of 16mm film, and make filmstrips from slides.





7.

4. Seal Press:

Dry mounting and/or laminating of flat materials where wear from handling is a problem.

5. Headliner:

For printing strips of letters and numbers in a variety of sizes and styles of print. These can be used in making layouts for posters, transparencies and materials to be duplicated in large quantities.



6. Cassette Duplicating:

By hooking up a reel tape recorder, record player, or other source, six duplicate cassettes may be made at one time. These are reproduced on a 1 to 1 time basis.

8.

7. Transparency Services:

These printed originals covering many subject areas are available for circulation to the schools. Demonstrations of the many methods of preparing transparencies are given, if requested. Finished transparencies are available.

In addition the department provides information on products, prices and vendors.



Professional Library and Curriculum Publications Area

A collection of curriculum publications from the following has begun: All school districts in Bucks County, sources within the state, the Pennsylvania Department of Education and selected schools nationally.

Information on innovative programs are filed for immediate reference. Courses of study, curriculum guides, resource units, manuals, handbooks, supplementary texts and related materials are arranged by subject area.

Although many books are housed in the individual offices wherein the orders originated, the CRC provides a single source for reference to the works.

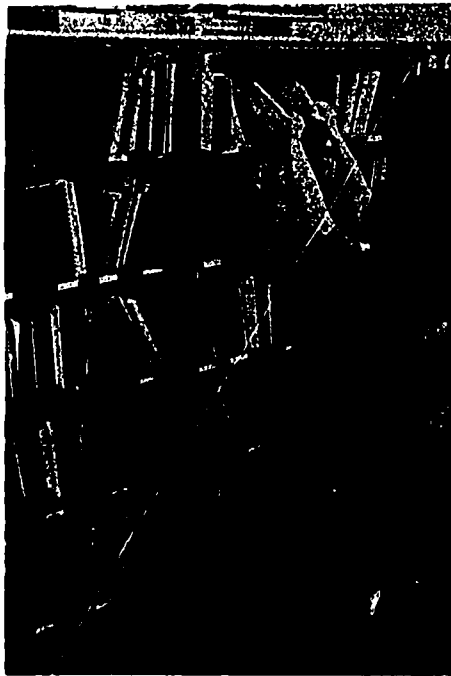
The Professional Library includes such reference volumes as:

- . CATALOGUES
- . PUBLICATION INDEXES
- . YEARBOOKS
- . ENCYCLOPEDIAS
- . GOVERNMENT PUBLICATIONS
- . EDUCATIONAL PERIODICALS
- . RESEARCH
- . PROFESSIONAL BOOKS

10.

Publications may be borrowed by staff members or by school administrators, curriculum workers, and teachers. Group activities such as workshops and evaluation meetings seem to be the most effective and economical use of the materials.

Publishing companies have consented to put on display sets of books for local school evaluation.



11.

### CONSULTANT SERVICES

The services of the Curriculum and Instruction Division are available to local school districts in connection with the development of county-wide or local curriculum programs.

- Consultants will organize and/or participate in workshop programs to be conducted by the Bucks County School Study Council or by the local school districts.
- Consultants are "on-call" for demonstration lessons and for working with individual classroom teachers to improve the teaching-learning process.
- Consultants are also available to develop curriculum research designs for evaluation purposes.

### The Science Resource Area

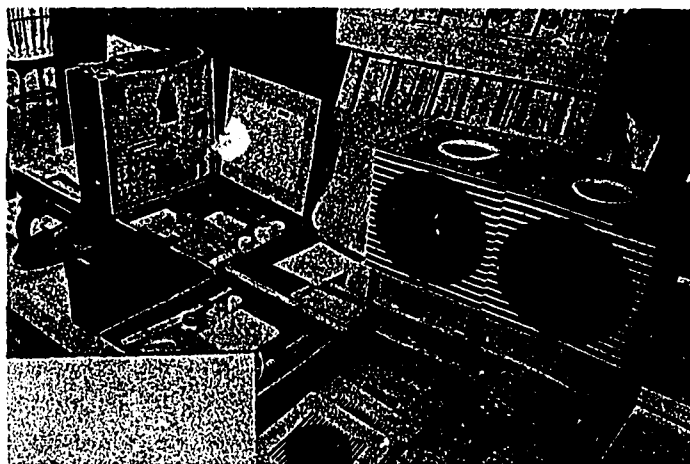
A Science Resource Center has been developed for the purpose of affording County Educators an opportunity to peruse the current materials available in science and supplying both hard and soft ware for the curriculum specialist while providing consultation services to local school districts. It contains supplemental and standard science textbooks; curricular materials available from Federal, State and Local agencies; science kits and equipment intended for instructional use; science program newsletters; science material catalogs; filmstrips and film loops; and other professional aids.

The Science Curriculum Specialist is always on call to provide services to County School districts. These services include: Providing in-service programs for teachers; helping school districts or teachers solve specific problems; establishing workshops; teaching demonstration lessons illustrating different techniques and calling upon outside specialists to inform County Educators of new innovations. Coordinating activities on a County-wide level and acting as liaison between State and Local educational units is also part of our service.



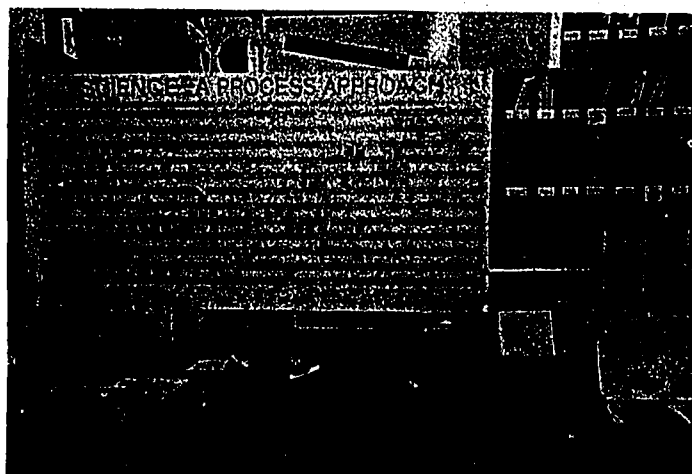
13.

Science Materials - Science Kits



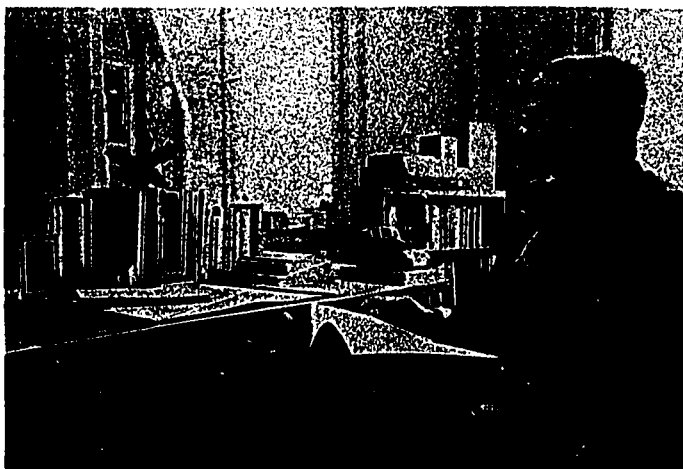
Equipment

Film Aids



### The Mathematics Resource Area

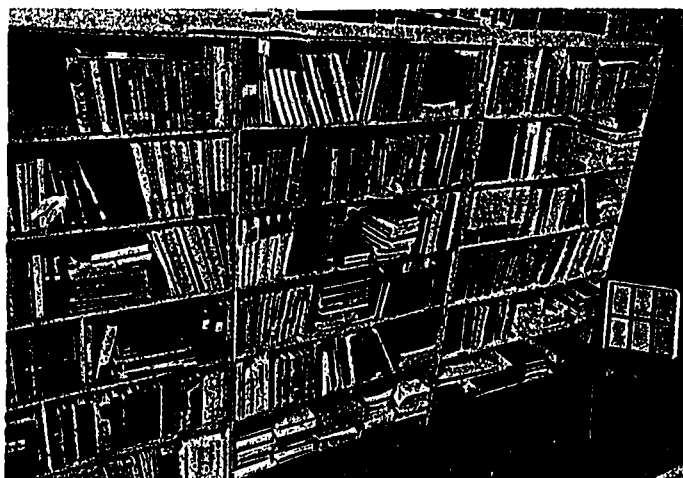
The Mathematics Resource Area is an ever expanding area, which incorporates both software and hardware relative to this particular discipline. The development of this area is to provide the teachers, administrators, and all other educators in Bucks County, with concrete items which can be examined and evaluated for use in the school curriculum.



Various publishers have furnished us with sample textbooks, teacher's guides and workbooks which accompany the texts. We also have specimen tests in the elementary and secondary areas of mathematics. Manipulative devices and games are available for examination and evaluation. Included in the display area are other audio-visual aids for use in

both individual and group instruction.

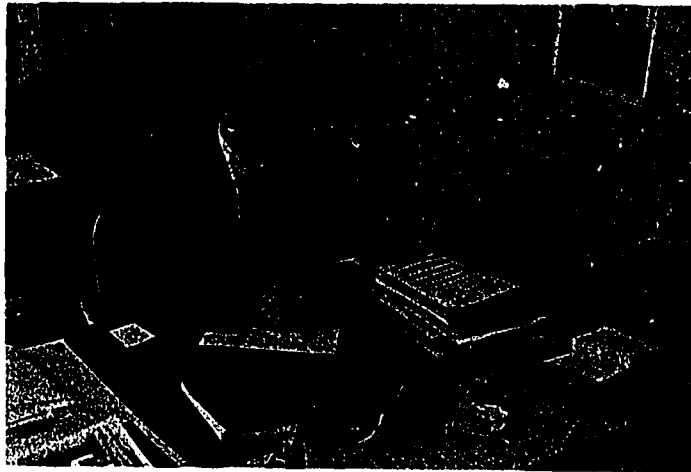
Available for investigation to anyone interested are pamphlets, brochures, and catalogs on different types of teaching materials and audio-visual aids helpful in teaching students mathematics.





Social Studies/International Education Resource Area

Through the office of the Social Studies Resource Area teachers are provided the opportunity to examine major basic social studies texts and supplemental materials, such as: simulation games, puzzles, multi-ethnic materials, records, kits, transparencies, tapes, and filmstrips. Vendor files of materials not on display are kept current for teacher reference, as are files of curriculum guides, resource persons, and field trips relating to social studies.

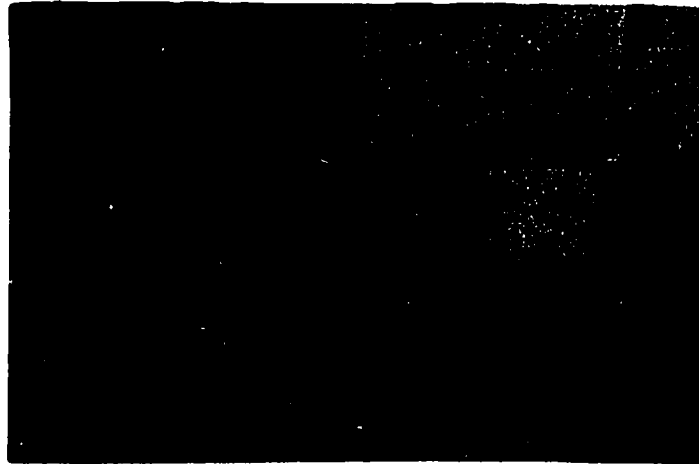


Information about state and national social studies projects, innovative programs, institutes, scholarships, and fellowships is disseminated through the Center.

The International Studies Resource Area, an adjunct of the Social Studies Resource Area, acts as a clearing house for information regarding international seminars, institutes, scholarships, tours, study abroad programs, and recruitment of teachers and administrators for over-seas positions.

16.

Services of the Social Studies Specialist are available to school districts to assist with in-service workshops, curriculum revision, teach demonstration lessons, speak to teacher and community groups, keep districts informed of the latest techniques and trends in the teaching of social studies, and to act as advisor to the Bucks County Council of Social Studies Teachers.



**Language Arts, Reading & Early Childhood Education Resource Area**

The purpose and objective of the ever-expanding Resource Area is to provide a well-stocked sampling of multi-media, material-resources available to aid the classroom teacher, to supplement instruction, and enhance learning. Services to school districts in this curricular area include recommendations for selection according to purposes. The diversity and wide range of levels involved in this curricular area necessitates an organizational plan that facilitates easy location of material to better serve local educational agents.

The Area includes both book and non-book media, kits (such as: SRA, MacMillan Spectrum, etc.), films, filmstrips, tapes, games, puzzles, pictures, etc. A supply of brochures is included in the vendor file to aid districts in selecting and ordering instructional materials. A collection of curriculum guides prepared by in-state and out-of-state school committees is available to visitors to the Center.



The collection, at present, is made up of samplings of instructional materials arranged under the following headings: reading; English, written and oral; spelling; and handwriting. Included are: major elementary and secondary basal-reader programs; linguistic-approach readers; content-area readers (at both grade-level instruction and high-interest, low-readability levels). Also leading literature series, poetry, drama, etc.; linguistic, transformational, structural and traditional grammar programs; creative writing programs, oral-language activities, speech, and dramatics; and leading spelling series; and handwriting programs. The Early Childhood collection includes materials for language and intellectual development; listening activities; manipulative activities; reading-readiness experiences; talk-starter pictures, visual and auditory perception; developing experiential and informational background.



A collection of screening devices for formal instruction, formal and informal inventories, standardized reading and language tests are also available for examination.

Home Economics

Home Economics consultant services are provided through the Department of Education in Harrisburg. The following services and programs are encouraged and promoted by the State Department of Education.

Supervision of Home Economics Teachers in the  
Interest of Improving Instruction

Advisor to the Future Homemakers of America

Consultative Services to Vocational Technical  
Schools' Home Economics and Food Service Classes

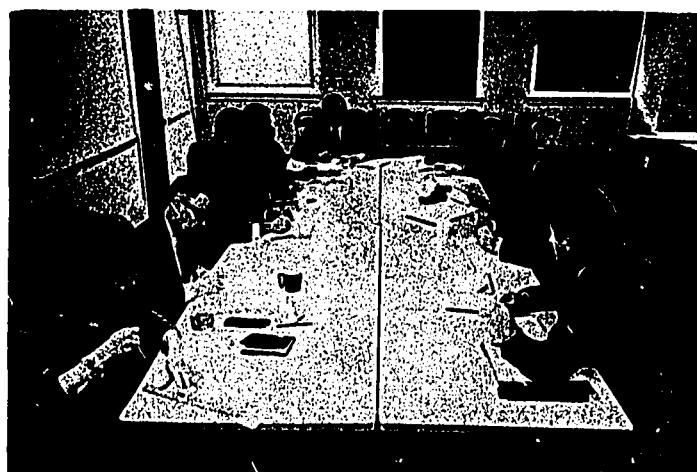
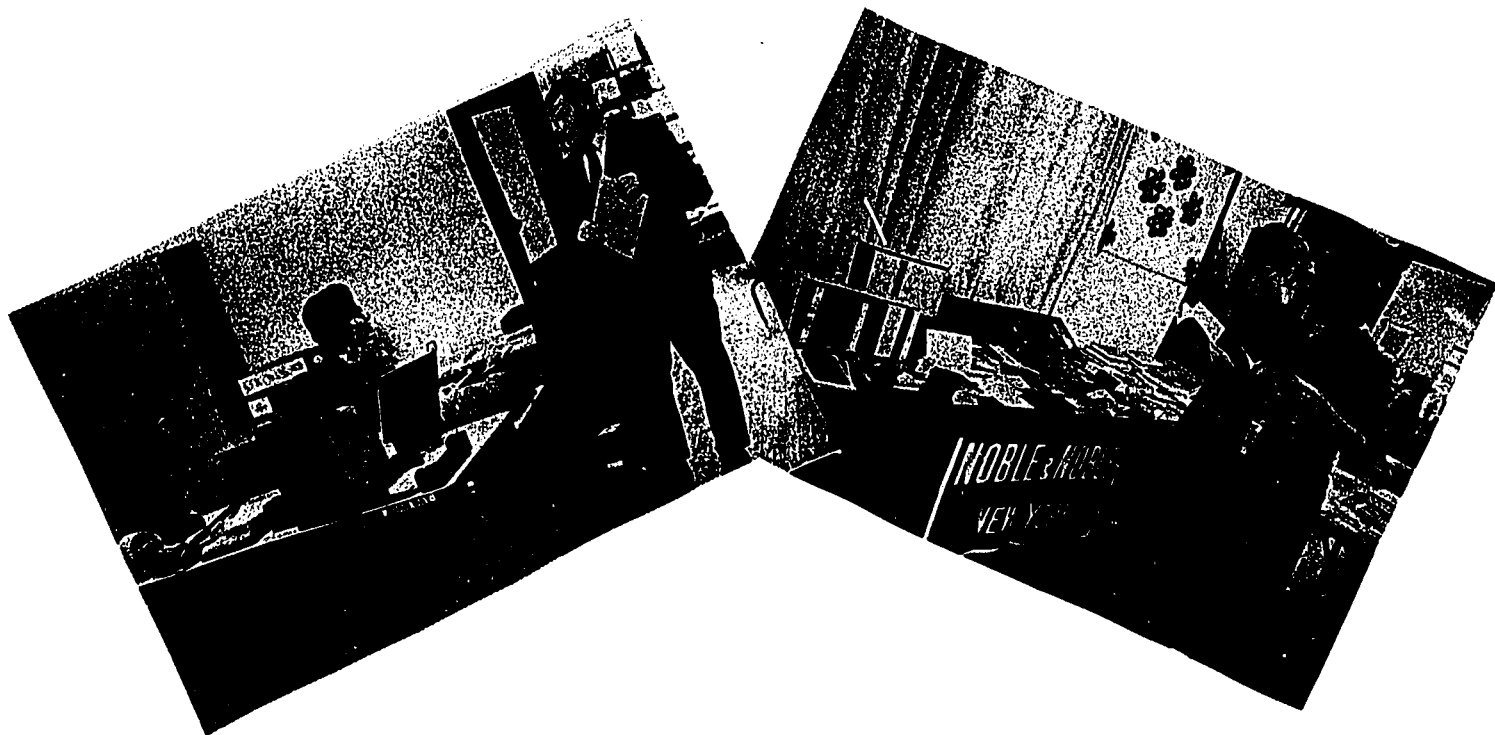
Interpreting and Promoting the Federal School  
Lunch Program

Organizing County and Area Professional Meetings

Liaison between State and Local Professional  
Organizations

Assistance to Local Schools: Improving and  
Expanding Home Economics Programs; Implications  
for Redirection of the Program

The success of the CRC is measured by our ability to establish and maintain a service program that will meet the needs of the students and the educators of Bucks County. Thus, the CRC program requires the cooperation of all educators in our service area.



### IN-SERVICE TRAINING

The CRC maintains a multi-purpose classroom suitable for group meetings, and a wide range of workshop activities and demonstrations.

Typical use of this facility would be:

- . CURRICULUM PLANNING & DEVELOPMENT
- . DEMONSTRATIONS OF LARGE & SMALL GROUP INSTRUCTION
- . TECHNIQUES FOR SUPERVISION
- . INNOVATIVE IDEAS IN EDUCATION
- . DEMONSTRATION OF NEW EQUIPMENT
- . PUBLISHERS INTRODUCTION OF NEW MATERIALS
- . READING PROGRAMS
- . PROGRAMMED LEARNING DEMONSTRATIONS
- . MICRO-TEACHING DEMONSTRATIONS
- . INSTRUCTIONAL MATERIALS
  - APPLICATION
  - PRODUCTION
  - SOURCES OF MATERIALS
  - EQUIPMENT USAGE

Direct Requests To:  
Division of Curriculum & Instruction  
Bucks County Public Schools  
Doylestown, Pennsylvania 18901  
215-348-2940 Ext. 444

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