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**ABSTRACT**

This publication presents in summary form the development of the two end products of the Trenton Title III project: (1) an educational planning system called STEP (System for Tranton's Educational Planning) and (2) a new planning office, the Division of Research, Planning, and Evaluation. Included is the outline of the planning cycle, a discussion of the Indicators of Quality, and a description of various activities of the planning office. This publication should be a useful guide for reviewing the merits of a comprehensive systems approach to planning and the organizational structure needed to operate the system and its related functions. Related documents are ED 056 371-373 and EA 004 550. (Author)

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System for Trenton's Educational Planning  
(STEP)

An Educational  
Planning System

by

David E. Weischadle

TPS

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Trenton Public Schools  
Trenton, N.J.

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An Educational Planning System  
by  
Dr. David E. Weischadle  
Director of Research, Planning,  
and Evaluation

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## INTRODUCTION

The two articles contained herein report upon the developments of Trenton's Title III project, "Building a Comprehensive Planning Capability Using EPPBS." Clearly resulting from the grant to date are two important end products -- a planning system and a planning office. Both the system and the office were developed by the local school district with technical assistance from Government Studies and Systems of Philadelphia.

Moving into the third year, both the system and the office face their most important test -- How well does each function? What changes need to be made? What impact on educational change does each have? These are difficult questions, but the answers are vital to the life of the school district.

As project director, I look forward to the coming year and its challenges. This confidence is based on the sound foundation of support and cooperation experienced during these past two years from all levels of the Trenton educational community.

Trenton, New Jersey

David E. Weischadle

STEP

System for Trenton's Educational Planning

Where are we now? Where do we want to be next year? Where do we want to be five years from now? What educational programs do we want to implement this year? How effective are these programs and how effective will they be five years from now? These are vital questions to any organization. They are particularly vital to the Trenton Public Schools because they concern our youngsters and the benefits to be gained by our youngsters.

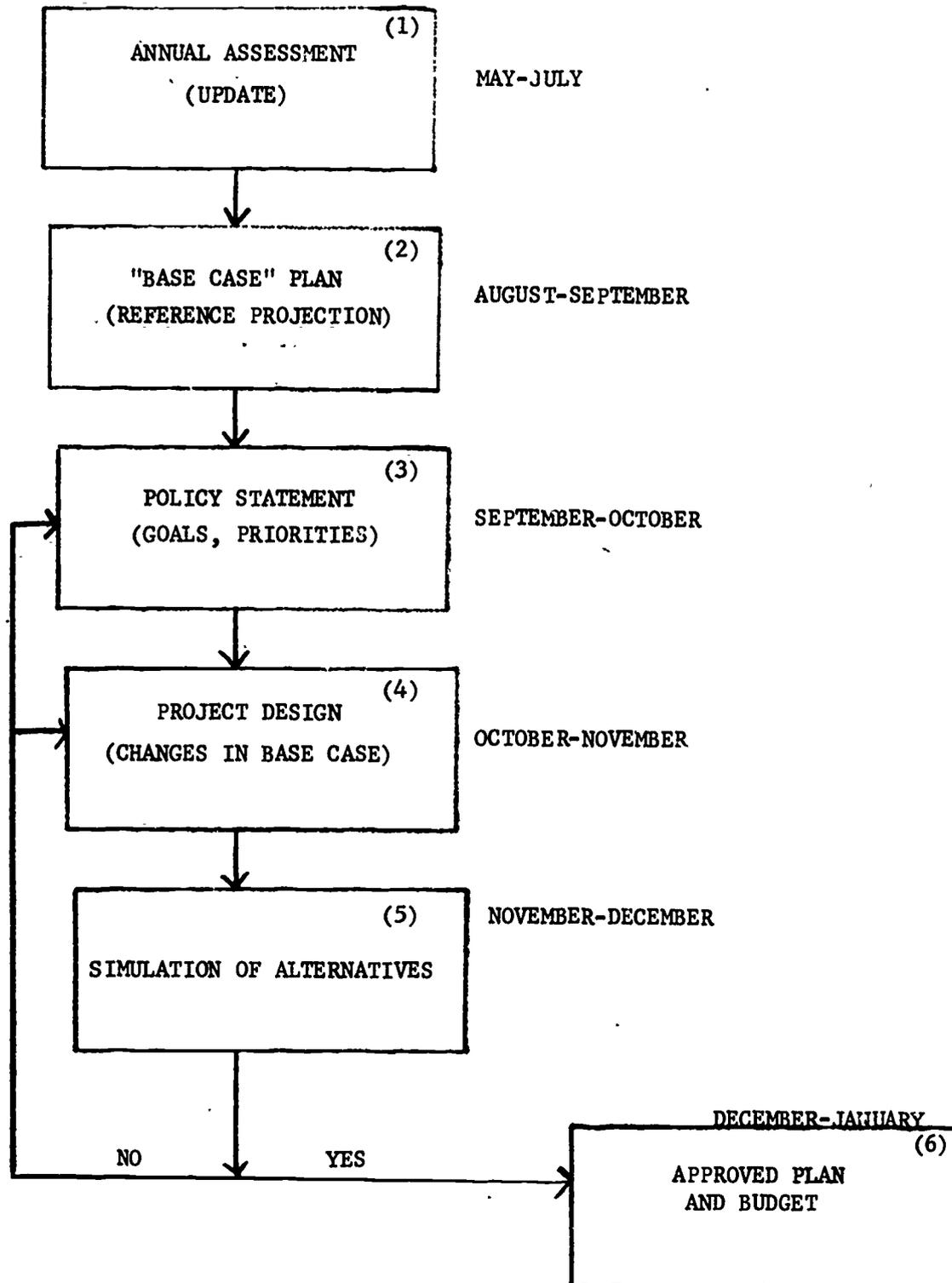
In an effort to answer these questions and provide hard data to support the effectiveness of our educational programs, the district established an office of Research, Planning, and Evaluation. This new office began the development of an educational planning system, utilizing several planning-programming-budgeting system (PPBS) techniques.

Funded by Title III ESEA, the office was designed to develop a fully operational planning system. The planning system will provide the Superintendent, his staff, and the Board of Education with a strategic planning system for making policy decisions and allocating resources, involving the community, local agencies, parents, students, and the district's instructional staff in the making and implementation of decisions regarding educational priorities, and reorganizing the planning and data collection services of the district under a director of planning.

The foundation of the system is STEP -- System for Trenton's Educational Planning. STEP consists of six key elements:

1. Annual Assessment -- a thorough and complete review and collection of planning information concerning students, staff, revenues, cost, expenditures, and "Indicators of Quality." (May-June)
2. Base Case -- a description of where we now stand in terms of all this data, and the projection of this information over the next five years. (June-July)
3. Priority and Goal Setting -- based on the information in program form, decision-makers review current levels and decide (based on community, staff, and student input) the desired levels over the next five years. (August)

MAJOR ELEMENTS IN THE STEP CYCLE



4. Project Design -- representatives of the community, staff, and student body will develop projects aimed at achieving the desired levels established in prior stages. (September)
5. Review and Evaluation -- the various alternatives offered in the project design stage will be reviewed and evaluated in terms of their impact on goals, cost-effectiveness, and their five year implications. (October-November)
6. Approval -- resulting from the evaluation will be an approved set of established programs and selected alternatives to modify that program to meet the new priorities set. Only when this stage is complete will a budget result. (December-January)

A prime factor throughout the whole system of STEP is that last year's budget no longer makes educational decisions for this year. Planning takes place first, and then the new budget results. Equally important, however, is the fact that goals and objectives are stated publicly and explicitly, and in a measureable form. And, in turn, decisions are based on a consideration of alternative means for achieving desired ends.

Based on the Trenton Community Survey, the Trenton school district identified over 20 key concerns of the community. These concerns were then transformed into measures or scales, called Indicators of Quality. These Indicators were preference measures which the community in general could use to evaluate their schools.

Typical of these Indicators is the local drop-out rate. At present, the rate of youngsters dropping out of school in grades 10 through 12 passes the 17% level. If current educational programs remain the same, that rate should rise. Based on additional input by the community, staff, student body, and a special task force, a desired level for a five year period was set at 5%. In effect, the school district had a clear, measureable objective to accomplish - close the gap between the 17% anticipated level and 5% desired level. It is this type of objectives which a project design team of community, staff, and student body can use to develop alternative educational projects.

In general, Trenton Public Schools using STEP can assess itself on these

Indicators, forecast what will happen if no policy changes are made, set desired levels for selected Indicators, and choose the most economical way of closing the gap between anticipated and desired levels.

In support of STEP is an array of computer programs aimed at forecasting and projecting such vital information as costs, resources, revenues, and enrollments. Such planning information therefore can be used to make decisions and analysis, for the programs also contains historical data as well.

As a result of STEP and its annual planning cycle of activities, the district will realize, at a minimum, the following benefits:

- an analysis of last-year's budget in a program-budget form
- a five-year forecast of all costs
- a five-year enrollment forecast for the school district
- an adjusted forecast of costs based on enrollments
- a profile of the school system on its own Indicators
- a five-year projection of the gaps between anticipated and desired levels on those Indicators
- the costs and probable effects on Indicators of various project alternatives

Division of  
Research, Planning, and Evaluation

On September 1, 1970 the Board of Education of the city of Trenton created a new division -- the Division of Research, Planning, and Evaluation. By this move, the Board recognized a severe handicap in school organization, i.e., the lack of any central staff which can provide a full offering of services in these three vital areas.

With the award of a Title III grant to develop a comprehensive planning system, the new division was provided with both the means and technical assistance to develop a viable organization within the school system.

The division was established having direct responsibility to the Superintendent, thus providing its director with the ability to work smoothly with the four major operating divisions of the school district -- Personnel, Administration, Curriculum and Instruction, and Business Administration.

Reflecting this relationship is the broad involvement of the Division into general district activities. This involvement can be described best in the following breakdown:

- I. Research
- II. Planning
- III. Evaluation
- IV. Project Development and Management
- V. Related Activities

In an effort to describe this division's impact on the school district, the following is presented for review.

#### I RESEARCH

In general, the division has approached the area of research from the aspect of immediate needs of the district. It has launched only those efforts which have been designated by the Superintendent as having high priority.

Special Studies. On several instances, the division has provided data and analytical reports to district staff. This service has ranged from very simple ethnic studies as in the case of the Civil Rights Survey to the development of a narrative needs assessment for the Title VIII project.

Data Collection. As a result of the Trenton community survey, a list of Indicators of Quality were developed. In order to establish the current state of these "Indicators" a collection process was designed and implemented. The results formed a partial basis for a large scale meeting of citizens, staff, and community last September (1971).

Research Inquiry. In an effort to focus on current research needs, staff members were queried about their most immediate needs. From this form, key research areas have been designated for searches to be made. Those areas tentatively designated are: Drop-out programs, causes, and prevention, PPBS; Open Space; Career Education; Gifted students; Disadvantaged; Tests and Measurements; and Individualization of Instruction.

## II PLANNING

By virtue of the funding requirement, the predominant activity of the new division has been in the area of planning, or rather, the development of a capability to plan. Resulting from this effort has been STEP -- System for Trenton's Educational Planning. This development has involved a large number of people, including the technical services of Government Studies and Systems.

Community Involvement. One of the prime task of the division has been to increase the opportunity for the general community to express its interests, concerns, and ideas concerning the schools. The "Trenton Community Survey" and the resulting "Indicators of Quality" became prime elements of STEP. The "Indicators of Quality" were then used in conjunction with the Superintendent's Citizens Advisory Committee's general session to establish goals and priority levels. Community (including students) participation will further be enhanced during the project design stage when citizens, staff, and students will have the opportunity to submit proposals and design programs.

Agency Involvement. A key aspect in the development of the planning system has been the involvement of educational, community, and government agencies during the design stages. No other project of this type has provided for the continuous input from agencies operating in conjunction with the school district, both directly and indirectly. Active in this group, called the Technical Task Force, have been N.J. Department of Education (Office of Management Information, Office of Planning, and Office of Urban Education), N.J. Department of Community Affairs (Division of Youth), Model Cities, United Progress Incorporated, Research for Better Schools (Philadelphia), Trenton Education Association, Trenton Federation of Teachers, Association of Administrators and Supervisors, N.J. Urban Schools Development Council, and City Government Administration.

Staff Development. During year one, the division instructed nearly one hundred staff members in the general concept of Planning, Programming, and Budgeting as related to comprehensive planning. These sessions brought about an awareness of the project and the general concept. These sessions were expanded in year two to reach over 200, including the Board, central administration, building principals, directors and supervisors, department chairmen, community representatives, teachers, and students.

EPPBS Modification. Central to the development of a planning system for Trenton was modifying an existing Education Planning, Programming, and Budgeting System (EPPBS) according to local specifications. The division has been a major factor in tailoring the design of the Student Enrollment Forecaster, the Revenue Forecaster, the Planning Information System, the Cost-Manpower and Indicator Forecaster, and the Cost-Benefit Analysis procedures. These activities have been handled jointly by the Director of Research, Planning, and Evaluation (Trenton) and the Systems development manager (Government Studies and Systems).

Project Administration. Accompanying the tasks outlined so far have been those efforts associated with the general management of a federal project. In this case, the project started with the establishment of an entirely new component in the school district. While the physical task of setting up an office was being done, machinery was in operation setting up the various elements of community, staff, and agency involvement. At the same time, efforts were carried out to develop acceptable dissemination and evaluation plans. Only four months after receiving funding, the project received good-to-excellent ratings in its state on-site evaluation. Other measures of its accomplishments are its publications inclusions in ERIC, Educational Research Services' (NEA-AASA) Local Research Annotated Bibliography, and Leon Lessinger's Accountability: Policies and Procedures (Crofts).

### III EVALUATION

Only limited time has been available to this key aspect of the educational process. The division has been searching for possible funding sources to provide additional personnel, particularly in the area of student assessment.

Program Evaluation. The division on several occasions has provided other segments of the district with program evaluation services. The evaluations conducted were designed in conjunction with those individuals carrying out the activities. Typical of this assistance was the evaluation report of the workshop on Behavioral Objectives (June 1971) by Educational Improvement Center for our division of Curriculum and Instruction. This evaluation was a partial basis for planning the later seminars to instruct teachers to be trainers of other teachers.

Tests and Measurements. As the division evolves into a fully operating organization, it has been preparing to assume a major role in the area of tests and measurements, in terms of both planning and implementation.

The initial step has been the participation in the district's city-wide Testing Committee. An extension of this involvement has been the submission of an application for Title III, ESEA, funds for a test and measurement specialist who would coordinate the development of a comprehensive student assessment program.

Staff Evaluation. This division also serves on the committee for the evaluation of principals. It has been recommended by this division that the procedures to evaluate principals be broad in nature and not limited to a single assessment instrument. In a proposition paper -- "Evaluation - A Continuous Process" -- this division recommended that a part of that evaluation should be based on objectives drawn up on an individual building basis.

Technical Assistance. Several divisions and projects of the school district have called upon the division to provide technical assistance. For example, the N.J. State Learning Center at Grant School asked the division to assist its project director in developing an evaluation design and provide some directions for its evaluator.

#### IV PROJECT DEVELOPMENT AND MANAGEMENT

As the evolving planning arm of the school district, the division became the logical focal point for organizing the varied activities of the districts' special projects. Ranging in various size, the projects have indicated several common functioning characteristics. To assist in the improvement of general project operation, the district initiated the development of a Project Management System with the assistance of Research for Better Schools, Philadelphia.

Monitoring Agent. As a result of a survey of all projects in June 1971, the division was appointed a "monitoring agent" of all projects in the district by the Superintendent. This action gave the division the responsibility for reviewing current activities, identifying common problem areas, and

developing a program of training to solve the problems. The division became an immediate source to help project directors expedite their problems.

Project Directory. An immediate task of the division was to identify all special projects by title, director, purpose, funding, and location. This information was compiled in a directory and distributed on a limited basis for 1970-71. A new directory has been completed and will be available on a large distribution basis. This directory will greatly increase the information base about Trenton's project activities.

Project Management System. In conjunction with the Project Management Center, Ohio State University, and Research for Better Schools, a series of five seminars were conducted for Board members, central staff, and project directors. These sessions were designed to provide an overview, and then an in-depth study of the elements of a management system, involving such things as PERT, work breakdown structure, and GANNT charts.

Project Management Procedures Handbook. Resulting from these sessions was the indication that a central guidebook was needed to provide guidance for project directors. As monitoring agent, the division accepted the task of directing the writing of this document by available personnel. This handbook has been designed to supplement regular Board policy to cover some unique operating activities of projects in terms of personnel, implementation, finance, training, communications, and reporting.

Technical Assistance. The division has been of assistance on several occasions in the area of proposal development. For example, the division developed proposals for training trainers of teachers (a project funded by N.J. Urban Schools Development Council), EDP - Trenton Public Schools, and Vocational Guidance Center (a Title I summer proposal).

## V RELATED ACTIVITIES

In addition to activities so far described under these four major areas, the division has been active in many related activities as well.

Belmont Evaluation. The division has served for the last two years as the agent for completion of the Belmont Evaluation. This U.S. Office of Education survey collects student, staff, and financial data on all federally funded projects in the school system. Those projects in Trenton now number about 25, representing nearly \$5 million.

National and State Surveys. Since its establishment, the division has completed some 15 major surveys in addition to the Belmont. Most comprehensive and time-consuming were the 1971 Elementary School Survey and 1971 Civil Rights Survey.

Behavioral Objectives. Because of their related importance to planning, the division has attempted to assist the district in the writing of behavioral objectives. With the Division of Curriculum and Instruction, this division has developed the initial proposal, located a consultant, provided evaluation assistance, drawn guidelines for submission, and aided in the review of the first drafts. It will continue to assist in any way possible.

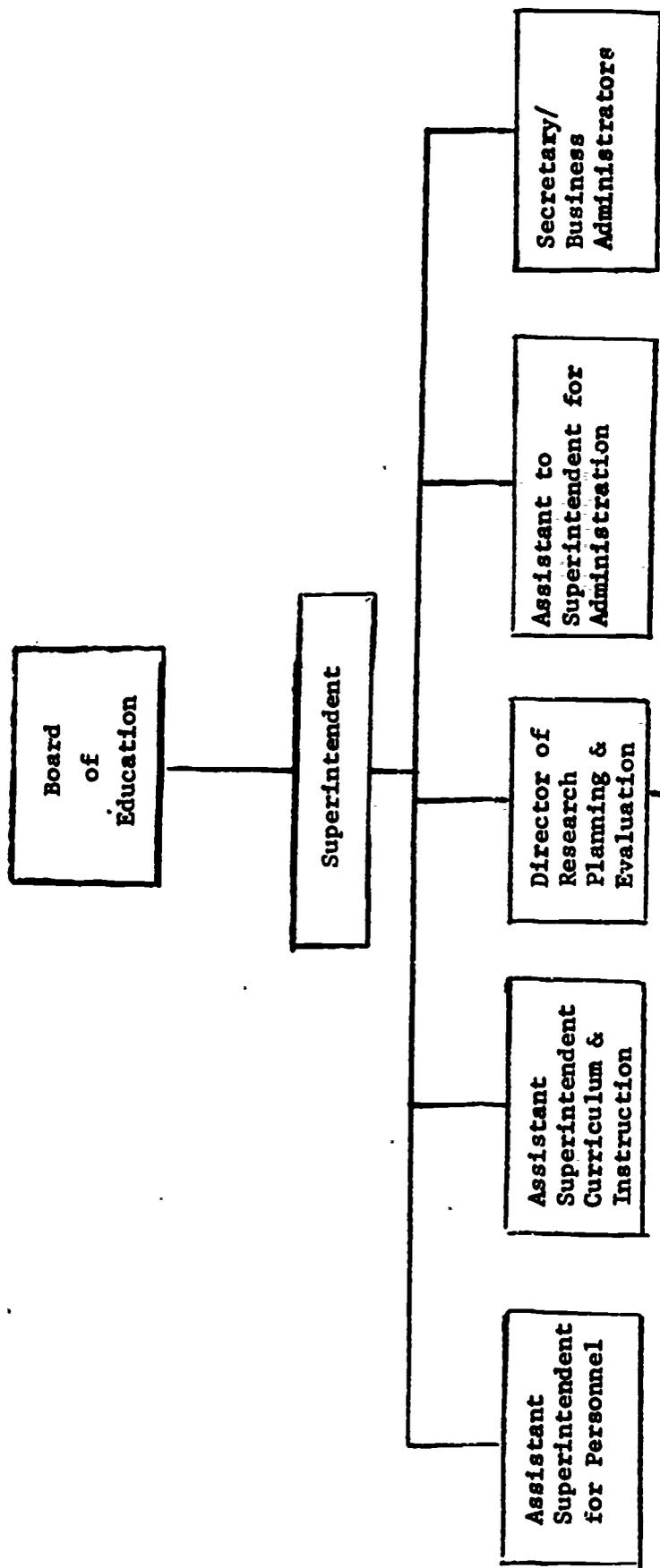
Consultant Bank. Now in its developing stage, the Consultant Bank has been designed to store information about individuals or organizations available to school districts like Trenton. Wherever possible, evaluations have been collected on the performance of these consultants. Where consultants have served the district, personnel have been asked to complete a review sheet describing their effectiveness.

Computerization. While the planning information system designed could run well on a manual system, it has far greater outcomes when electronic data processing equipment are available. Therefore, the division has become

closely involved in the development of a computerized management information system, encompassing personnel files, student files, payroll, expenditure accounts, and related operations. This district has developed a proposal designed to serve as an umbrella for their efforts. Entitled EDP-Trenton Public Schools, the proposal has called for the establishment of an actual project, able to seek funds on its own.

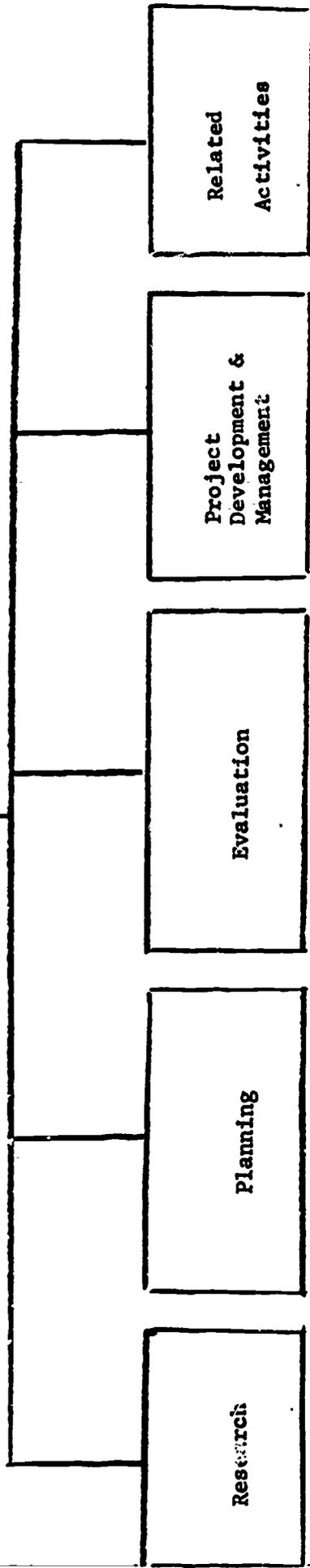
Community Bank. In order to improve parent and community participation in school programs, an effort has been designed to solicit, file, and retrieve names of parents available during various hours for involvement in curriculum or project design activities. Called the "Community Bank", the project will send forms home with elementary youngsters for completion. This division will become the depository for them, making them available as the need arises.

The above described activities represent a substantial effort on the part of this new division of Trenton Public Schools. While we are proud of these accomplishments, we are also mindful of the fact that we were asked to do many tasks supporting our prime role. This fact represents an important ingredient of the Trenton school district -- it provides an opportunity to do a job and does all it can to assist that individual, group, or division at work. That we were able to do these things, may speak well for us; but more important, they speak for the enlightened school district that nourished them.



Created on  
September 1, 1970

**DIVISION OF RESEARCH, PLANNING, & EVALUATION**



- \* Special Studies
- \* Data Collection
- \* Research Inquiry

- \* Community Involvement
- \* Agency Involvement
- \* Staff Development
- \* EPPBS Modification
- \* Project Administration

- \* Program Evaluation
- \* Tests and Measurement
- \* Administrative Evaluation
- \* Technical Assistance

- \* Monitoring Agent
- \* Project Management System
- \* Procedures Handbook
- \* Technical Assistance

- \* National and State Survey
- \* Consultant Bank
- \* Community Bank
- \* Behavioral Objectives
- \* Computerization
- \* RPE NOTES
- \* Research Bulletin

**Publications**

PROJECT PUBLICATIONS:

1. SYSTEM FOR TRENTON'S EDUCATIONAL PLANNING (Vol. I): General Design Report. ED 056 371

This volume presents background information on the project and explains the needs and decisions that actuated its implementation. First year activities and some preliminary teaching material on the concept of PPB (planning-programming-budgeting) in education are also described. The major focus is on a description of the proposed system, a clarification of the major concepts and activities, and an introduction to some detailed procedural decisions to be made during the remainder of the project. A related document is EA 003 762.

2. SYSTEM FOR TRENTON'S EDUCATIONAL PLANNING (Vol. II): Setting Goals and Objectives. ED 056 372

This volume concerns a procedure for setting the district-wide goals and objectives to be used in planning STEP (System for Trenton's Educational Planning). The report contains the analysis of a Trenton community opinion survey conducted in March-April of 1971. One vital element of the analysis is the development of "Indicators of Quality"--a series of measures to provide the planning system with standards for evaluation in terms of cost-effectiveness. A related document is EA 003 761.

3. SYSTEM FOR TRENTON'S EDUCATIONAL PLANNING (Vol. III): Enrollment Forecaster. ED 056 373

This volume describes an automated procedure for multiyear enrollment forecasting in the Trenton, New Jersey public schools. Enrollment forecasts generated by this procedure will provide enrollment estimates in each district's instructional program. Data required to operate the forecaster will be collected during the second year of its operation. Related documents are EA 003 761 and EA 003 762.

4. TITLE III -- BUILDING A COMPREHENSIVE PLANNING SYSTEM MODEL WITH EPPBS (Continuation Grant Application). ED 057 457

This 200-page report provides both a theoretical and practical approach toward providing the superintendent, his staff, and the Board of Education with a comprehensive planning system instrument for making policy decisions and allocating resources; involving the community, its agencies, parents, students, and instructional staff in the making and implementation of decisions regarding educational priorities; and reorganizing the planning and data collection services of the system under a director of planning.

5. PROJECT DIRECTORY

This report reviews and describes the innovative projects operating in this urban school district. The directory is one of the first attempts to identify and organize projects of somewhat varying nature into a unified framework. This simple identification effort marks the initiation

of a project management system in the school district which is being developed with the assistance of Research for Better Schools, Philadelphia.

6. RPE NOTES (Vol. I and II)

RPE Notes is designed to inform key people of the development of the Trenton Title III project. Also, available upon request, the newsletter is sent to all staff, key community representatives, State Department of Education, and other interested parties.

7. RESEARCH BULLETIN (Vol. I)

The aim of this publication is to inform and direct attention to articles which have a bearing on current or proposed projects and programs in the school system.

8. RESEARCH, PLANNING, AND EVALUATION: Activities and Services

An address presented to the first annual conference of the Center for Educational Technology, State of New Jersey, on April 28, 1972, in conjunction with "Building a Comprehensive Planning System Capability with EPPBS", a Title III ESEA project.

RELATED PUBLICATIONS:

1. Leon Lessinger, Dale Parnell, and Roger Kaufman ACCOUNTABILITY: Policies and Procedures. Crofts Educational Services, 1972

Lessinger et al presented in this publication a detailed review of the projects community involvement model and STEP. The authors take over 30 pages to review these two key components of the Trenton Title III project. See review of this work in NATION'S SCHOOLS, April 1972.

2. Educational Research Service. RESEARCH BY LOCAL SCHOOL DISTRICTS, Washington, DC, 1971.

This publication reviews the project activities and the four major reports produced during July-December 1971.

3. General Accounts --

"Should Schools Get a Report Card? they Did in Trenton," PHILADELPHIA INQUIRER, Sunday, August 15, 1971.

"Trenton Board of Education," SCHOOL BOARD NOTES, XVIII (September-October), 2.

"What the Public Likes," SCHOOL BOARD NOTES, XVIII (January-February), 4.

"STEP, Vol. I-III," RESEARCH IN EDUCATION, VII (March 1972),

"Field Notes," JOURNAL OF EDUCATIONAL RESEARCH, LXV (April 1972), 52.

"Building a Comprehensive Planning Capability Using EPPBS," RESEARCH IN EDUCATION, VII (April 1972), 32.

"Project Directory," URBAN NEWSLETTER, I (May 1972), 1-2.

4. Educational Research Service. RESEARCH BY LOCAL SCHOOL DISTRICT AASA-NEA: Washington, DC, January-June 1972.