DOCUMENT RESUME

ED 202 050

EA 013 404

TITLE   Foundation Program Assessment and Improvement
               System.
INSTITUTION   Hawaii State Dept. of Education, Honolulu. Office of
               Instructional Services.
REPORT NO   TAC-77-4297
PUB DATE   Oct 77
NOTE   32p.

EDRS PRICE   MF01/PC02 Plus Postage.
DESCRIPTORS   Academic Achievement; *Curriculum Development;
               *Curriculum Evaluation; Educational Assessment;
               Educational Quality; Educational Strategies;
               Elementary Secondary Education; *Instructional
               Improvement; State Programs
IDENTIFIERS   *Hawaii

ABSTRACT

          The Foundation Program Assessment and Improvement
System for the state of Hawaii seeks to implement a comprehensive
curriculum management system to improve instruction for students by
facilitating learner assessment, curriculum review and analysis, and
instructional improvements. This report describes the system and its
two components, emphasizing linkage, shared responsibility,
utilization of resources, accountability and strategies. State-,
district-, and school-initiated strategies are presented in three
charts. (Author/JD)

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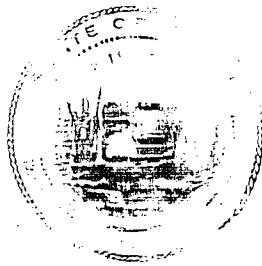
FOUNDATION PROGRAM ASSESSMENT AND IMPROVEMENT SYSTEM

Office of Instructional Services/Community and Support Services Branch
Department of Education • State of Hawaii • TAC 77-4297 • October 1977

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FOREWORD

The Department of Education has [...] recognized the importance of assessing and improving the curriculum systematic[...] order to account for [...] many programs and activities in our schools.

Throughout the Department, ma[...] individuals and groups are involved in curriculum development efforts. The wide rang[...] involvement of personnel at all levels of the Department requires close attention [...] coordination of efforts. There is need to identify the total scope of the Department's curriculum development activities and to bring them into a responsive and responsible curricu[...] management system. Such a system will better enable the Department to fulfill its r[...]ities to students and the community.

The purpose of this publication i[...] to present the Foundation [...]gram Assessment and Improvement System design for curriculum management in the [...]partment of Education. The system acc[...]mmodates and fac[...]ates assessing student p[...]ormance; reviewing and analyzing curric[...]a; and utilizing the results to plan, program[...], implement, and evaluate educational pro[...]ams and related se[...]ces in a systematic mann[...] to meet identified needs.

Along with the rationale for the [...]stem, this publication describes and discusses its component parts in detail. To imple[...]nt the system, Procedu[...] Handbooks will also be made available.

The Foundation Program Assessment and Improvement System is the result of collaborative efforts among school, district, state, university and community representatives in an effort to develop a curriculum management system responsive to concerns at all levels of the Department.

It is believed that the Foundation Program Assessment and Improvement System meets these needs.

Charles G. Clark
Superintendent

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ACKNOWLEDGMENTS

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During 1976-77, the Foundation Program Assessment and Improvement System went through a second major cycle of development. During this phase of work, which involved the total staff of the Office of Instructional Services, a revitalized Review and Dissemination Committee for the Foundation Program Assessment and Improvement System played a key developmental role. The members of this committee are as follows:

Mr. Claudio Suyat, Chairman	Deputy District Superintendent, Windward
Mr. George Yamamoto	District Superintendent, Central
Dr. Oei Maehara	Curriculum Specialist, Honolulu
Miss Aiko Otomo	Deputy District Superintendent, Leeward
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Mrs. Patsy Izumo	Director, Support Services Branch, Office of Library Services
Mrs. Patricia Ho	Teacher Representative
Mrs. Nancy Matsumura	Representative, School Advisory Council

Special gratitude is extended to Mr. Stanley Koki for his leadership and to the many individuals whose efforts have resulted in the creation of this system for curriculum management in the Department of Education.

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PART I
INTRODUCTION

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A. RATIONALE FOR THE FOUNDATION PROGRAM ASSESSMENT AND IMPROVEMENT SYSTEM

A management audit of the Department of Education conducted by the Legislative Auditor in 1973 revealed one of the Department's problem to be fragmented and uncoordinated assessment and curriculum improvement efforts. The audit recommended that the Department develop and implement a comprehensive curriculum management system which would improve instruction for students.

The following benefits expected from a sound curriculum management system provide the rationale for the Foundation Program Assessment and Improvement System:

1. The Department will be better able to periodically establish agreement with the public on important educational objectives;

2. The Department will be better able to measure and report to the public about how well Hawaii students are achieving the basic educational objectives;

3. The Department will be better able to use information on student achievement and the curriculum to plan for improvement of instruction throughout the State;

4. The Department will be better able to monitor and review existing programs from the perspective of current as well as future needs.

B. THE FOUNDATION PROGRAM

Two major documents guide educational activities in the State--The Master Plan for Public Education in Hawaii and The Foundation Program for the Public Schools in Hawaii.

The Master Plan provides eleven educational purposes for the State. The intent is to provide all students with equal opportunity in education through the establishment of overall guidelines and commitments of the Department.

The Foundation Program is based on the Master Plan and is the basis for curriculum improvement efforts within the Foundation Program Assessment and Improvement System.

The Foundation Program translates the Master Plan Purposes to 8 broad objectives. These include: (1) Basic Skills for Learning and Communication, (2) Positive Self-Concept, (3) Decision-Making and Problem-Solving Skills, (4) Independence in Learning, (5) Physical and Emotional Health, (6) Career Development, (7) Beliefs and Values, (8) Creative Potential and Aesthetic Sensitivity.

In addition to the objectives, the Foundation Program includes a flexible learning program for students consisting of four major parts:

1. The Academic Program

2. The Counseling Services and Guidance Program

3. The Student Activities Program and Services

4. The Administrative and Support Services Program

Following is a brief description of each:

The Academic Program

The purpose of the Academic Program is to equip each student with the knowledge, skills, attitudes, and values which one needs to live responsibly.

The Academic Program encompasses existing subject areas such as language arts, mathematics, physical education, science, health, social studies, art, music, foreign languages, agriculture, industrial-technical, industrial arts, home economics, and business-distributive education. Thematic concerns such as Career Education and Environmental Education cut across existing subject areas.

The Academic Program is person-centered and activity-oriented, with the needs of all students accommodated.

The Counseling Services and Guidance Program

The purposes of the Counseling Services and Guidance Program are (1) to assist the student in making self-directed and responsible decisions affecting the student's life, (2) to facilitate the development of student competencies in coping with personal and social demands, (3) to prevent the emergence of conditions and problems which may interfere with the student's full development, and (4) to provide remediation, as necessary, in order to minimize or correct the effects of handicapping conditions.

This portion of the Foundation Program includes planned individual and group guidance activities, as well as counselling services by professional school counselors for special needs of students who require individual help.

The Student Activities Program and Services

The purpose of the Student Activities Program and Services is to meet school-related interests and needs of students which cannot always be met in the regular classroom situation. The program provides a laboratory of activities for students which will enable them to: (1) learn how to serve as leaders and followers, (2) develop personal interests and talents, (3) develop personal and social relationships, and (4) develop as participating citizens in the total school, community, state, national, and world affairs.

The Student Activities Program and Services is that portion of the K-12 Curriculum which is normally beyond the regular class schedule. Each school strives to provide a range of activities according to student needs and available resources.

The Administrative and Support Services Program

The purpose of the Administrative and Support Services Program is to provide for a sound learning and teaching atmosphere in schools.

This is achieved through the allotment of material resources and certificated, classified, and para-professional personnel to schools. In addition, the program includes a range of auxiliary services such as school lunch, transportation, safety, custodial, clerical, repairs and maintenance, and community relations services.

C. DEFINITION OF TERMS

The words defined in this section are used in this publication with the following specialized meanings.

1.	Accountability	Determining and accepting responsibility; disclosing results.
2.	Assessment	Any procedure for gathering information or measuring achievement of objectives or competencies.
3.	Evaluation	The process of delineating, obtaining, and providing useful information for judging the worth, merit, or effectiveness of a program, activity, person, or entity.
4.	FPAIS Design	A document of intent within which are included the description of functions, components, and relationship of components of the Department of Education's curriculum management system.
5.	Non-Testing	The collecting of information through means other than Testing. Non-Testing provides information through such activities as special analytic studies, document review summaries, questionnaire or survey instruments, observation or attitude scales, interviews and on-site visitations.
6.	Objective	A statement of the end result, product, or condition desired, for the accomplishment of which a course of action is to be taken.
7.	Program	Planned combination of processes, content, personnel, facilities, equipment and supplies which operate together to accomplish common or related goals and objectives.
8.	Principle	A general guideline.
9.	System	A structure or formalized assembly of parts within which activities occur. The term includes "process" and recycling based on feedback.

10. Testing — The administering of an examination to measure ability, achievement, interest, or other traits.

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PART II

DESCRIPTION OF THE FOUNDATION PROGRAM ASSESSMENT AND IMPROVEMENT SYSTEM

A. SCOPE, AIM AND FUNCTIONS OF THE CURRICULUM MANAGEMENT SYSTEM

Sound curriculum management is a joint responsibility. The curriculum management system described here was developed to assist State, District, and School personnel to manage the curriculum effectively.

The Foundation Program Assessment and Improvement System accommodates and facilities learner assessments, curriculum review and analysis and instructional improvements within the Foundation Program. It aims to facilitate student achievement through systematic assessments and improvements of the Foundation Program.

The functions of the system are to:

1. Provide a management framework for systematically assessing, planning, developing, implementing and monitoring changes to improve the Foundation Program.

2. Serve as a basis for accountability for the Department.

3. Ensure involvement of, and communication with, the public on curriculum matters.

Figure 1 illustrates the design of the system.

Figure 1. Design of Foundation Program Assessment and Improvement System
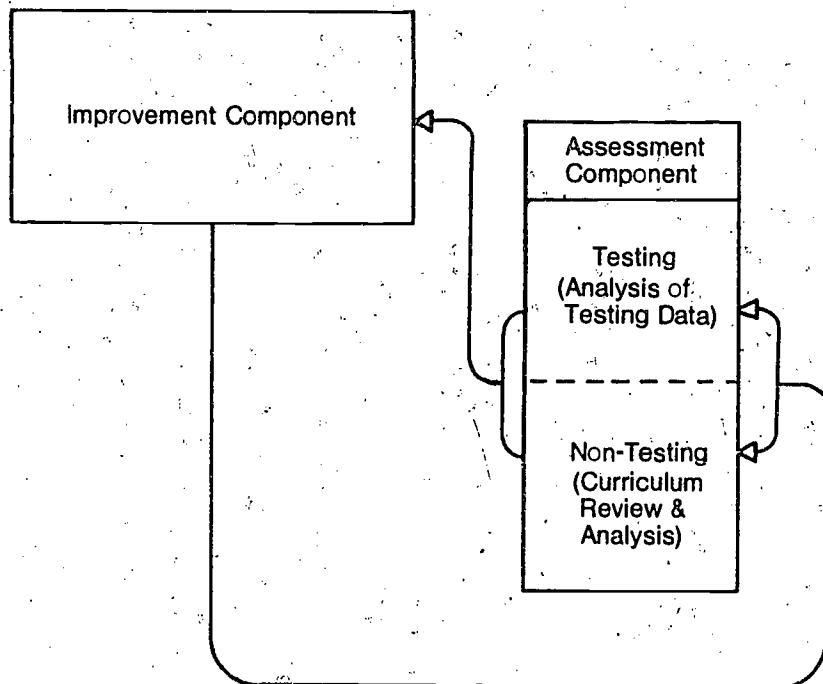
B. THE COMPONENTS OF THE SYSTEM

1. The Assessment Component

a. Principles to Guide Assessment

The following fundamental principles of assessment apply to Testing and Non-Testing conducted by any level of the Department -- the School, District or State:

Principle of Conducting Assessment for a Purpose

Assessment is not an end, but a means of providing information for educational decision-making about learner needs, program effectiveness and program improvement.

Principle of Basing Assessment on Attainment of Objectives

Assessment should be based on clearly stated objectives which provide a basis for evaluating programs and for measuring growth in learner knowledge, skills and attitudes.

Principle of Providing for Periodic Assessment

Due to their complexity, dynamics and continual evolvement and development, educational programs must be monitored and regularly adjusted. Effective programs require periodic assessment for movement toward meeting objectives and as a basis for improvement. Gradual improvement of educational programs rather than sporadic total replacement is recognized as desirable.

b. Description of the Assessment Component

Assessment is defined broadly as any procedure for gathering information or measuring achievement of objectives or competencies. The Assessment Component of the Foundation Program Assessment and Improvement System is designed to systematically collect information to be used for improving the curriculum. The component consists of (1) Testing and (2) Non-Testing. For both of these areas, a critical function is the analysis of information collected through assessment activities.

The Non-Testing portion assists in assembling and using a wide base of information in addition to test data to provide the basis for curriculum improvement efforts. A central Non-Testing activity is the review of the existing curriculum and consideration of all curriculum-related concerns.

Major Testing and Non-Testing activities are identified in the following flow chart. The arrows in the center and solid line to the left indicate the logical flow of activities; the broken line to the right indicates feedback. On the basis of feedback, the activities may be combined, undertaken in a different sequence, or modified and adjusted in various ways.

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Figure 2. Design for Assessment


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┌─────────────┐
│ Determine   │◁────▷
│ Assessment  │
│ Needs       │
└─────────────┘
      │
      ▽
┌─────────────┐
│ Determine   │◁────▷
│ Assess-     │
│ ment        │
│ Parameters  │
└─────────────┘
      │
      ▽
┌─────────────┐
│ Obtain Data │◁────▷
│ Collection  │
│ Instruments │
└─────────────┘
      │
      ▽
┌─────────────┐
│ Determine   │◁────▷
│ Data        │
│ Collection  │
│ Procedures  │
└─────────────┘
      │
      ▽
┌─────────────┐
│ Determine   │◁────▷
│ Reporting   │
│ Requirements│
└─────────────┘
      │
      ▽
┌─────────────┐
│ Determine   │◁────▷
│ Data        │
│ Analysis    │
│ Procedures  │
└─────────────┘
      │
      ▽
┌─────────────┐
│ Determine   │◁────▷
│ Data        │
│ Synthesis & │
│ Presentation│
│ Procedures  │
└─────────────┘
      │
      ▽
┌─────────────┐
│ Collect Data│◁────▷
└─────────────┘
      │
      ▽
┌─────────────┐       ┌──────────────┐
│ Analyze Data│◁────▷─│ Improvement  │
└─────────────┘       │ Component    │
                      └──────────────┘
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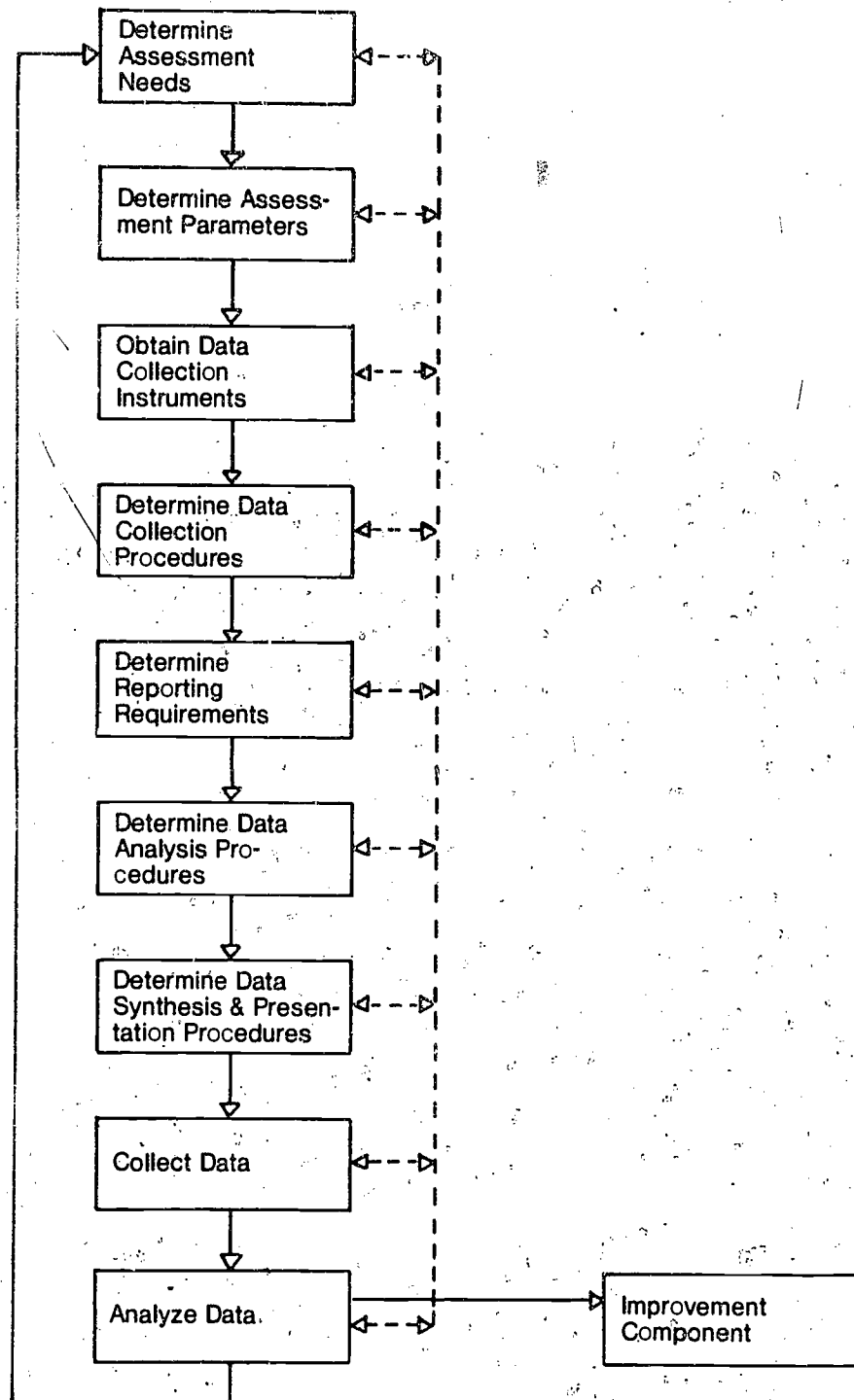
Determining assessment needs refers to establishing goals, requirements and rationale for Testing/Non-Testing

Determining assessment parameters refers to establishing the scope of Testing/Non-Testing. This includes identifying available resources in relation to Testing/Non-Testing goals, determining the priority of Testing/Non-Testing goals, identifying Testing/Non-Testing areas, determining the target group(s) and optimum time for Testing/Non-Testing.

Obtaining appropriate data collection instruments includes deciding on which Testing/Non-Testing instruments are required, examining available instruments, and developing new instruments as needed.

Determining data collection procedures consists of establishing plans and procedures for sampling and the administration of Testing/Non-Testing instruments. It also includes procedures for scoring, editing and training of personnel involved in the administration of Testing/Non-Testing instruments.

Determining reporting requirements refers to identifying the recipients of the Testing/Non-Testing information, the specific information required for these publics and the reporting strategies and media format to be used.

Determining data analysis procedures refers to establishing methodologies (analytic models) for appropriately analyzing and interpreting the data collected. For Testing, it includes identifying statistical treatments to be used.

Determining data synthesis and presentation procedures includes deciding on the report content, data comparisons, and display format as appropriate for the data collected.

2. The Improvement Component

a. Principles to Guide Curriculum Improvement

The Foundation Program Assessment and Improvement System is based on nine principles relating to curriculum change in the Department. These principles are discussed in the following section:

Principle of Linkage with Available Information

Program improvements should be based on adequate information, whether routinely available or newly acquired. Testing and/Non-Testing provide important sources of information.

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The Improvement Component is intended to make full use of a wide base of information, both existing and newly acquired, in order to improve the curriculum.

Principle of Multiple Initiatives and Shared Responsibility

Curriculum improvement, as a shared responsibility in the Department, is initiated at the School, District and State levels, and the wide range of improvement efforts, initiatives, strengths, and points of view are encouraged.

Coordination and change strategies are established to ensure systematic progress toward statewide goals and commitments, as well as conservation of staff time and energies.

Principle of Improvement as Changed Behavior

The ultimate end of program improvements is to achieve positive changes in learners. To reach this objective, the behavior of those who work with students must also undergo change. Changing behavior takes time and must be carefully nurtured.

Desired behavioral changes can be stimulated by consultation and involvement to secure individual commitment; clarification of roles and responsibilities; control of the demands for change made on individuals at a given time; and support to individuals throughout the change process.

Principle of Incremental Change

Change processes within the Department must be orderly, not abrupt or disruptive, and without unreasonable demands on personnel.

The integrity of existing programs and their present organizations are recognized, and revitalization is to be on a step-by-step basis over a period of time.

Principle of Communication, Consultation and Involvement

Successful change must include communication, consultation and involvement of those involved, and substantial grassroots participation is necessary to stimulate statewide changes.

A steady flow of communication throughout the school system and the public is ensured by continuous review, reactions and contributions of ideas from all sectors of the Department and community.

Principle of Resource Commitments According to Established Priorities

For change to be realized, resource requirements of possible change options must be clearly understood. In addition, before a particular change option is selected for implementation, it is essential to secure administrative commitment of necessary resources.

Realistic improvement activities are ensured as specific tasks and resource requirements are delineated for each.

Principle of Utilizing Personnel Expertise to the Fullest

Within a large organization, many types of expertise among personnel are represented. To achieve goals, it is desirable to capitalize on whatever specialties are available.

Identifying and maximizing use of the special talents, expertise and points of view of staff members throughout the Department are emphasized.

Principle of Fully Utilizing External Resources

Agencies outside of the Department must be used as much as possible to derive the greatest benefit to students.

Utilization of colleges and universities, community resources, research and development centers, professional organizations and other agencies and specialized resources outside of the Department is stressed. Final responsibility remains with the Department, however.
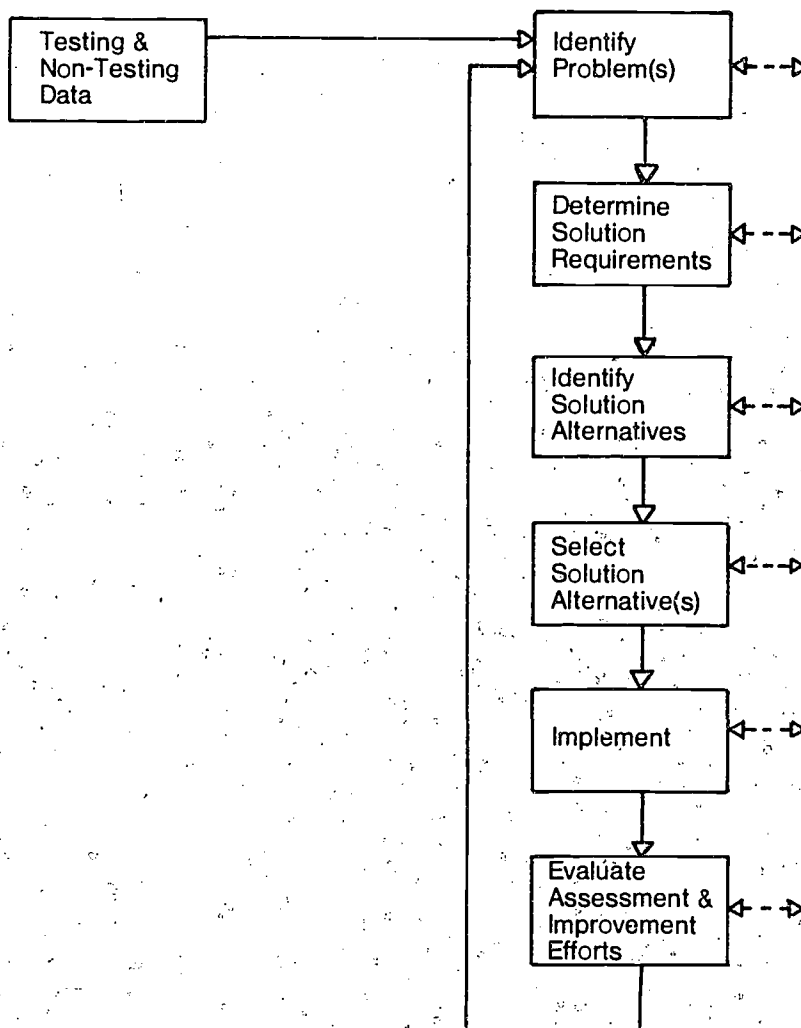
Principle of Accountability

The Department must answer to many publics. To be accountable, it must accept responsibility for planning, conducting and evaluating educational activities systematically and responsibly, and disclosing its results to the public.

b.   Description of the Improvement Component

1)   Design of Improvement Component

Major improvement activities are identified in the figure below.

Figure 3.   Design for Curriculum Improvement

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┌──────────────┐                    ┌──────────────┐
│ Testing &    │───────────────────▷│ Identify     │◁ ─ ─▷
│ Non-Testing  │                  ┌─▷│ Problem(s)   │
│ Data         │                  │  └──────┬───────┘
└──────────────┘                  │         │
                                  │         ▽
                                  │  ┌──────────────┐
                                  │  │ Determine    │◁ ─ ─▷
                                  │  │ Solution     │
                                  │  │ Requirements │
                                  │  └──────┬───────┘
                                  │         │
                                  │         ▽
                                  │  ┌──────────────┐
                                  │  │ Identify     │◁ ─ ─▷
                                  │  │ Solution     │
                                  │  │ Alternatives │
                                  │  └──────┬───────┘
                                  │         │
                                  │         ▽
                                  │  ┌──────────────┐
                                  │  │ Select       │◁ ─ ─▷
                                  │  │ Solution     │
                                  │  │ Alternative(s)│
                                  │  └──────┬───────┘
                                  │         │
                                  │         ▽
                                  │  ┌──────────────┐
                                  │  │ Implement    │◁ ─ ─▷
                                  │  └──────┬───────┘
                                  │         │
                                  │         ▽
                                  │  ┌──────────────┐
                                  │  │ Evaluate     │
                                  │  │ Assessment & │◁ ─ ─▷
                                  │  │ Improvement  │
                                  │  │ Efforts      │
                                  │  └──────────────┘
                                  └─────────
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To improve the curriculum, problems must be identified clearly based on an adequate base of information.

Determining solution requirements refers to the consideration of all dimensions relevant to a problem (such as the political, social or emotional contexts) identification and selection of pertinent factors, formulation of criteria based on the factors selected, and the prioritization of the criteria identified.

Identifying solution alternatives refers to the search for and array of the alternatives for solving a problem.

Selecting solution alternative(s) refers to the choice of the most sensible alternative from among the possible alternatives based on the identified solution requirements. The most sensible alternative sometimes is a "mixed solution" or combinations of various alternatives.

After the solution alternative has been implemented, it is necessary to evaluate the worth and effectiveness of assessment and improvement efforts.

Figure 4 which follows indicates the flow of activities and relationship between the Assessment Component and Improvement Component of the Foundation Program Assessment and Improvement System.

Figure 4.   Flow of Activities and Relationship Between the Assessment and Improvement Components
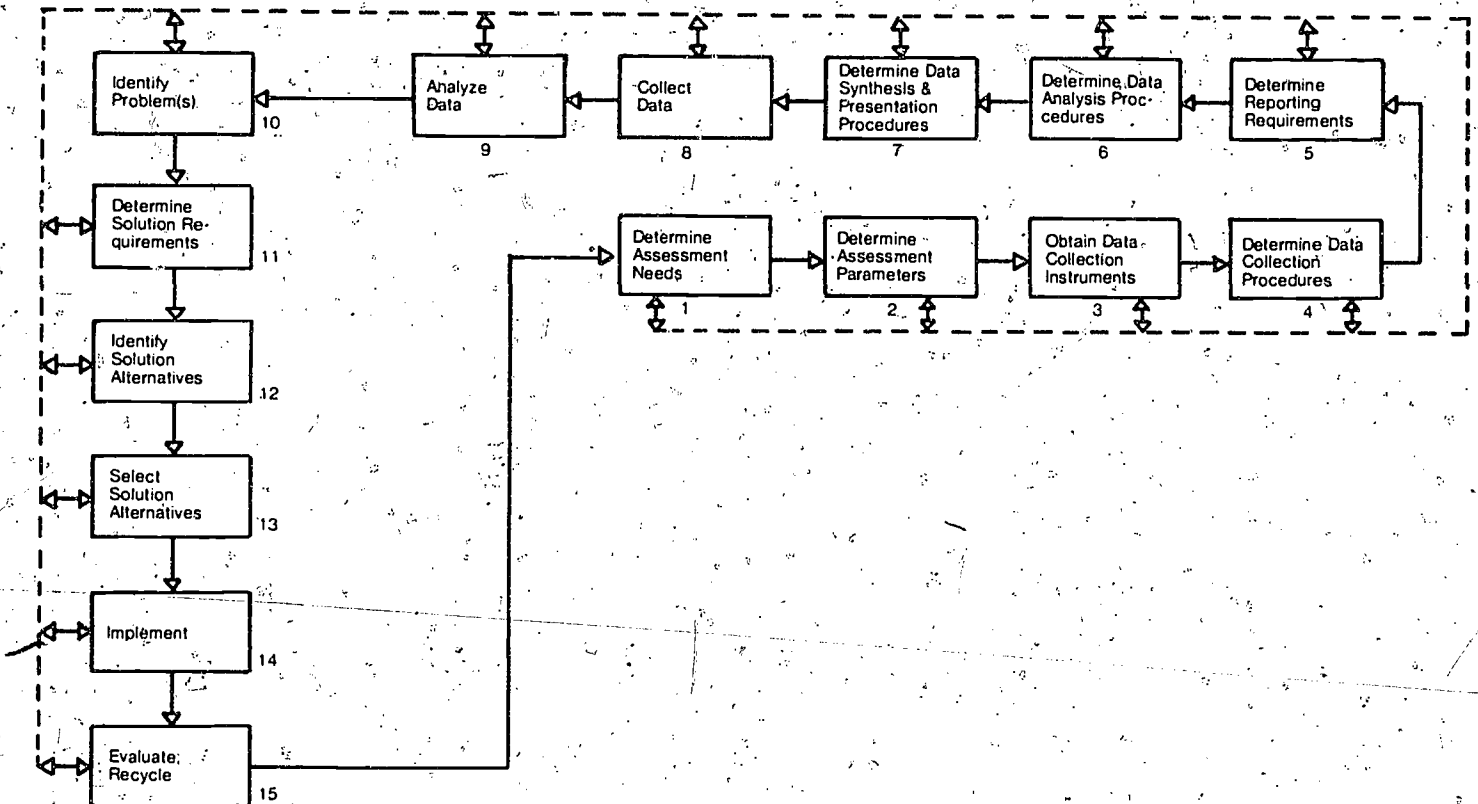
2) **Strategies – School, District, State**

The Improvement Component systematizes curriculum improvement efforts regardless of the level at which they occur. To foster curriculum improvement efforts throughout the Department, three change strategies have been developed. These strategies represent School, District, and State procedures for achieving curriculum improvements.

The State-Initiated Strategy for statewide delivery of an improvement effort is contained in Chart I which follows. The District-Initiated Strategy is contained in Chart II. The School-Initiated Strategy is contained in Chart III. These strategies are explained in greater detail in a companion Procedural Handbook.

Essential tasks to be carried out in each Improvement Strategy are indicated in Columns A and B to the left of the charts. Major Tasks in Column A are expressed in terminology related to the Planning, Programming, Budgeting System's analysis format to represent the interface of the Improvement Strategies with the PPBS. The Key Stages identified in Column B refer to the same tasks and uses terms which are more familiar to curriculum developers.

Column C, D and E of the charts contain the State, District and School level functions and roles in the respective strategies. It should be remembered that these functions and roles change depending upon which strategy is being employed.

Column F records key approval points and agencies throughout the various stages of the strategy.

Column G lists resource agencies and services that may be profitably used in carrying out the strategy. The listing is suggestive only. Unlike the other columns on the chart, it is not organized according to a time sequence.

In studying the charts for the first time, it is recommended that the reader first work his or her way down Column B to get a sense of the unfolding stages of the entire strategy before taking up in sequence the horizontal ranges relating functions, roles, and approval points to the Key Stages with Column B.

While the three strategies differ on the basis of where the change activity is initiated, each level of the Department plays an important role in each strategy. The cooperation and coordination required of all three levels, as well as their reliance on an identical improvement design, underscore the essential unity of the change processes reflected in the Foundation Program Assessment and Improvement System.

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I. State Level Strategy: Full Statewide Delivery of Program Option

A. Major Tasks in Change Process	B. Key Stages	C. State Level Functions and Roles	D. District Level Functions and Roles
Problem Identification and Analysis Development and Analysis of Solution Alternatives Selection of Alternative	**B1** Determination of high priority statewide needs in program area Identification of promising programs to meet needs / Field trial, analysis of promising programs Identification, analysis of promising program ideas capable of development (Routine, ongoing process) Comparison of relevant program alternatives on basis of resource requirements and predicted benefits Preparation and presentation of recommended alternative(s) (degree of development work required, major phases, time frame, personnel requirements, preliminary budgets, estimated capabilities for meeting needs, etc.) Selection of alternative(s) for implementation	**C1** State Level Personnel: Plan, coordinate (a) statewide program area need analysis and (b) statewide program review, analysis recommendation process. (Full utilization to be made of statewide work groups; associated technical staff; other appropriate resource personnel and agencies; as well as all necessary consultation and input from school, district levels.)	**D1** District Level Personnel: Provide representation in statewide work groups. Provide full consultation and input to state level in need analysis, program review process. Arrange for school level consultation and input into need analysis, program review process.
Implementation	**B2 (b)** If no design/development required: Preparation of detailed installation plan (stages; time frame; personnel requirements, roles; logistics; inservice; field service; evaluation; budget, etc.) ------ OR ------ **B2 (b)** If design/development required: Consignment to appropriate agency Preparation of detailed design/development plan. Execution of needed design/development tasks (design validation, materials crafting, field test/revision cycles, etc.) Preparation of detailed installation plan (see B2 (a) above	**C2 (a)** Prepare installation plan (with full district consultation and utilization of needed resource agencies). Provide district level personnel (including teacher leadership group) with thorough orientation in installation plan and procedures. ------ OR ------ **C2 (b)** Recommend and arrange project consignment to appropriate agency. Maintain close liaison with project; consult and advise; monitor management system reports; disseminate information to district and school levels. Assist in planning and arranging field trials in schools. Act as joint planners of installation plan (utilizing full district level consultation.) Provide district level personnel (including teacher leadership group) with thorough orientation in installation plan and procedures.	**D2 (a)** Provide needed consultation and information to state level during preparation of installation plan. Arrange for school level reaction and input into installation plan. Identify teacher leadership group to assist in district-wide installation. Provide school level personnel with thorough orientation in installation plan and procedures. Assist school level in orientation of parents to installation plan. ------ OR ------ **D2 (b)** Coordinate district school involvement in project field tests. Assist in orientation of school level personnel involved in project field tests. Provide needed consultation and information to state and project personnel during preparation of installation plan. Arrange for school level reaction and input to installation plan. Identify teacher leadership group to assist in district-wide installation plan and procedure. Provide school level personnel with thorough orientation in installation plan and procedure. Assist school level in orientation of parents to installation plan.
Evaluation Revision	**B3** First phase installation. Analysis of first stage feedback; modification, plan adjustments as needed Remaining installation stages and adjustments.	**C3** Provide statewide leadership and coordination for all phases of installation process (utilizing full district level consultation and needed resource agencies.) Provide needed consultation and direction to district level personnel and district teacher leadership group. Monitor district installation progress and prepare management system reports. Provide installation progress information to district level and schools. Coordinate any needed installation plan revision.	**D3** Lead and coordinate installation process in respective districts. Assist (with teacher leadership group) in installation in-service program. Provide needed consultation to state level during installation process. Provide (with teacher leadership group) needed field consultation and assistance in schools. Arrange for school level reaction and input regarding installation process. Provide periodic progress reports to state level for management system. Assist school level to keep parents informed of installation progress.
Re-Cycle	**B4** Operation of continuing evaluation and quality control systems. Re-study if program ceases to meet needs	**C4** Arrange planning and implementation of continuing program quality control system (with full district level consultation and utilization of needed resource agencies). Monitor the program through periodic reports from district level; coordinate needed adjustments. Recommend re-study if program no longer seems to meet statewide needs.	**D4** Provide needed consultation to state level concerning quality control system. Monitor program in district; provide periodic status reports to state levels. Recommend re-study if program no longer seems to meet district needs.

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E. School Level Functions and Roles	F. Key Approval Points and Agencies	G. Resource Agencies and Services (Within and External to DOE)
E1 School Level Personnel: Provide representation in statewide work groups. Provide full consultation and input to district level in need analysis, program review process.	**F1** Approval of recommended Alternative(s).	Resources, agencies, systems; groups and individuals representing educational interests, areas of expertise such as: Professional literature Information Clearinghouse Systems Professional organizations State Library System Teacher Assist Center Curriculum resource collection throughout the state Community and Support Services Branch
E2 (a) Provide needed consultation and information to district level personnel during preparation of installation plan. Assist district level personnel in identification of teacher leadership group members for installation process. Orient parents and students to installation plan.	**F2 (a)** Detailed implementation plan Approval.	Evaluation Section (Superintendent's Office) Curriculum Research and Development Group College of Education College of Continuing Education Other University Departments and Institutes
E2 (b) Provide field test sites and pilot teaching. Furnish needed feedback data to project personnel. Provide needed consultation and information to district level personnel during preparation of installation plan. Assist district level personnel in identification of teacher leadership group members for installation process. Orient parents and students to installation plan.	**F2 (b)** Consignment to particular agency approval. Detailed design/development plan approval. Interim development approval point(s). Detailed implementation plan approval.	Regional Laboratories National curriculum development and/or evaluation project centers. Publishers Government agencies Museums, galleries Educational activities of business, labor, civic, public interest groups, etc.
E3 Participate in installation in-service program. Install, teach program in schools. Adapt program to fit particular school contexts and needs. Provide needed consultation and information to district level personnel during installation process. Keep parents and students informed about installation progress.	**F3** Implementation plan modification approval. Adoption.	
E4 Provide needed consultation to district level concerning quality control system. Provide school program status information as needed in quality control system. end re-study if program no longer seems to ool needs.		

A. MAJOR TASKS IN CHANGE PROCESS		C. DISTRICT LEVEL FUNCTIONS AND ROLES
	B1	**C1** District Level Personnel:
Program identification and Analysis	(a) Determine special district need(s) (within framework of Master Plan, Foundation Program, State Program Guides and other statements of statewide intent and priority.)	Take initiative in identifying special district needs deserving coordinated district study and action.
	(b) Analyze need(s) systematically.	Notify state level of intent to undertake district initiated improvement effort in particular area.
Development and Analysis of Solution Alternatives	(c) Identify relevant alternatives for meeting need(s).	Invite school level participation in anticipated improvement effort.
Selection of Alternative	(d) Compare alternatives on bases of their resource requirements and predicted benefits.	Organize and convene interschool work group for further analysis of problem area and consideration of improvement alternatives.
	(e) Select alternative for implementation.	Provide work group with available information concerning needs and existing programs or new program ideas related to needs.
		Coordinate special studies, data gathering or procurement of needed committee materials as necessary.
		Suggest specialized resource agencies for consultation, assistance. Coordinate contact with such.
		Request assistance of appropriate state level personnel at any stage of need identification and analysis, program review and alternative identification and selection.
		Assist work group throughout in refining and agreeing on selection of best improvement alternative.
		Forward selected alternative through District Superintendent to State Superintendent for review (utilizing form PMS-1). (Projects requiring special state or federal funds require tentative approval by the State Superintendent before preparation of detailed improvement project plan.)
	B2	**C2**
Implementation	(f) Prepare detailed improvement project plan (phases; time frame; logistics; evaluation plan; budget, etc.)	Assume responsibility (with full consultation and involvement of school level personnel) for preparing detailed improvement project plan. If project requires special funds and/or has been identified as having statewide significance, forward plan through District Superintendent to State Superintendent (utilizing PMS format).
	(g)1 If program alternative is in existence: Try out, evaluate. Modify, adapt as needed. **OR**	
Evaluation		Coordinate the implementation of all phases and elements of the improvement project plan.
	(g)2 If development indicated: Design, develop new program. Try out, evaluate. Modify, adapt as needed.	Arrange for utilization of specialized resource agencies as needed. Request assistance of appropriate state level personnel at any stage.
Revision		
	(h) Adopt (or reject) program. (If latter, re-cycle process to B1 above.)	Provide full district-wide communication regarding nature and progress of improvement project.
		Reconvene school level work group regularly for progress review and advice.
Re-Cycle	(i) Review status and effectiveness at intervals. Modify further if needed. If program ceases to meet needs, re-cycle process to B1 above.	For projects utilizing special state or federal funds and/or identified as having statewide significance, provide reports to state level at intervals and in format required by PMS. For projects not so categorized provide brief yearly progress reports to the State Superintendent for information.
		Coordinate subsequent reviews of program status and effectiveness.
		Recommend restudy if program no longer seems to meet needs.

D. SCHOOL LEVEL FUNCTIONS AND ROLES	E. STATE LEVEL FUNCTIONS AND ROLES	F. KEY APPROVAL POINTS AND AGENCIES	G. RESOURCE AGENCIES AND SERVICES (WITHIN AND EXTERNAL TO DOE)
D1 School Level Personnel: Participate and provide representation in work group(s) for coordinated improvement effort in district. Through work groups contribute at all points to need identification and analysis, program review and alternative identification and selection. Provide consultation and advice to work group members throughout process. Cooperate in surveys and supply data requested by the district work group. Orient parents and students to intiation and progress of effort.	**E1** State Level Personnel: Disseminate information about new program developments—within state, national, international—to district and school levels. Select, procure, distribute and update collections of curriculum materials in respective program areas to be maintained at central point in each district. Provide needed consultation and assistance to district level in process of need identification and analysis, program review and alternative identification and selection. Facilitate contacts with needed external resource agencies in state or nation.	**F1** District Superintendent approves initiation of study, analysis. District Superintendent tentatively approves selected improvement alternative. State Superintendent tentatively approves alternative requiring special state or federal funds and authorizes preparation of detailed plan. State Superintendent identifies project having statewide significance.	Resources, agencies, systems; groups and individuals representing educational interests, areas of expertise such as: Professional literature Information Clearinghouse Systems Professional organizations State Library System Teacher Assist Center Curriculum resource collections throughout the state Community and Support Services Branch Evaluation Section (Superintendent's Office) Curriculum Research and Development Group College of Education College of Continuing Education Other University Departments and Institutes
D2 Continue to consult, review, advise and otherwise assist in implementation, evaluation and revision. Implement all phases of project plan in the schools (with coordination from district level and assistance of appropriate resource agencies and personnel.) Adapt, augment, personalize program to fit particular school needs and contexts. Participate in recommended inservice included in project plan. Evaluate phases of program and/or provide specified data to project evaluators. Provide orientation on new program to students, parents. Cooperate in subsequent reviews of program status and effectiveness. Recommend restudy if program no longer seems to meet needs.	**E2** Study detailed improvement project plan. Suggest modifications or additions, if any, from state perspective. Provide needed consultation and assistance to district level in improvement project implementation, evaluation and revision. Facilitate contacts with needed external resource agencies in state or nation. Examine periodic progress reports of the project. Initiate consultation if review seems to warrant. Consult in any subsequent restudy resulting from program no longer meeting needs, especially in those projects requiring special funds or having definite statewide interest.	**F2** For detailed project plans requiring no special funds, approval by District Superintendent, State Superintendent, Board of Education; (inclusion in Legislative Budget request). Interim approval points as per project plan. For adoption of program within current operating expenses, approval by the District Superintendent. For adoption of program which has required or will require special funds, approval by District Superintendent, State Superintendent, Board of Education; (inclusion in Legislative Budget request).	Regional Laboratories National curriculum development and/or evaluation project centers Publishers Government agencies Museum, galleries Educational activities, business, labor, civic, public interest groups, etc.

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A. MAJOR TASKS IN CHANGE PROCESS	B. KEY STAGES	C. SCHOOL LEVEL FUNCTIONS AND ROLES
Problem Identification and Analysis Development and Analysis of Solution Alternatives Selection of Alternative	**B1** (a) Determine special school need(s) (within framework of Master Plan, Foundation Program, State Program Guides and other statements of statewide intent and priority.) (b) Analyze need(s) systematically. (c) Identify relevant alternatives for meeting need(s). (d) Compare alternatives on bases of their resource requirements and predicted benefits. (e) Select alternative for implementation.	**C1** School Level Personnel: Exercise major initiative and control in carrying out all major tasks and key steps indicated in columns A and B. In addition the following: Notify district level of intent to undertake school initiated improvement effort in particular area. Request asistance from district/state levels or external resource agenceis to help identify and analyze needs, develop relevant alternatives and select alternative for implementation. Forward selected alternative to District Superintendent for review (utilizing form PMS 1) (Projects requiring special state or federal funds require approval by the District Superintendent and the State Superintendent before preparation of detailed improvement project plan.)
Implementation Evaluation Revision Re-Cycle	**B2** (f) Prepare detailed improvement plan with budget. (g)1 If program alternative is in existence: Try out, evaluate. Modify, adapt as needed. OR (g)2 If development indicated: Design, develop new program. Try out, evaluate. Modify, adapt as needed. (h) Adopt (or reject) program. (If latter, re-cycle process to B1 above.) (i) Review status and effectiveness at intervals. Modify further if needed. If program ceases to meet needs, re-cycle process to B1 above.	**C2** If project requires special state or federal funds and/or has been identified as having statewide significance forward detailed improvement plan through District Superintendent to State Superintendent (utilizing PMS format). For projects utilizing special state or federal funds and/or identified as having statewide significance; provide reports to state level through District Superintendent at intervals and in format required by PMS. For projects not so categorized, provide brief yearly progress reports to district level. Request assistance from district/state levels or external resource agencies to help in installation or development/installation phases or subsequent review of status and effectiveness. If program ceases to meet needs, re-cycle improvement process to C1 above.

D. DISTRICT LEVEL FUNCTIONS AND ROLES	E. STATE LEVEL FUNCTIONS AND ROLES	F. KEY APPROVAL POINTS AND AGENCIES	G. RESOURCE AGENCIES AND SERVICES (WITHIN AND EXTERNAL TO DOE)
D1. District Level Personnel: Provide schools with information regarding new program developments including general information on a routine basis and specially prepared bodies of information to help particular school improvement efforts. Examine school reports of improvement effort intent. Include these yearly compilation of district improvement projects and forward to State Superintendent. Provide consultation services and otherwise assist school personnel to identify and analyze needs, develop relevant alternatives and select alternative for implementation. Maintain central collections of curriculum materials provided by state for use of school personnel in improvement studies.	**E1** State Level Personnel: Disseminate information about new program developments—within state, national, international—to district and school level. Provide needed consultation and assistance to district personnel working with schools to identify and analyze needs, develop relevant alternatives and select alternative for implementation. Select, procure, distribute and update collections of curriculum materials maintained in districts for use by school personnel in improvement studies.	**F1** School Principal approves initiation of study, analysis. School Principal tentatively approves selected improvement alternative. District Superintendent and State Superintendent tentatively approve alternative requiring special state or federal funds. State Superintendent identifies project having statewide significance.	Resources, agencies, systems, groups and individuals representing educational interests, areas or expertise such as: Professional literature Information Clearinghouse Systems Professional organizations State Library Systems Teacher Assist Center Curriculum resource collections throughout the state. Community and Support Services Branch Evaluation Section (Superintendent's Office) Curriculum Research and Development Group College of Education College of Continuing Education Other University Departments and Institutes
D2 Provide all needed assistance in preparing detailed improvement project plan where special funds are required and/or improvement project is of statewide significance. If state level approval is secured, provide all needed assistance in preparing subsequent reports required by PMS. Examine yearly reports on status of school improvement effort. Respond as needed. Provide consultation services and otherwise assist school personnel to install or to develop and install new programs. Assist in subsequent review of status, effectiveness of program. Routinely compile aggregate information on ordinary school level improvement efforts in district (number, type, scale, etc.) and provide periodically to state level.	**E2** Provide needed consultation to district personnel working on detailed improvement project plan where special funds are required and/or improvement project has statewide significance. Review subsequent reports required by improvement project management system. Respond as needed. Provide needed consultation and assistance to district personnel working with schools to install or develop and install new programs. Routinely compile information on school level improvement efforts statewide, providing periodic summary reports to appropriate authorities.	**F2** For detailed project plan requiring no special funds, approval by School Principal. For detailed project plan requiring special funds, approval by District Superintendent, State Superintendent, Board of Education; inclusion in Legislative Budget request. Interim approval points as per project plan. For adoption of program within current operating expenses, approval by School Principal. For adoption of program which has required or will require special funds, approval by District Superintendent, State Superintendent, Board of Education; (inclusion in Legislative Budget request.)	Regional Laboratories National curriculum development and/or evaluation project centers Publishers Government agencies Museums, galleries Educational activities of business, labor, civic, public interest groups, etc.

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3) Structure and Functions
The following organizational groups serve various purposes related to the improvement of the curriculum:

Review and Dissemination

Assists in providing for and coordinating curriculum improvement efforts. It determines and recommends the types of working groups to be organized, their major tasks, and general deadlines. Some possible types of working groups are the following:

Curriculum

Will analyze programs and recommend changes in each curriculum area -- i.e., social studies, language arts, math, science, art, music, foreign languages, health, and the various areas dealing with the practical arts and vocational-technical education.

Thematic

Will perform functions similar to Curriculum groups in cross-subject topics or themes such as values education, career education, and environmental education.

Special Purpose

Will analyze and recommend improvements in other areas such as graduation requirements, school scheduling, inservice, early childhood education, the gifted and talented, and other target areas.

Each working group is encouraged to proceed through a work cycle consisting of the following phases:

Phase 1. Assemble Data, Review and Analyze

Study all (DOE) documents related to subject area, Foundation Program, related subject areas;

Study all data related to studies offered; studies taken by pupils; student success, and the like;

Study all Needs Assessment data:

Study all curriculum theories and program models on the national, international, and Hawaiian scenes;

Visit schools, talk with teachers, administrators, counselors;

Invite testimony and criticism from educators, parents, and other citizens on the following areas (partial):

the present definition and scope of the subject field, its need for broadening and change;

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present support to the subject area, present teacher training (in-service and pre-service); curriculum materials; funds; evaluative support;

the results of the program in such terms as teacher satisfaction and teacher development; student success; student satisfaction.

Phase 2. Recommend

Formulate curriculum improvement recommendations, including development of guides and instructional materials, recommendations for curriculum research and development efforts, recommendations concerning coordination of effort with the other subject areas.

Phase 3. Communicate

Discuss the recommendations with all concerned.

Obtain approval from appropriate decision-maker(s).

Disseminate information to appropriate audiences.