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The final 1970 report of a 3-part study on regional education services focuses on a unit for (1) planning cooperative educational programs in terms of financial considerations, resource allocations, program operation, governance, and roles relative to operation; (2) making provisions for evaluation of the regional cooperative; (3) providing for change and innovation in the cooperative; and (4) evaluating the unit using a 4-phase evaluation design. A 10-item bibliography, 8 figures, and 1 appendix are included. (MJB)

## Cooperative Research With Schools

A BASIC PLANNING AND EVALUATION MODEL FOR COOPERATION

IN PROVIDING REGIONAL EDUCATION SERVICES

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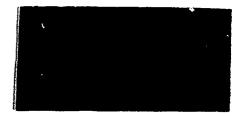
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1970





#### Preface

This part of the Study on Regional Education Services was made possible through a Title V, E.S.E.A. grant awarded to the California Area School District and support from the Region C Educational Development Center, The Regional Instructional Materials Center and the Appalachia Education Laboratory.

#### BASIC PLANNING AND EVALUATION MODEL FOR COOPERATION IN PROVIDING REGIONAL EDUCATION SERVICES

Education in the United States traditionally has been a State function with governance of education controlled by local boards of education.

Each school unit was a self-contained encity providing the full range of services that it could afford or that its clientele required. In recent years, demands for more services from local schools are generating new concepts in organization for education. Many of these concepts are predicated upon notions of regional cooperation rather than totally local autonomy.

An early thrust for cooperative activity in education came from the school study council movement started in the late 1940's by Dr. Paul Mort at Teacher's College, Columbia University. A wide variety of cooperative activities has been developed in education since that time; Title III of the Elementary and Secondary Education Act of 1965 (ESEA) provided more incentive for school districts to cooperate to improve education. Various intermediate units, boards of cooperative services, and structures for shared services have stressed cooperation and expanded services in education. Recently, the development of educational cooperatives has been viewed as one means to improve education in Appalachia. This present model has been developed from an array of concepts for cooperation found in the literature.

#### Introduction

An initial assumption of this model is that the basic <u>idea</u> of cooperative action in education is sound and generally accepted; therefore, a long rationale does not need to be developed as part of this document. The general concept or framework of an educational cooperative and a basic



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definition are included in the following material quoted from <u>The Educational Cooperative</u>: <u>Rationale Administration</u>, <u>Implementation</u>. (Although the definition pertains specifically to cooperatives in Appalachia, it is broad enough to relate generally to cooperative action in education.)

This program addresses itself to the problems related to the locus of change -- small schools and school districts, inadequate financial and human resources, and distance-time factors -- and attempts to provide a structure and process by which the inventions of change can make effective long-term contributions to the education of children and youth.

The cooperative is an aggregation of people, ideas, money, and potential. Its organization is a confederation of local school districts which in concert with a state department of education and a local college or university voluntarily bind themselves logether to increase their capacity through a joint effort . . .

The establishment of the cooperative is based on the assumption that 1) the ratio of needs to resources will likely remain unfavorable; 2) educational need will continue to be greater in Appalachia than in the nation as a whole; 3) local school districts will continue to serve as the legal agencies for conducting public education; . . 4) any plan for improving educational accessibility must deal effectively with an educational base structure which is essentially a closed system functioning with inadequate resources. . .

In summary, the concept of Educational Cooperative holds that education needs new directions and that the design for the new directions must begin with its basic structure. Further, it is assumed that only through a dramatic rearrangement of relationships among school districts, administrators, classroom teachers, boards of education, and lay citizens can a change in structure be achieved.

An Intermediate Unit to foster and encourage regional cooperative action in education is a form of educational cooperative and contains basic elements of cooperation; one of the most important being that participants will voluntarily relinquish some decision-making prerogatives



<sup>1</sup> The Educational Cooperative: Rationale, Administration, Implementation. Appalachia Educational Laboratory, Inc., Charleston, West Virginia, June, 1969. Preface to the Draft Copy.

in exchange for assistance in obtaining certain goals and in providing educational services that each member separately could not realistically expect to provide alone. Some forces encouraging cooperative action in education are shown in figure 1.

The nomenclature "Unit" used throughout this paper to represent a cooperative model is intended to be a generic, and not a specific, term. Concepts underlying the general "Unit" include the concepts underlying intermediate units, or educational cooperatives, or boards of cooperative services, or other cooperative arrangements between and among school districts. As a prototype evolves to accomodate specific requirements of districts being served and of state-wide legal jurisdictions within which the Unit is being developed, an attempt must be made to provide an umbrella under which diverse organizational arrangements might fit. It is particularly important that the model be open-ended so that it can (1) create impetus for change; (2) develop new ways of serving education -- new systems, structures, procedures and elements directed at providing new ways of doing educational things better; (3) adapt to changes within it; (4) adapt to changes encouraged by systems surrounding it or impinging upon it; (5) expand its sphere of influence effectively; and (6) maintain its own operations through efficient efforts.

Cooperative arrangements are more than the simple total of the resource allocations of each basic component of the Unit. The educational cooperative, a multi-district confederation, provides the conceptual and organizational framework for local school systems to increase their capabilities to produce quality education.<sup>2</sup>



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<sup>2&</sup>lt;u>Ibid</u>., p. 3.

Efficiency and -> Schools for -> Considerations, Specialization Social Etc. Demographic Geographic Data, Etc. Enterprise -Competitors Educational Demands on Industry, Relevancy Business in the Education; new New Roles for Effectivmess, Systems; new Processes Pressure Involvement Relevancy, Education Demands Student Public Better for for Accountability Request for Pressure for more money?" Legislative Services -"Do we get Mandate; more for Expanded Social and Finance Arrangements - Pollution Inadequate Using Tax - Poverty Tax Base Concerns Dollars: Emerging - Drugs Awareness of Delinquency, Professional Deficiencies Problems of Labor needs Public and Drop out, **Problems** Social and

Figure 1. Examples of Forces Encouraging Cooperative Action

Relationships within each cooperative endeavor in education may be unique. In some cases, uniqueness is applied by legislative mandate; in other cases by demographic or geographic factors; in other cases, by still other factors or forces. A basic planning and evaluation model for the Unit should consider as many variables as possible to provide maximum flexibility resulting from diverse needs of each cooperative endeavor.

#### Planning

Some basic goals for the Unit should be described in general terms.

The following are logical general goals:

- 1. To provide expanded and improved administrative organization for the service area
- 2. To provide services that a single district would not easily be able to afford by itself
- 3. To provide for the organizational and program maintenance necessary for the Unit to sustain itself
- 4. To encourage and facilitate change and innovation through a variety of means
- 5. To allocate a percentage of its resources for "resource producing" or "resource creating" activities and for planned high risk activities.
- 6. To provide solutions through cooperative action for educational problems that may be difficult to alleviate without cooperation
- 7. To provide the impetus for developing new systems, ideas, procedures and linkages for education

The general objectives, and the specific enabling objectives established to operationalize the general objectives will play an important role both in the planning and the evaluation stages of the Unit. Without some unique goals to provide more than simple administrative improvement and shared services, there would seem little real reason for establishing yet



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another stratum of decision-making within the educational structure.

A basic planning and evalution model should be developed in such a way that it (1) is <u>functional</u> for immediate implementation, (2) is <u>theoretical</u> and conceptually sound for developmental and/or resource-producing activities, (3) is <u>projective</u> to provide direction for long-range goals, and (4) contains provisions for economic efficiency as well as program effectiveness. This basic model might be described as a planning model including suggestions for an evaluation component and comprised of several operationally definitive phases or levels of activities. Figure 2 portrays a summary of major elements of each level of program development for a basic model which includes:

- 1. basic elements necessary for initial organization and minimal operation of an educational cooperative unit
- 2. Some first-level program developmental ideas consisting of administrative and/or organizational adjustments
- 3. second-level program developmental ideas including program and curricula modifications, as opposed to administrative modifications in level 1
- 4. specific long-range plans and projections for educational innovation from baseline data developed out of levels 2 and 3

Some representative program components which the Unit should include, or for which plans should be made for future consideration are:

- 1. special administrative services, such as computer-assisted administration
- 2. developmental activity such as field services and assistance in location and/or allocation of resources
- continuing education for vocation and avocation ( new and experimental programs)
- 4. long-range planning capability
- 5. psychological services
- 6. materials and media development



### ERIC AFUITAGE Provided by ERIC

# PROGRAM AND SYSTEM DEVELOPMENT

•			
TNTUL	First-Level	Second-Level	Third and Following Levels
INPUT	Administrative Services	Program and Curricular Modifications	Generate new ways to conduct education
Basic Elements	Generation of Baseline		
for Organization,	Data	Development of new prc-	Implement innovative and some
Development and		grams to meet immediate	"high risk" programs
Maintenance:	Planning for new programs,	needs	
	systems, and curricula		Revision of out-dated courses
- Resources		Planning for funding for	
	Elementary Research	programs to meet current	Recruitment of persons to fill
- Legislative		needs	special roles
Action	Coordination		
-7:		Evaluation of present	
- Local Incent- ive for	Sharing of present services		
Cooperation			
	Primarily Administrative	Primarily Program and	Primarily development of new
ORCANTZAPTONAL	arrangements and Modific	Curricula Arrangements and Modifications, Eval-	systems, programs, etc. Self-renewal concepts for the
ACTIVITY	Administrative Services	uation of ongoing pro-	total structure
		grams. Planning for new	
		programs and systems of	-
		Education	·

Figure 2. Flow chart indicating emphasis of each level of program development

- 7. special education (where there is insufficient enrollment in individual districts for adequate programs)
- 8. coordination of curriculum resources
- 9. provision for inservice activities
- 10. basic provisions for data gathering and research
- 11. capabilities for revision and updating of baseline data
- 12. communication and coordination with the State Education Agency
- 13. programs relating to improved and expanded educational opportunities
  - a. adult basic education
  - b. adult education
  - c. occupational education
  - d. cooperative programs
  - e. work-study programs
- 14. assessment and evaluation services
- 15. provision for continuous self-evaluation and self-renewal allowing adaptation of the total organizational environment to include or exclude discrete elements of the new organizational arrangement, including powers of determination over inclusion and exclusion for specific program activities.
- 16. resource producing activities
- 17. technical assistance for implementing innovations and changes

Cooperative arrangements in education must provide the impetus, framework, and structure for development of <u>new kinds</u> of educational systems, incorporating new ideas, media, and operations. Cooperation is not simply another way of looking at shared services; it must reflect capabilities for the conceptualization and development of (1) <u>new ways</u> of conducting activities for the educational enterprise, (2) new ideas for generating programmatic systems for the educational enterprise, and (3) new support systems for education.

The Unit is built on the basic assumption that the concept of local control of education is both a logical and a political reality; it attempts



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to develop an innovative, generative, self-conceiving educational outlook within constraints imposed by the regular educational system. Such a Unit should build upon the given educational structure and serve to provide a catalyst for new ideas and developments; it should be synergistic. Unless the Unit develops the capabilities for generating innovative solutions and for developing innovative designs and systems in education, it does not represent something new in the educational structure; it becomes a structure for compounding present inadequacies.

Thus, in developing long-range planning processes and procedures for evaluating the effectiveness of cooperative arrangements, the developmental steps must take into account underlying assumptions upon which the Unit is based and must reflect those assumptions both in planning stages and in evaluation procedures. A true cooperative moves through a number of stages from the idea of a single district "going it alone" in everything to the generation of new ideas, structures, systems and concepts for education. Figure 3 shows some of the developmental stages between single district operation and full cooperation.

Clearly, in planning stages Unit personnel and governing groups must enumerate some basic and long-range goals to serve as guidelines. These goals must reflect alternative ideas and designs in education and must provide latitude for future development, field testing, and implementation of newer concepts applicable to education.

The Unit must gain and retain its power through the <u>participative</u> nature of the organization; it should <u>not</u> be coercive, but should attract influence by provision of services not otherwise available to its clientele or membership. This in turn implies that individual units should have the option of "buying in" or of "buying out", depending upon the perceived

· Projection; Systems Techniques Research and Development (R&D) - Newer Systems for Education · Planning and Evaluation · Planning and Evaluation - In-service Programs - Management Systems Training Programs Field Services Higher Education Specialization · Accountability - Instruction · Financing · Diagnosis New Roles - Delivery - Media Operation for Ancillary Services in Education Cooperative Planning such as Research and New Administrative, New Roles New and Expanded self-renewal and Organizational Initiation Services and Arrangements Development Programs Administrative [nstructiona] and Services Programs Services Shared Shared Planning Planning District(s) Single School

Process from Planning and Initiation to Operation

Flow chart indicating planning steps and progress toward new arrangements in education, shown in developmental stages through time Figure 3.

- Dissemination; communication

Change Processes

- Legislative Activity

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effectiveness of services rendered. "Holding power" of the Unit can then become a criterion variable for evaluation of program activities. Coercive membership, like tenure, presupposes incompetence and does not encourage organizational innovation.

On the other hand, in order to initiate a cooperative Unit, it may be necessary for local units to pay a "membership" fee to generate resources necessary for the organization to become operational. After a specific trial period as determined by the governing board (three years, perhaps) the Unit should have become strong enough to stand on its own, holding members through the quality and quantity of services rendered.

For the Unit to gain its initial impetus, some adjustments must be made at the outset by each agency cooperating under the jurisdiction of that Unit. Some of these adjustments might be as follows:

- 1. relinquishment of some basic decision-making power
- 2. agreement to participate as a component in a cooperative arrangement during initiation and field-testing of the Unit
- 3. allocation of some resources for administration and development of the Unit
- 4. contribution of personnel to work toward full implementation of the Unit
- 5. cooperative attitudes toward restructuring control of some activities from local boards of the Unit's governing board
- 6. awareness that not all programs of the Unit will apply equally to all local districts within the Unit

General Financial Considerations: The Unit should be able to provide more and better services on a relatively more economical base than each of the structures which it was designed to serve. This in no way implies that the Unit will cost less, or be cheaper than prior or present organizations; the diversity of services and the potential for innovation, development



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and self-improvement available through cooperation will be more economical than the same range and scope of activities would be if they were sponsored by individual organizations or school districts. The strength of cooperation lies in its ability to generate new ideas, systems and procedures for education in a relatively economical manner, not in reducing present costs for education. A regional cooperative Unit provides a way of making better investments in education, as well as more sound expenditures for education. A regional cooperative Unit, due to its larger scope and unique position in the educational structure should engage in a few calculated "risk-taking" ventures. It certainly should allocate a percentage of its resources for "resource-producing" or "resource-creating" activities; 4 activities designed to provide future pay off in the educational enterprise. Such activities might be teacher improvement projects, planning, research development, policy improvement, etc. Resource producing activities are a form of investment. Whereas the single school district may be too small to set aside a large enough percentage of its operating budget for such ventures, the Unit should be able to provide assistance for its whole service area, especially in light of the similarity of problems among the districts in Region 1. Crucial elements, then, are the potential for: (1) growth and improvement, (2) economic efficiency, and



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<sup>&</sup>lt;sup>3</sup>J. K. Galbraith, <u>The Liberal Hour</u>, New York: The New American Library (1964), p. 40. A Mentor paperback. The test of what a community should <u>spend</u> on a social service is what it can afford -- what it believes it can spare from other forms of consumption. The test of investment, by contrast, is what will pay for itself. (emphasis added).

<sup>4&</sup>quot;Resource-creating" activities is a term borrowed from <u>Policy Making</u> for <u>American Public Schools</u>, developed by the National Academy of Education, March, 1969. The term is used here as in that work, pages 19-21.

(3) better educational opportunities for young people growing up in a dynamic society. A cooperative Unit provides strength and credibility in the presentation of ideas to the legislature, the power structure, the general public, and the state education agency due to a larger constituency identifying and realizing similar problems in their educational endeavors.

Goals: The determination and refinement of goals for a regional cooperative Unit is of primary importance especially early in its developmental stages. Goals should be based upon the criterion, "What can best be done cooperatively to improve education?" Since goals are desirable things to be attained, the basic development of goals should not be circumscribed by "What is" or reality; the development of goals should enter the domain of "What should be" or "What ought to be". Analysis of progress from what is to what should be can provide a focus for the evaluation process and should provide indicators of the efficiency and effectiveness of the Unit's activities. Some suggested general goals have been stated previously.

Resource Allocation: Resource allocation decisions follow determination of goals. Resource allocation includes not only general fiscal concerns, but in-kind contributions, space, and time contributions as well as overhead and maintenance. It is apparent that a percentage of the Unit's resources must go to organizational development and maintenance (internal). Expenses for organizational development should decline in terms of total percentage of allocation while percentage of resources allocated for maintenance and program development (external) should increase. As the service Unit reaches some point of equilibrium, the percentage of resources for maintenance should continue to decrease while



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the percentage of resources for program development should increase. At some point a condition of "dynamic equilibrium" should be reached where a predictable pattern of resource flow can be seen among the components (organization development, organization maintenance, program development, and program maintenance.) At all times, however, the Unit must retain part of its resources to allocate to innovative program development.

These funds should be seen as "risk capital". (See figure 4).

In an analysis of resource allocation, time must be seen as an extremely important resource. Time represents a closed system; <u>i.e.</u>, there is a finite amount available and the decision to use a given amount of that time represents a commitment based upon a value orientation. Within the constraints of time, organizational goals must be evaluated so that there is a fair relationship between expected output and allocated input of time.

The initiation of a new organization provides an opportunity to build in procedures for continuous evaluation and self-renewal. If these processes are installed initially, they will be recognized as a normal part of the organization and will not engender the resistance that would be forthcoming if they were to be imposed at a later date, at which time it might seem that evaluation were being proposed to point out weaknesses in the organization.

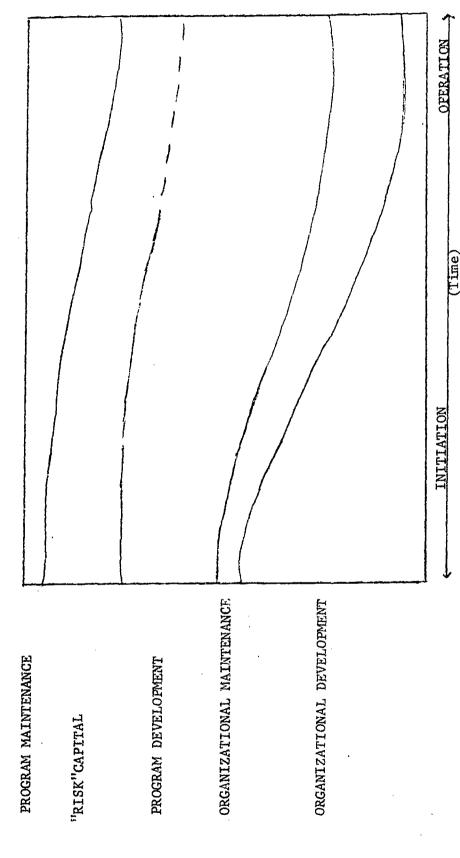
<u>Program Operation</u>: Planning activities should relate to projected program operation. Implementation of program activities will ultimately define the effectiveness of the planning activity of the Unit. If new systems for education develop due to the synergistic and catalystic nature of the Unit, there will be a concomitant development of new roles and



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er line

100%



Schematic representation of resource allocation for basic Unit activities shown as a function of duration of organizational operation ( Time). Risk Capital eventually may come to be seen as program development monies as the organization is proved effective. Figure 4.

0%

responsibilities in education.

A major function of a special service Unit should be to serve as a point of interface with other systems and to provide a locus and procedure for system integration. Since a regional cooperative Unit is designed to serve a group of districts sharing common problems, it should be able to synthesize their unique needs and then serve as an interface with the larger system in which the local education systems are operating. A cooperative Unit would operate between (1) the state education agency and the local systems, (2) any regional activities ( such as an educational laboratory) and the local systems, and (3) systems of higher education and local systems. A second aspect of the system integration process is the coordination function that the Unit can perform for individual school systems within the Unit's service area. Although primarily recipients of a coordination function, systems served by the special service Unit should have some agreement to share some of their decision-making responsibilities in terms of changes seen as good for the total service Unit area.

In its rudimentary form, the Unit provides a framework for cooperative planning and problem-solving in education. Whereas the typical state education agency staff is too small to provide consultative service to all districts in most areas of need, the Unit can provide a new point of more intense contact with local districts and respond readily to regional needs. (The same situation obtains in the relationship among the Unit, higher education and local schools). To insure the desired interactions, the Unit's controlling board must contain representation from the state education agency, as well as local schools, regional activities, and institutions of higher education within the Unit's geographic service area.



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Governance: Governance for a regional cooperative Unit should be a function of a board broadly representative of local units to be served and of cooperating agencies of the Unit. Specific governing relationships could be determined by the enabling or the mandating legislation. In terms of working relationships, however, the Unit's governing board should be made up of representatives chosen from the controlling boards of the Unit's clientele; professional guidance would come from committees or advisory groups. That is, the Unit's board should be structurally under the control of various local boards to be served by the Unit. (Figure 5 presents a skeleton outline of governing relationships).

Roles relative to operation: An organizational framework may encourage change and new things to happen, but people serving in new roles that have been rationally conceived to improve specific deficiencies are the factors that enable change to occur. The Unit can provide for program flexibility through employment of persons to serve a number of roles not usually identified as "normal education roles" and not usually provided in the traditional organization. This flexibility should stimulate program development and accelerate change processes.

An example of a role that might be developed within the Unit is that of educational diagnostician, a person trained to identify specific learning handicaps or impairments and who, in a team arrangement with a specialist, should help to define individual programs of instruction for persons with learning disabilities or impairments. The diagnostician's role is that of a generalist in diagnosis. He is not an expert in special education or some clearly defined area of learning disability, but rather he has a general knowledge of problems which hinder normal learning in the



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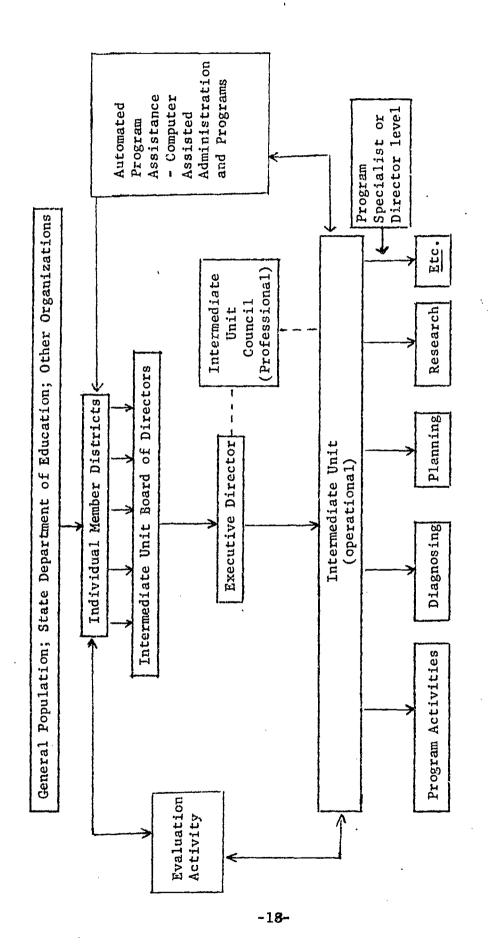


Figure 5. "keleton diagram of goverance for the Unit. Note relationship whereby the Unit is controlled by its constituent members

classroom. The diagnostician should make preliminary plans and referrals to experts.

The Unit should provide access to specialists in newer instructional concepts, such as learning packages or individually prescribed instruction, or other programs designed to assist learning. Such specialists would not have as their major focus a subject area, such as science, but would be concerned with new approaches to learning.

A regional cooperative Unit, although <u>assumed</u> to be a useful entity, must take initial steps to (1) define its role as an organization and (2) define new roles within the organization to be filled by personnel. These roles should be complimentary to those of local educational units and should be seen in the larger context of development and expansion of better educational services. Examples of such roles follow; some roles have been combined but may be expanded as demand for service increases. A brief summary of representative activities of each role is included.

- 1. Educational evaluator. This office would maintain continuous monitoring and evaluation of new programs of the intermediate Unit and would have responsibility for specific evaluation tasks as designated by local districts participating in the Unit structure. The evaluator would have inservice responsibilities for working with educational staff in the evaluation process, especially in developing ways of monitoring student achievement.
- 2. <u>Inservice director</u>. It would be the responsibility of the inservice director continuously to refine and develop new inservice approaches aimed at continuous upgrading of educational personnel. This person probably should have a joint appointment in a college of education with responsibilities for teacher education and/or student laboratory or field experiences.
- 3. Media and Communications System specialist. (self-explanatory)
- 4. Materials development and clerical assistance. (self-explanatory)
- 5. Program developer and information officer. This person would have major responsibilities for helping in proposal development and in providing information for local schools and/or local district use, as well as preparing brochures or other public information materials.



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- 6. Federal and state program coordinator. This person would have major responsibility for maintaining files and current information on new federal and state programs and mandates. Clerical assistance in this office would be available to process paperwork and forms for all federal and state programs in the service area. This office would work closely with the program developer to be sure that proposals and grants were developed in line with the intent of legislation and guidelines.
- 7. Personnel coordinator. This office would be responsible for maintaining a personnel file for the entire area served by the Unit and, acting with the direction and assistance of local personnel, would engage in recruitment activities based upon a personnel plan developed for the service area of the Unit, as well as for the staffing of the Unit itself.
- 8. Research and special programs. Research activities of the Unit should be limited, but some research will be necessary in the development of new programs and evaluation plans. Major functions of this office, however, would be to serve in coordinating experimental or special programs which should be operated or directed through the Unit, to field-test new programs, to help identify needs in the service area, and to coordinate research activities of higher education institutions in an attempt to find applicable solutions to local problems. If new programs prove successful, they should be implemented in local schools. This office would then serve as a focal point for insertion of newlytested programs, and would be seen as a facility for developmental activity. This office would be, in effect, a gadfly to introduce new ideas throughout the intermediate Unit service area.
- Personnel for data processing activities. Total data processing activities for the service area of the Unit should be a central element in the development of the Cooperative; they will provide the first-line of programs for the Unit and provide impetus for all new program development. Initially this office would be concerned with computer assisted administration; as services develop and grow, computer assistance will be available for specialized programs of instruction. It is important that initial planning of data processing activities includes capabilities for data compatibility, planning activity, space accounting for identification of classrooms or buildings that could be used for special programs, processes and procedures for updating baseline data, as well as other activities generally seen as related to data processing. (Refer to the final report, Feasibility Study for a Regional Data Processing Center in Fayette, Greene, and Washington Counties in Pennsylvania for the Regional Planning Project, Title III ESEA, Systems Development Corporation, April, 1969, for more comprehensive presentation of the functions of this office.)
- 10. Education and community planner. (self-explanatory).



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11. Special project office. This office should have one or more people available to set up and operate some special projects. One or more of these positions might be reserved for internships from within the local systems or from higher education.

Each of these roles represents possibilities for change, growth and development. Some of the roles will be filled as needed early in the growth of the Unit; others will provide guidelines for growth. Some of the roles represent the core or backbone for the very initiation of the Unit. Initial planning and goals will identify those roles which will be considered necessary for the early stages of the Unit. Developmental roles will emerge after the Unit has been operating for awhile.

#### Summary

The Unit should serve as a source for the planning, development, initiation and evaluation of educational programs and change. Cooperative action controlled within the local districts of the Unit will provide a broader base for educational development and improvement. This paper is an attempt to provide some structure, framework and guidelines to assist in the planning and development of an intermediate unit to provide regional education services.

One objective of cooperative planning in providing regional education services is to encourage the development of careful evaluation of organizational activities in such a way that provision is made for the addition of programs that have been developed and tested and for the deletion of programs which the new programs are designed to replace. A philosophy regarding developmental activity must be based upon the planning model. An intermediate unit for cooperation in providing regional education services probably has a unique function in development as it relates to local school districts.



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#### Provision for Evaluation

#### Introduction

Evaluation of a regional cooperative should be designed to measure both quantitative and qualitative change. Based on the assumption that educational cooperative endeavors should be designed to encourage new systems, ideas and procedures in education, quantitative measures will be more helpful than qualitative measures in assessing the Unit's general effectiveness in accomplishing stated objectives. Evaluation is simpler the more clearly are stated the objectives. However, objectives relating both to qualitative and to quantitative elements should be constructed. Since a prototype has a higher per unit cost than an on-going activity, initial evaluation of change and of new or demonstration activities should focus primarily on quantitative ( i.e., effectiveness) aspects. The connotation of failure must be judiciously avoided in the evaluation process, since failure implies an end product rather than a process and procedure for developing new or bettem approaches to the attainment of goals. Evaluation must be seen as supplying a feedback link to encourage generative action resulting in growth and self-renewal.

There are at least two broad frames of reference for evaluation activity of the Unit: evaluation of the Unit's operation and of its efficiency and effectiveness, and the evaluation role of the Unit serving as an external evaluator for programs of local districts. One role hypothesized for the Unit was that of evaluator. Thus, districts should be free to call upon the Unit to assist in designing, developing and conducting evaluations of local activities. On the other hand, internal evaluation procedures both of the Unit's organizational operation





-- maintenance and development -- and of the programs developed and operated by the Unit are necessary. This section will deal in general ways with procedures for establishing guidelines and a model for evaluation.

Numerous evaluation models are appearing on the educational scene. Probably many of these could be adapted to an evaluation process for the regional Unit. On the other hand, a synthesis of the better points of several models should provide a more workable framework for evaluation. It is also probable that several evaluative techniques will be useful due to the complexity and comprehensiveness of the regional cooperative Unit's proposed programs. Care must be taken at the outset to determine, as well as possible, kinds of data necessary for evaluation to insure comparability of data at a later time. Immediate evaluations may be guilty of collecting more data or more detailed data than necessary. This sin, however, is probably more forgiveable than not collecting enough. Data once collected, may not be used but it is difficult to generate data once the collection stage has passed.

Evaluation should provide signposts or guideposts for continuity, change, and innovation, as well as an assessment of the status quo.

Evaluation should be seen as a process and not as an end product; a process viewed through time. All too often evaluation is seen as a "final report" on an activity or on an organization; worse yet, as a final report to be shelved and forgotten. Evaluation must be recognized as continuous feedback providing direction for the attainment of objectives or goals; for the development of new goals, directions, and programs; and as a mechanism to instigate continuous self-renewal of the organization.

Evaluation should be planned carefully within a logical and flexible



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framework. A sound and workable evaluation model depends upon the clear statement at the outset of the program objectives in a variety of behavioral steps. Secondly, global program objectives seem necessary. Each global program objective should be capable of being divided into levels of specificity which lend themselves to a reasonably accurate analysis of their probable achievements.

The evaluation model must take into account the factor of time.

Programs need time in order to prove their worth and effectiveness. Time must be a factor in the evaluation model to allow for the accomplishments, or the partial accomplishment of various goals as stated in the planning phase. Evaluation implies that something is either going somewhere or not-that change is taking place. This is especially true if time is included as an element, suggesting that evaluation will identify whether or not some change has occurred over time. Some attention should be paid at the outset in defining and understanding some key concepts such as change and innovation, since they will be the focus of the evaluative activity.

#### Change and Innovation

Some research on change has suggested that a system's ability to change is directly relational to its opportunity to provide for observation of newer procedures, ideas, structures and methods. The regional cooperative Unit must incorporate built-in procedures encouraging or providing opportunities for demonstration, dissemination, diffusion, and adaptation.

Change can be defined as a process aimed at a goal. Change is a process, not a thing; the end product of change may be a thing, or it may be a new process. Based upon such assumptions, project evaluation must



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provide feedback for continual change and readjustment of program direction, rather than simply be an exercise for a final report to be filed. Evaluation aimed at the development of a final report is, in effect, evaluation of an end product or a thing; continuous evaluation as feedback for decision-making is evaluation of process.

The Definitional Problem: One thing is apparent in the definitions of innovations and change which appear in Appendix A of this paper; innovation is not necessarily seen as invention (<u>i.e.</u>, something that is unique or entirely new), but rather that innovation may be relative to a locality. Innovation may be the recombination of known elements into new programs or the adaptation by local districts of a proven program to meet a local need. Recommendation XI of the Subcommittee on Education of the Committee on Labor and Public Welfare of the United States Senate posits the following definition for innovation.

XI. Educational innovation is a new or different concept, methodology, organization, or program that is systematically introduced into the classroom, school system, and/or the state as a whole. 5

Thus, an innovation can be something adapted to local needs through a recombining of proven educational activities into a new model designed to alleviate needs identified at the local level. The innovation, when demonstrated and diffused, should have promise of alleviating needs in other locales with adaptation of specific elements to the local needs. The regional cooperative Unit is such an idea or concept. If evaluation of



United States Senate, Subcommittee on Education of the Committee on Labor and Public Welfare, Notes and Working Papers Concerning the Administration of Programs Authorized Under Title III of Public Law 89-10, The Elementary and Secondary Education Act of 1965 as Amended by Public Law 89-750, April, 1967, p. 37.

activities of the Unit is to relate to change, some notion of change and innovation must be clearly held to provide a basis for that evaluation.

Stufflebeam, in the CIPP evaluation model describes four kinds of evaluation: context evaluation, input evaluation, process evaluation, and product evaluation, coninceret these elements, product evaluation, focuses on an end product; the other three elements are primarily concerned with process. The emphasis on process may suggest that the classical experimentally designed and controlled evaluation procedures are not the best, especially for global measures of change.

Historically, educators have attempted to establish experimental models and designs as a basis for evaluation. This procedure is particularly well suited to product evaluation, but less appropriate to process evaluation. Product evaluation techniques may not be applicable to evaluation of change in the true sense. Experimental design as a procedure for evaluation implies that rigid controls are maintained; no alterations are made in any central element in the method, technique, or content being evaluated lest the modification render an invalid evaluation. This hinders making adjustments in the program to reflect changing needs based on preliminary feedback.

Guba makes the following distinctions between product and process evaluation.

Generally speaking, the traditional rules of experimental design and field control are rigorously invoked. The essential task of traditional evaluation is to judge.

Modern concepts of evaluation veer sharply from these traditional ideas. Evaluation is seen less now as a judgemental device than it is as a <u>decision-making</u> device; the purpose of evaluation is to assist in the making of decisions. Since there



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are many decisions to be made, there are also many kinds of evaluation, some of which are sharply different from the product evaluation described above.

Thus, it appears that the most important kind of evaluation for the ongoing Unit structure is process evaluation. Process evaluation should be used with on-going educational programs of the Unit and product evaluation should be used after the conclusion of a specific program, before it is adapted or adopted in toto in local schools within the Unit's service area.

Evaluation procedures may take many forms. If basic objectives of the Unit are to initiate change and provide better and newer educational services, then some evaluation of the effectiveness of the Unit will include a summary of whether or not basic objectives are met; <u>i.e.</u>, whether or not change is taking place in a planned manner. <u>Gross measures</u> of the following kinds of things can provide <u>indicators</u> of the extent to which a program of the Unit is meeting basic objectives.

- 1. Expanded opportunities for students.
- 2. Expanded experiences for students.
- 3. Expanded numbers of choices for students.
- 4. Increased flexibility within choices available.
- 5. Economic feasibility of program.
- 6. Increased program activities.
- 7. Better administration support systems.
- 8. Numbers of new programs available.



<sup>&</sup>lt;sup>6</sup><u>Ibid.</u>, pp. 306-307.

#### Evaluation Design

The evaluation design described in this model is essentially an extension of Stufflebeam's CIPP evaluation model. Elements incorporated in the extension of the model include some taken from the EPIC model and some synthesis taken from the evaluation model for Title III programs as developed in the state of Tennessee. As such, the evaluation model or design includes four separate phases: Phase I, context, status or assessment evaluation; Phase II, input or planning evaluation, Phase III, process or operational evaluation; and Phase IV product, or final evaluation.

Within each of these evaluation stages can be developed procedural outlines such as those shown in figures 6 and 7.( pages 32 and 33 ).

Although there will be modifications in the procedural guidelines for each procedures of evaluation, the general model for evaluation procedures should be applicable.

Each of the steps of the evaluation design are logical extensions of planning activities, and should compliment planning activities of the Unit. While planning may be seen as preparation for making decisions and providing the framework for action, evaluation can be seen as a review of decisions in light of certain data, criteria, or some changes that can be documented, and as a procedure for exploring the need for new decisions. Continuous operation of an organization of program is seen as an administration or management function and is related to both planning and evaluation.

There now follows a summary of four phases or kings of evaluation.

The phases should be seen as continuous; that is, although they are divided into phases for discussion they are really all parts of a general evaluation



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<sup>7</sup>Appropriate references are shown in the bibliography.

process. Implementation of each phase will depend upon planning, development of objectives, and the following of a logical process. In some cases there is a discussion of what should be done in each phase and, as applicable, a discussion of what has already taken place in Region 1 of Pennsylvania.

Phase I evaluation (context, status or assessment): Prior to Phase I evaluation there is an initial planning stage which leads to decisions to do something. These initial planning decisions should lead directly to the application of Phase I evaluation. In this phase, a general assessment of need is conducted. This assessment will also provide some baseline data, as well as guidelines for future action. In some cases, sampling procedures and analyses are applicable; in other cases population data and compilation of averages and simple comparisons are applicable. In Region 1, initial status or assessment results were incorporated in a planning grant proposal and subsequently in the definition of needs and in the development of planning documents for each district. After initial assessment and identification of need, activity is initiated under Phase II evaluation. Some adjustment and expansion of needs from the initial planning stages will be made as a result of operational procedures of the context or assessment phase.

Phase II evaluation (Input or planning): Phase II results directly from activities conducted under Phase I evaluation. (Results of Phase I evaluation led, in Region 1, to development and implementation of planning activity supported by a planning grant.) Some Phase II evaluation activities have been conducted under the planning grant and are incorporated in the operational plan as goals, objectives, strategies, procedures, and various other judgmental criteria. Also, the legislative mandate and requirements of the Department of Education provide input or planning

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data for the fustification of the next steps of development.

Additional planning or input evaluation steps must be taken after operation has begun to provide a basis for specific planning relative to implementation of discrete program elements of the Unit. In other words, each activity of the Unit should follow through basically the same four phases of evaluation as did the development of the Unit itself. A tentative design for guiding input or planning evaluation is suggested in Figure 6 on the next page.

Figure 6 relates specifically to an evaluation of major organizational objectives and to determining the feasibility of new programs thrusts for the Unit (a form of planning); Figure 7 on page 33 relates to analysis of new programs to implement organizational goals or major program thrusts. Both formats are similar, however, as they outline logical steps in implementing an evaluation activity. Questions of technique -- sampling, comparisons, analyses -- are omitted from the general design.

Phase III evaluation (operational or process evaluation): Phase III will commence after the Unit and/or its programs have operated for a given period of time. Procedures for conducting process evaluation must be established beforehand to serve as guidelines for operation. However, some recycling of operational evaluation processes may be necessary as data are fed back to the operational scheme and as monitoring provides a decision-making base. This may be true since process evaluation should provide periodic checkpo. Its to serve as bases for changes in decisions. Operational or process evaluation is not a "clean" experimental activity since complexity of the operational evaluation scheme is circumscribed by the inability to control all variables experimentally and the inappropriateness of random

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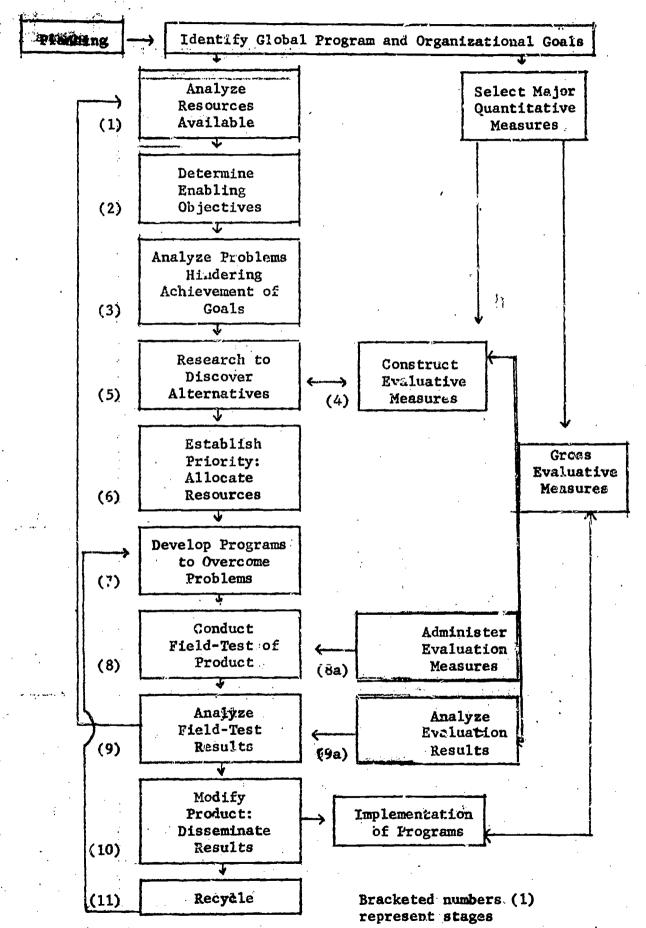


Figure 6. Major Stages in Feasibility Analysis for New Organization
Program Thrusts for the Unit. (Program thrust, if feasible, will be implemented as shown in Figure 7).

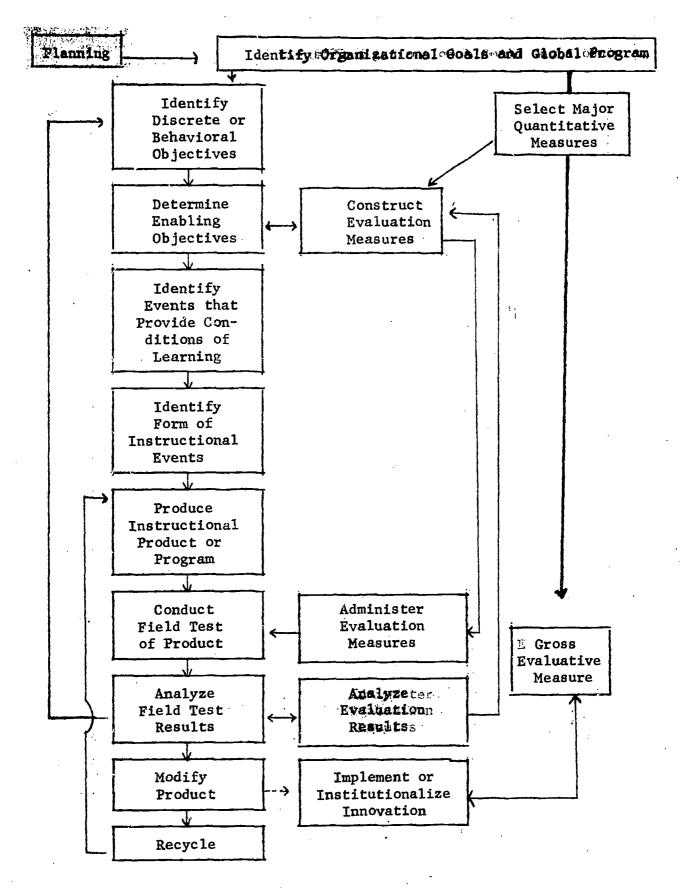


Figure 7. Major Stages in Design for Developing and Evaluating Innovative Instructional Systems (Figures 6 and 7 were adapted from a model described by Dr. Jacob Shapiro).



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selection or assignment.

Before any evaluation of change may be undertaken, there must be a lapse of time over which some change may be identified. Operational evaluation cannot be expected to produce results until the project has been operating long enough to effect some change. Development of means, analysis of participant evaluation, and analysis of gross measures of increase or decrease indicative of change may provide systematic bases for decision making and the rudiments of procedures for self-correction and self-renewal. Subjective participant evaluation on the part of pupils, the community, and educational personnel may be valuable in process evaluation. Growth of use of Unit services and interest on the part of local districts for increasing participation in the Unit and for increasing the scope of Unit activities will provide indicators of success. Ultimate evaluation measures for the Unit may be predicated on changes in students; initial evaluations may be based upon quantitative measures or gross program elements. Wherever possible, evaluation should be based upon behavior changes.

Phase IV evaluation (product or final): Phase IV will be a summation of process or operational evaluations, resulting in some value being put on the end product. If applicable, statistical analysis pertinent for final evaluation techniques will be used. These techniques will be employed wherever appropriate field controls, random assignment or selection, and order of data (ordinal, nominal, etc.) are available. Final evaluation procedures should be used to determine the effectiveness of specific programs that have been developed and pilot-tested under controlled circumstances. Such product evaluation must also show economic considerations (accountability) as well as program improvements or lack of

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improvement. Prior to adaptation of any specific program by a member district of the Unit, the program should have been subjected to careful and controlled product evaluation.

Insertion of elements from Unit programs in schools will provide quantitative data on the progress of the change process from awareness to diffusion and finally institutionalization of innovations within an operating system. The rate of institutionalization of program elements of the Unit will also demonstrate the efficacy of cooperative action between and among school districts with similar educational problems, in that activities which have been field-tested in similar settings can be adapted readily to new districts.

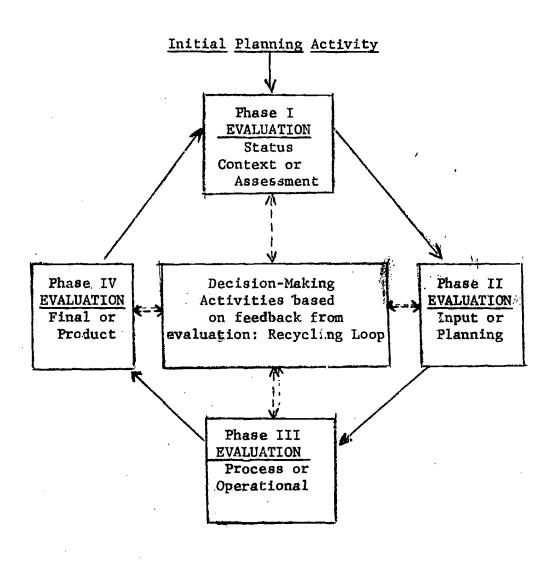
Evaluation of these measures will be by relatively simple procedures such as evidence of continuing participant interest as reflected in implementation of ideas from the Unit in more classroom settings in a single school, school district, or throughout the region.

#### Summary

A concept and design for evaluation has been outlined in this section of the paper. A summary of scheme for the procedure has been set forth in figure 8. This figure has been adapted from page 14 of the <u>Design for Tennessee Assessment and Evaluation of Title III, ESEA</u>. Figure 8 shows each of the four primary phases of the projected evaluation procedure and their relationships to each other. Techniques of evaluation within each of the phases will vary. The basic models from figures 6 and 7, pages 32 and 33 should help provide direction for the evaluative process within the phases.



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Evaluation Design Process Diagram adapted from <u>Design for Tennessee Assessment and Evaluation of Title III, ESEA:</u> A report developed by Dr. F. K. Bellott at Memphis State University for the State of Tennessee, Department of Education, J. H. Warf, Commissioner, 1969.



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Planning and evaluation are seen as continuous elements of a total management process. Planning established the values and the philosophical points of decision as well as the direction toward which the organization should move. Whereas, the role of planning is probably to give preparation for making decisions (direction, values, philosophy, etc.), the use of evaluation is to review decisions in light of some criteria established to determine whether the objectives are being met or whether new decisions need to be made.

When a new organization is established, it is imperative that the evaluative function be interwoven so that the organization sees evaluation not as a threat, but as a process for continuous self-renewal; the new organization should program an evaluation procedure into itself at the outset so that the staff of the organization can feel comfortable with a built-in process of self-renewal. Evaluation should provide a feedback to the organization relative to the effectiveness of the organization's activities. As new programs are tried, tested, and added to on-going activity, old programs should be replaced. The concept of continuous evaluation should remove most threatening elements from the addition and replacement process. This will, however, only be possible if personnel do not see a "vested interest" in every program, but rather see possibilities for continued change, growth and development as the most critical elements in the organization.

Thus, evaluation is an essential concomitant of the planning process.

Both planning and evaluation will be essential elements for the development of any plan for cooperation in providing regional education services.

#### BIBLIOGRAPHY

- Appalachia Educational Laboratory, Inc. <u>Appalachian Advance</u>. Charleston, West Virginia: The Appalachian Educational Laboratory, Inc. IV, 2 (October, 1969) and IV, 3 (November-December, 1969).
- Appalachia Educational Laboratory, Inc. <u>The Educational Cooperative</u>:

  Rationale, Administration, <u>Implementation</u>. Charleston, West Virginia:
  The Appalachia Educational Laboratory, Inc. June, 1969. (Draft Copy; Multilithed).
- Bellott, Fred K. <u>Design for Tennessee Assessment and Evaluation of Title III, ESEA</u>. Developed for the State of Tennessee, Department of Education, J. H. Warf, Commissioner. Memphis: Memphis State University, Bureau of Educational Research and Service, March, 1969.
- Eidell, Terry L. Model for the Management and Operation Subsystem of the Educational Cooperative, Appalachia Educational Laboratory Work Group Conference, Charleston, West Virginia: November, 1967. (Multilithed).
- EPIC Evaluation Center. <u>Project EPIC: Evaluative Programs for Innovative Curriculums</u>. Tucson, Arizona: Ampitheater Public Schools. January, 1967. (Multilithed).
- Mager, Robert. <u>Preparing Instructional Objectives</u>. Palo Alto: Fearon Publishers, 1962.
- State Plan of Intermediate Units For Pennsylvania. A report by the Pennsylvania State Board of Education. Harrisburg: The State Board of Education. January, 1967.
- Stufflebeam, D. S. "Toward a Science of Educational Evaluation", Educational Technology, VIII, 14 (July, 1968).
- \_\_\_\_\_\_, "The Use and Abuse of Evaluation in Title III", Theory Into Practice, VI, 3 ( June, 1967).
- United State Senate. Notes and Working Papers Concerning the Administration of Programs Authorized Under Title III of P.L. 89-10, ESEA. U.S. Senate, Committee on Labor and Public Welfare, Subcommittee on Education. Washington: April, 1967.



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#### APPENDIX A

#### DEFINITIONS OF INNOVATIONS

The following definitions of innovation may provide some basis for the development of the Region 1 Intermediate Unit and some guidelines upon which to base subsequent evaluations of the effectiveness of the Unit in generating change and innovation. Characteristics of all of the definitions are that innovation is not necessarily invention, and that innovation is relative to the locale. These definitions are particularly applicable if a specific intermediate unit is designed to serve a particular area and its needs, rather than to provide uniform but general services of similar nature as dictated by some central source.

#### DEFINING INNOVATION

Several special consultants developed definitions of innovations. Six of them are included here:

Everett Rogers defines an innovation as—
an idea perceived as new by an individual. This is a subjective definition of innovation; it is based on the assumption that what matters is whether the idea is new to the receiver, rather than whether it is objectively new in the eyes of experts. If we seek to understand the individual's behavior in regard to innovation, we

Harry Passow defines it in this manner:

To the extent that these school systems, alone or in consortium with other systems, are tackling significant valid theory and research to develop programs and procedures which are undoubtedly 'new' for that systemsuch school systems are participating in a kind of educational innovation.

must view the situation and the idea from the point of

47 Rogers, p. 146.

view of the receiver.

48 Passow, p. 221.

<sup>1</sup>United States Senate, Subcommittee on Education of the Committee on Labor and Public Welfare, Notes and Working Papers Concerning the Administration of Programs Authorized Under Title III of Public Law 89-10, The Elementary and Secondary Education Act of 1965 as Amended by Public Law 89-750, April, 1967, pp. 36-37.



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Glen Heathers writes that --

a proposal may be innovative in relation to a particular innovation, or through making novel contributions to the design and implementation of local school improvement programs. A third possibility is that a project may be innovative only in the limited sense of introducing certain program features within the locality for the first time<sup>49</sup>

James Finn comments that --

nothing is likely to be, strictly speaking, innovative in the Kuhn sense of creating a paradigm never before set forth \* \* \* Educational innovation \* \* \* cannot be classified either as something completely new or something that is only new within the locality or region. Rather it should be thought of as existing on a continuum. 50

Harold Gores uses this categorization:

- (1) "Catch-up" Projects--where the need is for the basic tools of education. They represent poverty in education and are an obligation to be met.
- (2) "Innovative Projects"--where the quest is to import a practice successfully demonstrated elsewhere. This category constitutes the heaviest obligation and puts a special burden on the dissemination of information so that the schools will know where discoveries have been made.
- (3) "Inventive" Projects--where the search is for a new answer to an old question, or a workable answer to a new question.51

Hilda Taba also believes that in order to deal with the question of innovativeness, one needs to consider innovations according to differences in levels and types:

First, there are innovations that create an entirely new perspective on curriculum, teaching, learning, or instructional materials and media. These innovations require reconceptualization of content, teaching strategies and learning processes.



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<sup>49</sup> Heathers, p. 184

<sup>50</sup> Finn, p. 331

<sup>51</sup> Gores, p. 294.

A second type of innovations represent implementing of already created models, testing them and adapting them to local conditions, such as trying out a new mathematics curriculum or incorporating a method of discovery learning.

A third type of innovation is that of altering the administrative arrangements, such as installing team teaching, changing the manner of scheduling, or introducing new media. These types of innovations are of little worth unless they are accompanied by appropriate changes.

A fourth type of innovation is extending practices which are not in themselves innovative into areas that have lacked them. This is innovation in a local sense only.<sup>52</sup>

If goals of the Unit are conceived as two-fold--improved organizational activity (maintenance) and the generation of change and innovation leading to new and better ways of conducting education--then some basis for evaluating the Unit's effectiveness in terms of change must be defined. Further, there must be some generally accepted view of what change and innovation are. Perhaps some of the definitions in this appendix will be of assistance.



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<sup>52&</sup>lt;sub>Taba</sub>, p. 117.