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ABSTRACT

One of a series of sixteen knowledge transformation papers, this paper presents an educational planning model which incorporates citizen involvement at the local level and provides a more responsive and efficient vocational education system. In the first section techniques are discussed for encouraging community participation, such as general advisory committees, craft committees, joint apprenticeship committees, public meetings, official hearings, and interaction. Then a comprehensive, genéralized model is given for, educational planning, stressing the following areas: (1) the relationship of participation to the success of the planning; (2) plotting of alternative strategies; and (3) planning outcomes by producing a number of Human/Technical Resources Impact Packages. The actual mcdel is described as providing an overview of activities, changer cccurring from decisions, and costs. Three basic phases are identified for a systems approach to planning: analysis of needs, situations, and trends; design; and implementation and evaluation. The last section applies the model to vocational education. Data reeds are discussed for the following areas of vocational education: basic information, programs of instruction, student counseling, instruction, and educational accountability (evaluation). Also outlined are reasons why state and local agencies may have failed to plan adequately in the past. The four appendixes present examples of citizen participation in California, Florida, Illinois, and New Jersey. (ELG)

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VOCATIONAL EDUCATION AT THE

written by

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1979

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FOREWORD

The increasingly complex delivery system for vocational education at the state and local levels creates problems of program duplication, fragmentation of services, and inefficient use of limited resources. Better planning represents one solution to such problems. At the local level, comprehensive planning which includes genuine citizen participation offers the possibility of a more responsive and efficient vocational program. This paper addresses the need for improved planning at the local level by presenting an educational planning model which incorporates citizen involvement and is applicable to the vocational education system.

"A Model for Planning Vocational Education at the Local Level" is one of a series of 16 papers produced during the first year of the National Center's knowledge transformation program. The 16 papers are concentrated in the four theme areas emphasized under the National Center contract: special needs subpopulations, sex fairness, planning, and evaluation in vocational education: The review and synthesis of research in each topic area is intended to communicate knowledge and suggest applications. Papers should be of interest to all vocational educators, including administrators, researchers, federal agency personnel, and the National Center staff.

The profession is indebted to Dr. Ralph Bregman for his scholarship in preparing the paper. Recognition is also due to Dr. Gordon F. Law, Sr., Rutgers, the State University of New Jersey; Dr. Harold Halfin, University of Wisconsin-Stout, and Dr. Daniel Fahrlander, the National Center for Research in Vocational Education, for their critical review of the manuscript. Dr. Carol P. Kowle, research specialist, supervised the publication of the series. Ms. Jo-Ann Cherry coordinated editing and production.

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in Vocational Education

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INTRODUCTION

Why is planning a continuing concern in vocational education of the problems created by multiple delivery of programs which often result in diplication and fragmentation of services and inefficient use of resources necessitate better educational planning. For example, a recent study of public class-room training in San Francisco, California, revealed complex financing, administration, and operating procedures within programs (San Francisco Mayor's Office of Manpower, 1975, pp. 6-40). According to Halperin (1978) some members of Congress think vocational educators do not engage in effective statewide planning. Educational planning at the local level is the primary focus here, but the need for more effective planning techniques is just as critical.

Federal legislation has only recently placed a strong emphasis on planning. Advisory groups are beginning to receive more attention as planning instru-, ments, and the community is becoming more important in the decision-making process in vocational education.

A major attempt at improving planning in vocational education is the local advisory council concept established by the vocational education amendments of 1976. The legislation requires that the council be composed of members of the general public and representatives of business, industry, and labor. Congressional intent is clear: community input into planning is necessary and valuable.

A review of the research shows that community participation in vocational education planning generally occurs through advisory committees. At the same time, little commentary is available on the theory and effects of community participation in vocational education planning. No studies have analyzed the impact of such participation. Further, the literature on vocational planning models is sparse.

In view of the greater concern for community involvement in vocational education planning, the following statements are representative of the position taken in this paper:

- 1. Comprehensive planning requires active and continuous citizen participation / *
- The quality of the planning process is directly related to the extent and intensity of community participation

3. Local agency vocational personnel--teachers, administrators, and support staff--will be more likely to encourage community participation in comprehensive planning if they understand that there cannot be one without the other

Materials are organized into three sections: (1) a discussion of techniques for encouraging community participation in local vocational education planning; (2) an outline of a comprehensive planning model for use at the local level; and (3) application of the planning model to vocational education.

COMMUNITY PARTICIPATION IN VOCATIONAL EDUCATION PLANNING .

The schools have been criticized for a lack of comprehensive planning. In addition, there is some feeling that the schools are not responsive to the public (Fantini, 1967). Many secondary school curricula appear bound to college admission policies (Fein, 1970). Additional criticism has been leveled at the schools' lack of effectiveness in educating low-income students (Levin, 1970). Some argue that today's schools are obsolete because they are still dispensing information in a society which has other sources more appealing and more influential to students (Coleman, 1972). Such criticism exemplifies the need for greater citizen participation to make educational planning more responsive to changing social needs.

Major social upheaval in past decades has increased the need for citizen involvement in education. Such developments as affirmative action legislation, concern over civil rights, special needs legislation and litigation, court decisions, government policies, and limits on financial resources necessitate greater community involvement in educational planning. The local advisory councils mandated by the 1976 amendments exemplify the growing emphasis on citizen input into the educational planning process. Such a requirement is not new to government: the Title I (Elementary and Secondary Education Act) guidelines of 1971 were amended to require district-wide parent councils (Davies et al. 1978). In Dallas in 1976, the court required further school desegregation and specific adoption of a plan prepared by members of the community (Davies et al. 1978).

Social pressures may fluctuate but education is one institution that must respond more willingly to the new demands that are created by changes in the social environment.

Citizens' advisory councils are one means of making education more responsive to the community's changing needs. Such mechanisms to promote change are vital, according to Brégman et al. (1974), because:

Institutions should be able to anticipate crises: plan for the long term; confront conflicts; decentralize activities but maintain generalized central control: enlarge local government units;

innovate administrative techniques; collaborate for interorganizational relations; link objectives with those of other organizations; and regard the resources of the organization as the resources of society (p. 17)

Changes must be made in organizational values and philosophies at appropriate times. Timing is important: if institutions such as vocational education are not responsive to changing social needs, they will lose public support and public funding.

The issue is not whether the community should be involved, but how it should be involved. The entire community must be committed to change. Without community involvement and commitment, comprehensive planning is an illusion. Druian (1977) has described four case studies which demonstrate specific techniques to build citizen participation into community education programs in rural, "rurban," suburban, and urban areas.

OPPORTUNITIES FOR CITIZEN PARTICIPATION

Experience has yielded many lessons that could be helpful in encouraging citizen participation (Sviridoff, 1969). First, there is no one strategy or form for participation. Vocational programs, traditionally, have relied upon trade/craft advisory committees. The vocational education amendments of 1968 and 1976 mandated state and local advisory councils. But planning requires more than a legislative mandate. It also requires acceptance of community representatives as full partners in the planning process (Sarthory, 1974).

Specifically, constituents must participate in three phases of planning-analysis, design, and implementation. For example, members of the community can provide input into the information system. They can help determine goals. They have welcome insight into the political and legal consequences of implementation. They can analyze alternative plans and establish the order of preference. Citizens with a variety of skills can become stakeholders in the success of an educational goal. According to Holt (1974); "Educators need not forego their professional responsibilities; and the community (members) need not usurp those responsibilities. What each group should do is define how they may better work together" (p. 712).

Participation in planning is a process. The process must not become the product but a technique to achieve a goal. The quality of local leadership will determine the degree of success and participation.

Furthermore, individuals devising strategies for participation must be prepared to share power. A broader vower base might slow the decision-making process, but is likely to establish decisions on a firmer basis. An example of the successful use of shared power is California's regional councils, which were responsible for determining which educational agencies within their

jurisdiction would provide vocational, adult, and continuing education programs (see Appendix A for additional information).

Certain conditions appear to promote favorable citizen action (Davies, 1976) Davies suggests that people act when they have:

- a. some self-interest at stake
- . a clear and compelling diagnosis of the situation
- b. a meaningful prescription
- d. a sense of power to enforce the prescription
- e. access to information
- f. received training/orientation for their new role
- g. available good staff leadership

Citizen participation needs to be integrated into the planning process. Yet the question remains, how do educators encourage citizen participation?

Once school officials agree on the need for community participation, the format for input must be established. The techniques for communication are Individuals may provide counsel to other individuals or to work groups. Advisory boards, public meetings, and hearings are other means of communicating opinions on school planning (Citizen Participation, 1978; Lamar, 1978). Timing, cost, complexity of the subject, community values and other characteristics, and political and social climate will dictate the selection of one or more techniques (Citizen Participation, 1978). Representatives of particular segments of the community might be asked by the planning unit to provide assistance. These individuals should possess the value orientation/ expertise of the group or industry they represent. For example, an expert from the community might critique a plan to help adults develop new job skills for mid-career change, or, the mayor's expert on economic development might be asked to help develop the local application/plan for the vocational system. In either case, the individual must have appropriate experience and knowledge.

Advisory committees are the most widely used form of formal citizen participation in planning. There are two primary types of advisory committees in vocational education: general advisory, and occupational or craft (Nerden, 1977, pp. 27-28). In addition, Riendeau (1976, pp. 5-6) describes joint apprenticeship committees while King (1960) discusses special or "ad hoc" committees. The following is a discussion of the various types of advisory committees and their potential input into planning. For specific examples of community involvement in local planning see the appendices.

General Advisory Committees

These committees provide advice regaring the overall policies for the vocational program within a geographical area. A typical example can be found

in Florida's Dade County Office of Public Schools where the committee concerns itself with such activities as training content, and public relations (see Appendix B for addition

Within the context of planning, the general committee shou advise on development and selection of goals and objective vocational system. Advite should also be sought on: (1) e for any new or reorganized activity, (2) criteria for anal strategies for the implementation of an activity, and (3) and delivery (see Program of Instruction, p. 16). When al are proposed, committee members should review, analyze, an of priority for strategies within the overall educational

Craft Committees

These committees offer assistance in determining objective needs for a specific program area within a vocational/tech Craft committees have input into such operational details structure and content; craft/technical qualifications for facilities, equipment, supplies, and funding; and student ment, and follow-up. In a diverse and highly technical protrade and industrial education, several craft committees as

doint Apprenticeship Committees

These committees have administrative authority over apprent and on-the-job work experience. Highly skilled craftpersor advise vocational/technical institutions about needed vocat instruction. Members can assist in planning for one or mor the program and are particularly important in planning artithe secondary and postsecondary levels of vocational instru

Special or Ad Hoc Committees

These committees serve on a temporary basis for specific pr (King, 1960). An example of ad hoc committee activity migh and proposing a plan for inservice training of vocational e council members.

A number of other options dist for active citizen involvem education planning. These include public meetings, officia interactive techniques.

.

Public Meetings

These meetings provide an opportunity on an informal basis to identify issues, discuss ideas, and obtain clarification. A typical use of public meetings in relation to vocational education planning could involve soliciting information on needs of target populations, including the handicapped, disadvantaged, and inmates in correctional institutions. Citizen surveys might be used to gather data in preparation for such a meetings.

Official Hearings

Generally, hearings are used to obtain considered views and prepared position papers from those who testify about specific proposals. For example, public hearings are used to determine the feasibility of constructing vocational/technical institutions.

Interactive Techniques

The charrette is used to convene governmental and nongovernmental interest groups in an intensive meeting lasting from several days to weeks. Considerable preparation and study precede these meetings. They are designed to produce creative solutions to problems.

In a <u>squatters session</u>, a planning team works intensively with the user-client for <u>several days at selected times</u> during the planning of a project. Because the planning team is present at all times during these few days, problems can be addressed quickly in direct discussions.

Interactive television-based participation is a promising new technique which has been used by the North Carolina State Advisory Council on Vocational Education to obtain citizen opinions on vocational programming.

Policy Delphi is another interactive technique which involves designating a panel of individuals to express their written views on a subject. Successive rounds of arguments and counter-arguments gradually create a consensus or a set of clearly established positions. A modified form of the Delphi technique has been pioneered by the West Virginia State Advisory Council on Vocational Education to elicit citizen involvement in planning.

Each of these techniques can provide appropriate citizen input. However, maximum effectiveness of the community's contribution is realized only when an educational plan or model has been carefully constructed with identified goals and strategies.

A COMPREHENSIVE, GENERALIZED EDUCATIONAL PLANNING MODEL

Comprehensive education planning is a fairly recent phenomenon (Coombs, 1970). This emphasis on comprehensive planning stresses the importance of the



· 6. -

systematic analysis of data. Comprehensive and systematic planning engages individuals in meaningful dialogue, takes into account the interrelationship of systems, provides for alternative strategies for reaching goals and objectives, and is a means for adequately preparing for the future.

Deliberate educational planning involves producing alternative strategies, together with predicted consequences, to aid decision makers in reaching declared goals. The process should incorporate continuous analysis, feedback, and updating as essential features (Wolvek, 1968). Participation on the part of citizens means that they take part in each of the planning phases in order to exercise power or influence on the decision-making process. Vocational educators at the local level, including teachers, administrators, and support personnel, must be sensitive to the opportunities for citizen participation.

Planning is a process (Morphet, 1972) which is dependent upon an information system. The information system provides analysis of data to ascertain:
(a) status, (b) future direction or goals, and (c) strategies for reaching goals and objectives. The distance between (a) and (b) represents the magnitude of a need or situation, whereas the alternatives to overcome the need represent the solutions proposed to the decision makers. For example, school districts in the State of Virginia are asked to consider each vocational programming goal in terms of where the system is now and where it should be in five years. The discrepancy between where the system is and where it should be represents the need and thus determines the boundaries of the goal.

Relationship of Participation to Planning

When individuals participate in the planning process they are more likely to be supportive of changes which result. Because the community is composed of different groups, consideration should be given to enlisting a variety of representatives appropriate to the problem or situation. Individuals representing business, industry, labor, civic and professional associations, economic development agencies, public and private educational institutions, the CETA prime sponsor, and youth council should be asked to participate in vocational education planning. These individuals should reflect the demography of the community in terms of sex, ethnicity, race, and the needs of special groups such as the handicapped. Other interest groups should be identified and their involvement sought when appropriate. Those who might be contacted are the Chamber of Commerce, agricultural extension service, local and county governments, military, and community action agencies (PREP Report No. 24, 1970).

Although some researchers like Stanton (1977) state that school councils are ineffective mechanisms for changing educational policies and decisions, this lack of effectiveness can be overcome. Creative behavior on the part of local vocational educators can bring about a meaningful relationship between the school and the community. Citizen participation inspiraning

vocational education opens the system to new ideas, current developments from other fields, and an awareness of the need for improvements. Further, planning provides a forum for debate and joining of issues (O'Leary, 1972). There are many situations where citizens can make significant contributions to planning.

Alternative Strategies

Planning involves preparation of objectives, documentation of boundaries, and delineation of constraints for each goal. Once this is completed, alternative strategies can be plotted for each goal. Each potential strategy has a different combination of activities and methods. The allocation of resources, time, estimated costs, and the anticipated degree of success (performance indicators) can then be plotted for each alternative. Such information, when consolidated, constitutes a Human/Technical Resources Impact Package.

The selection of an alternative to satisfy a goal involves testing one strategy against another for feasibility, efficiency, and effectiveness. The major benefits of studying alternatives lie in the insight resulting from simulation, testing, and cross analysis (see Figure 1).

Given the information from this testing and analysis, management personnel have the responsibility to compare the tradeoffs, or advantages and disadvantages, of these alternatives. Consideration is accorded to suggestions made by the planning personnel (Copa and Geigle, 1976). Management selects the alternative which seems best suited to the planning purposes and circumstances. The probability of a better decision is increased because management has a choice of alternative solutions.

Planning Outcomes

Planning is only one operation of a management system. Within the boundaries of the planning activity a complex series of activities takes place. A major outcome from these transactions is the production of a number of Human/Technical Resources Impact Packages. Each package contains an exhaustive description of the following topics:

Need Identification:

- 1. current status or situation
- 2. anticipated goal
- discrepancy between status or goal
- 4. specific problem
- 5. trends resulting in future needs
- -6. futures (projections)



Goal Statement:

- 1. boundaries (including time phases)
- objectives
- 3. constraints

Technical Requirements:

- 1. laws
- 2. regulations
- 3. codes

Resources (Costs):

- 1. _people
- 2. facilities
- 3. equi-pment
- 4. supplies

Activities and Methods:

- 1. Program Evaluation and Review Technique (PERT)
- 2. Critical Path Method (CPM)

Time:

- 1. ideal
- 2. negotiated

Performance Indicators:

- 1. ideal level
- 2. acceptable range
- 3. non-acceptable level

Consequences:

- 1. short-range
- on (a to c)
- a. political

- 2. intermediate
- or
- b. legal
- system

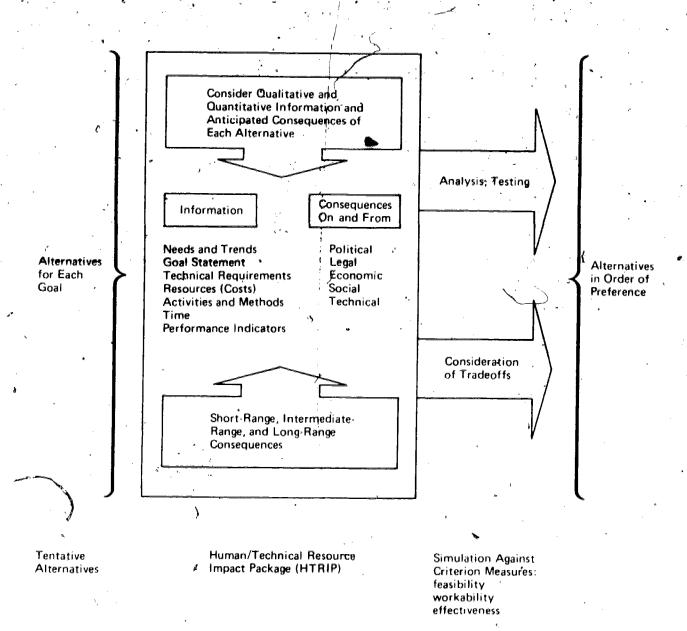
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- c. economic
- or subsystem

- 3. long=range
- from a ... which impacts on vocational education
- d. social
- e. technical (production)

-9-

Figure 1
THE PATTERNED ANALYSIS OF TENTATIVE ALTERNATIVES



Adapted from E.S. Quade and W.I. Boucher (Eds.), Systems Analysis and Policy Planning (New York: American Elsevier Publishing Company, Inc., 1968), p. 13. Adapted with permission of Elsevier North-Holland Publishing Co., Inc., New York.

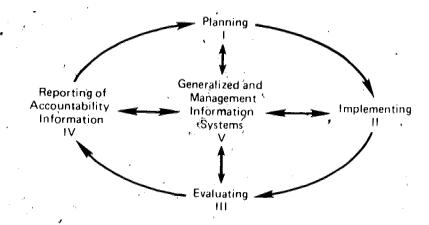


The Actual Model for Planning

A comprehensive model which relies doon citizen participation can help the local education agency develop an information system by providing an overview of (a) activities, (b) changes occurring from decisions, and (c) costs.

Through the information system citizens can monitor progress of the planning process and their contributions. To illustrate, the planning model in Figure 2 (p. 13) has fifteen steps. Citizens can be involved in most of these steps, whether as advisory committee members or as experts contributing to public hearings or the Delphi process. The form of their involvement is affected by the complexity of the topic as well as the timing, costs, community characteristics, and the political and social climate.

Information is a cornerstone of management systems and decision making (Ross, 1970). Planners, in fact, rely on generalized and management information systems to guide their decisions (Stevenson, 1978). The management information system should be able to provide periodic reports to the public on the degree of change occurring in any other part of the system or subsystems as an outcome of the planning effort or other operations. Graphically, five basic operations of an educational management system are as follows:



The systems approach represents one of the most promising organizational, techniques to manage change. When combined with planning concepts, it is a powerful tool to help resolve problems/conflicts which can arise between present and future organizational practices (Nowrasteh, 1971). Essentially, the concepts of planning for problem identification and solution consist of three basic phases (Morphet, 1972): analysis of needs, situations, and trends; design; and implementation of the plan and evaluation of the planning of effort.

Each phase and its elements are briefly described below,

Analysis Phase

The purpose of this phase is to study a situation or trend, examine a problem, or determine that a need exists. The analysis might be initiated by the planning staff, the General Advisory Committee on Vocational Education, or the Board of Education. In any event, the data banks of the in-house/external information systems are surveyed. When the data are not available, a needs assessment, for example, should be conducted (Campbell, 1974): The information obtained will help identify strategic or administrative goals.

Design Phase

Existing activities are analyzed in terms of proposed initiatives and alternative strategies are identified for each goal. A Human/Technical Resources Impact Package (HTRIP) for each alternative is prepared and tested.

An alternative strategy or plan should be tested in a simulated environment in order to identify potential strengths or weaknesses in its operation. Three major criterion measures (see Figure 1) can be applied to the simulation: feasibility, workability, and effectiveness (Bushnell, 1972). Feasibility takes into account constraints to and required resources for the achievement of a goal. Consideration must be given to such factors as: (a) the availability of new money and capable staff, (b) regulations, and (c) community values. Workability involves the extent to which a potential solution can be put into operation. This factor determines whether the proposed changes produce the declared benefits, given a certain level of expenditure. Effectiveness is determined by comparing the first two measures (feasibility and workability), taking into account the time differential between implementation and expected results.

Implementation Phase

Preparation for this phase involves receiving data elements for process and product evaluation of selected alternatives, the final step in the design phase, and putting the alternatives into action. "Implementation begins with the review of options and identification of necessary steps in the chosen alternative action plan. A time schedule is developed, the plan is reviewed, the final decision is made in favor of implementation, and the strategy is actually put into effect.

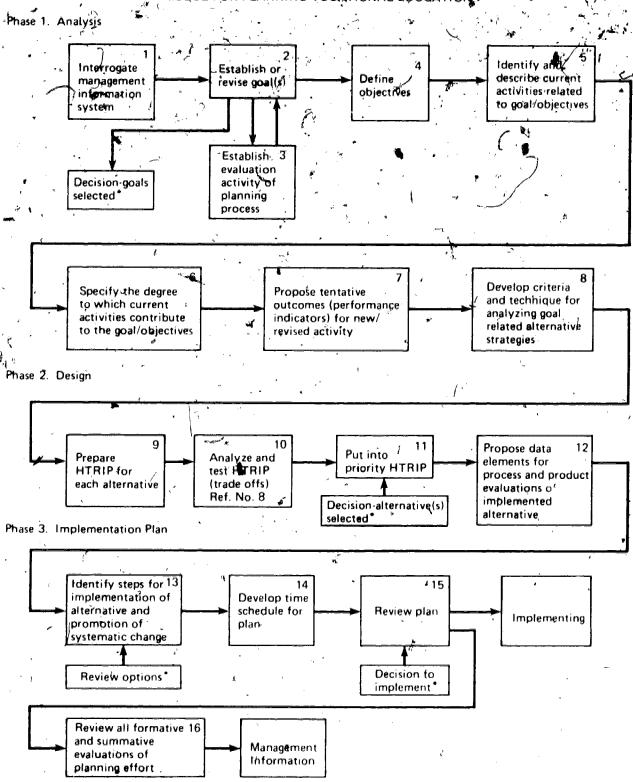
Overview of Model

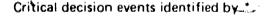
#Figure 2'shows all three major phases--analysis, design, and implementation-as they combine to make a model of an entire planning process. Figure 3 provides





MODEL FOR PLANNING VOCATIONAL EDUCATION





-13-

INTEGRATION OF AN INFORMATION SYSTEM, MANAGEMENT FUNCTIONS, CHANGE PROCESSES INTO A NETWORK FOR PLANNING, IMPLEMENTING, EVALUATING, AND REPORTING information implementing (reviewing § planning evaluating systems and the design the plan analysis ' (organizing) -Problem-Management Strategic Utilization of finding information planning concepts 🦝 system change processes for implementation of plan new Administrative .cycle planning (directing, staffing) 7 Generalized Implementation information of plan (controlling) and forecasting system including Process. data from input product, and impact and context evaluations evaluations 8 Reporting results of implementation for problem-solving problem, sequences 1 to 4 solution, sequences 5 to 9 Management functions are displayed by ()



an overview of the planning process from problem-finding to problem-solving. In this figure, planning is portrayed as part of a larger management process. A problem concerning vocational education might be identified by staff outside the planning unit and involve input of data into the information system. This data might not be used for planning purposes but would still be available to planners. Figures 2 and 3 provide a framework within which citizen participation can be incorporated into the educational planning process.

APPLICATION OF MODEL TO VOCATIONAL EDUCATION

Atteberry et al. (1977) make a distinction between strategic and administrative planning in vocational education. Strategic planning deals with broad matters which affect the direction of the vocational education system and involves specifying goals and policy for the system. Policies set the boundaries within which decisions are made. The model described in the previous section, with some modification, can be used to determine the short, intermediate, and long-range vocational education goals for the local agency. That is, the local educational agency can specify the direction and emphasis that vocational education should take by applying the planning concepts which appear in the model.

Several components basic to any vocational education system are involved in both strategic and administrative planning. These components include:

- 1. Population needs
- 2. Job market opportunities
- 3. Job performance requirements
- 4. Program of instruction
- 5. Promotion of vocational education
- 6. Student recruitment
- 7. Curriculum, resources, and ancillary services
- 8. Guidance and counseling
- 9. Placement
- 10. Vocatjonal instruction
- 11. Program review
- 12. Evaluation

The planning model can be applied to each of these components or parts of components. To illustrate, the model can be used to plan for (a) the determination of job market opportunities, (b) placement, or (c) evaluation. The quality of information gathered for each phase will depend on the time, resources, and commitment of local agency personnel. After the plan for each component is devised, however, the management system should be employed. That is, the plan should be implemented and evaluated, and the results should be reported periodically. The data obtained for each component will be incorporated into the information system. Thus, management of a vocational education system entails continuous and integrated consideration of all twelve components in a sequence appropriate to the local situation. The importance



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of local planning and community participation planning for these twelve components is specified in the current vocational education legislation, the Educational Amendments of 1976 (P.L. 94-482 (A) (B) and (C)). Local recipients of federal vocational monies must describe in their annual application for funding (a) the needs of potential students, (b) how, and to what extent the program will meet these needs, and (c) how activities relate to or coordinate with manpower programs.

The following is a description of the 12 components of a vocational education system with a discussion of their data needs for planning. This information on operations is adapted from materials developed by the San Mateo County Office of Education in cooperation with Vocational Education Section, California State Department of Education, 1972, as revised in 1974. (See Appendix C for a similar plan used by Illinois Community College District #529.)

Basic Information

- 1.. Population Needs. This component is concerned with establishing an information file on data relative to the vocational education needs of the target population, including the handicapped.
- 2. Job Market Opportunities. Job market information is concerned with the demand side of the labor demand/supply curves. This file would contain information on existing and new and emerging occupations which fall within the scope of vocational education and have current or anticipated excess demands.
- Job Performance Requirements. Data in this file would include information on the skills and knowledge required to achieve the occupational or other objectives of instruction. The development of these specifications might involve task analysis, which uses data supplied by individuals having substantive knowledge of actual occupational skills required for licensure. Representative vocational education trade advisory committees have an important role in establishing requirements for different levels of entry and progression in the field.

Program of Instruction

1. Program Development and Delivery. Information about population needs, job opportunities, the number of students and their employment objectives, placement, and program duplication and articulation are gathered and integrated in order to identify program development or improvement needs. For example, New Jersey's County Coordinating Councils prepare a comprehensive plan which incorporates the above data elements and determines the mode of delivery for vocational programs, whether in a comprehensive high school, area vocational-technical secondary/post-secondary centers, or autonomous vocational districts (see Appendix D for more information).

- 2. Promotion of Vocational Education. The purpose of this component is to report to the public the strengths and weaknesses of activities, changes and costs of the vocational education program.
- 3. Student Recruitment. This is aimed primarily at identifying those who need vocational education and encouraging them to enroll in a program of instruction.
- 4. Curriculum, Resources, and Ancillary Services. The purpose of this component is to provide the appropriate curricula and obtain the resources necessary for instruction in vocational education programs. Such resources include new monies, materials, equipment, physical plant, and trained instructors. In addition, this function is concerned with the development of ancillary support such as audiovisual equipment services, community resources, library services, inservice instructor training programs, and preservice and inservice training for specialized supportive and supervisory personnel.

Student Counseling

- 1. Guidance and Counseling. Guidance and counseling consists of those activities necessary to provide individuals with sufficient information to allow them to make meaningful and informed occupational choices. This information should include data related to the availability, characteristics, and recruitment of jobs for which instruction is, or will be, available. The individuals' vocational interests and capabilities should be continuously assessed.
- 2. Placement. The objective here is to assist students in finding employment which best fits their needs and the needs of employers.

Instruction

1. Vocational Instruction: This represents the major activity of the system, that is, providing instruction to individuals for the purpose of preparing them for gainful employment or advanced vocational-technical training. Most of the resources available to the system will be utilized here.

The success of the program of instruction is highly dependent on a number of other activities which preceded it. These include analyzing the needs of the population, identifying specifically where job vacancies exist or will exist, developing a congruent variety of programs, developing curricula which are responsive to the skills and knowledge required to enter and succeed in an occupation, and assisting students, through exploratory and remedial instruction, to select and succeed in a vocational program.

Educational Accountability (Evaluation)

- 1. Program Review. This represents the review of local prothe local advisory council, CETA councils, other communistate agencies.
- Evaluation. Evaluation is the process of determining t which the program or courses are meeting the objectives of evaluation are used as part of the management inform as well as for meeting the requirements for periodic repromotion.

Evaluation in vocational education is comprised of two and process evaluation. Product evaluation is primaril with how well the system met its overall goal and objectived, fow example, by follow-up studies of the changes and socioeconomic status of leavers and completers. Pris directed at understanding how well each segment has objectives. This form of evaluation should be carried time as basis, with the results used for structuring im

CONCLUSION

The preceding overview of the data needs of the 12 component program provides a framework within which planning must take cation, planning needs arise out of the programmatic and into the components of a vocational education system.

The question of the status of comprehensive planning in vocstill remains, however. According to Atteberry et al. (197 state and local agencies to plan vocational education prograbeen a topic of concern for quite some time." There are set the situation exists as it does. Briefly, as indicated by 1 Rodgers (1976).

- Planning appears to threaten those who fear loss of jobs allocations of resources
- 2. Decision making in vocational education has been charact short-term reactions fostered by funding cycles which ar to long-range program development
- 3. Experienced planners are in short supply, particularly a
- Vocational education is so vulnerable to adverse economi activities that planning is looked upon as an exercise i
- Vocational departments in universities have not moved ag develop the theory and practice of vocational planning

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- 6. State Departments of Education do not seem to be concerned with the process of local planning, only the product
- 7. Program goals are often unclear and subservient to maintenance requirements (e.g., enrollments needed to retain teachers) of the system
- 8. Information gathering and analyzing is informal and used to justify local budget requests
- 9. The concept and value of a planning function are perceived differently

Such criticism of vocational education planning at the local level is mentioned only to emphasize the importance of a comprehensive and farsighted approach to administration and programming. The planning model provided here allows local vocational administrators to view the entire interface between programming components and planning phases. The model includes a number of points at which planners can draw on the expertise of the community to provide creative alternatives for the delivery of vocational education.

The various techniques mentioned for eliciting community participation can be integrated into the planning phases presented in the model, as several of the illustrations suggest. Citizen input into planning for job market information, job performance requirements, program development and delivery, placement and evaluation, and other aspects of the vocational program can be crucial to its success. Vocational education has a history of working with business and industry personnel through craft/trade committees. However, the time has now come to expand and formalize community participation.

In short, strategic and administrative planning and community involvement in planning are key factors in the success of a vocational program at the local level. At the same time, a stronger commitment can be made to comprehensive planning to insure high quality vocational programs which meet the needs of both the community and the student. Comprehensive planning in vocational education at the local level is both desirable and necessary. Involvement of community members in the planning process can only enhance the results, if the process is managed in a structured and deliberate way. The model presented here is designed to provide the sort of structure needed to encourage successful planning with adequate community input.



APPENDIX A

California Regional Adult and Vocational Education Councils (RAVEC)

The RAVECs were put into effect by state law on January 1, 1976. Regional boundaries were coterminous with boundaries of adjacent community college districts. Among their major tasks was the responsibility for "developing a short-term plan for the improvement of [all] vocational and continuing education within their region." The councils were required to delineate the functions and responsibilities in such areas as: (1) adult basic education, (2) high school diploma programs and courses for adults, (3) vocational and occupational education, (4) procedures for transfer programs, and (5) procedures for development of articulation agreements. CETA activities were included. The council had the opportunity to recommend apportionment (financial support) based on the absence of unnecessary duplication.

Statutes defined the county membership. Community colleges, secondary districts, county offices, private postsecondary institutions, and CETA were represented.

Each RAVEC was required to have a vocational and continuing education advisory committee, with 10-18 members. According to a 1978 report, 990 persons served on these committees with business and industry having the largest representation.

Because of budget and fiscal changes in California, the RAVECs were not refunded.



APPENDIX B

Florida's Regional Planning Coordinating Councils

These councils were responsible for vocational education, adult general education, and community instructional services in each of the 28 community college service districts. Membership on the council is composed of educators from secondary and postsecondary institutions. The council makes recommendations to respective secondary and postsecondary institutions for additional courses or programs or changes in existing programs. Local agencies can establish additional committees. For example, the Dade County Public Schools have a General Advisory Committee. A major function of this committee is to provide advisory and consultative services in determining school system objectives and policies in connection with the types of vocational and adult education services needed in the community. The committee is concerned with training needs, curriculum, public relations, and similar activities.



APPENDIX C

Illinois Eastern Community Colleges, District #529

The District prepares one-and-five year plans covering such areas as planning and evaluation, occupational program assessment and articulation, student services including counseling and placement, program management, personnel, and community resources.

There is a Vocational-Technical Occupations Advisory Committee composed of 18 regular members and an alternate from each secondary school district in the college district. This committee has power to appoint special Occupational Program Advisory Committees to meet the needs of occupational education. The Special Occupational Program Advisory Committees meet with the instructors of the occupational program to advise, make recommendations for upgrading the program and assist in evaluation, placement of students, and follow-up.



APPENDIX D

New Jersey's County Career Education Coordinating Council

One council in each of New Jersey's 21 counties is responsible for preparing a Comprehensive County Plan for Career Development. Various representatives of education, business, industry, government, and labor participate in the comprehensive planning process. The planning model incorporates such steps as assessment of needs, identification of outcome and process goals, selection of alternative courses of action, and the specification of program priority areas.

REFERENCES

- Atteberry, Jim W.; Miller, Wilbur R.; and Pershing, James A. Improving Vocational Education Planning: More Myth than Reality? Final Report. Columbia MO: Department of Mactical Arts and Vocational-Technical Education, University of Missouri, March 1977.
- Berman, Paul, and McLaughlin, Milbrey Wallin. Federal Programs Supporting Educational Change, Vol. VIII: Implementing and Sustaining Innovations. Prepared for the U.S. Office of Education, Department of Health, Education and Welfare. Santa Monica, CA: Rand, May 1978.
- Bregman, Ralph; Chialtas, Chris; and Nelson, Richard S. The Janus Report: A Report on the Changing Social Setting in the United States with Implications for New Roles for State and Local Vocational Education Personnel. December 1974.
- Buontempo, Gregory, and Klavon, Michael. <u>Making the Most of Your Advisory</u>
 <u>Committee</u>. Trenton, NJ: New Jersey State Department of Education, November, 1975.
- Bushnell, David S. "A Systematic Strategy for School Renewal." Educational Technology 7 (February 1972): 27-32.
- Campbell, Paul B. "Needs Assessment in Educational Planning." Educational Planning 1 (May 1974): 34-40.
- <u>Citizen Participation</u>. Washington, DC: Community Services Administration, 1978.
- Coleman, James S. "The Children Have Outgrown the Schools." <u>Psychology Today</u> (February 1972): 72-82.
- Coombs, Philip H. What Is Educational Planning? Paris: UNESCO, International Institute for Educational Planning, 1970.
- Copa, George H., and Geigle, Erwin K. <u>National Conference for State Vocational Education Planning Staffs</u>. Final Report. Minneapolis, MN: Minnesota Research Coordinating Unit for Vocational Education, Department of Vocational and Technical Education, University of Minnesota, November 1976.
- Davies, Don; Upton, James; Clasby, Miriam; Baxter, Felix; Powers, Brian; and Zerchykov, Ross. <u>Federal and State Impact on Citizen Participation in the Schools</u>. Boston, MA: Institute for Responsive Education, 1978.
- Davies, Don. "Perspectives and Future Diffections." In Institute for Responsive Education, Schools Where Parents Make a Difference. Boston, MA: 1976.



- Druisn, Greg. Citizen Participation Handbook: Four Case Studies. Community Education Advisory Council Report No.6. Northwest Regional Educational Lab. Washington, DC: U.S. Government Printing Office, 1977.
- Equall, Steve A. Advisory Committee for Vocational Education: Establishing, Organizing, Operating. Lincoln, NE: Nebraska Department of Education, n.d.
- eric Clearinghouse on Educational Management. ERIC Abstracts: A Collection of ERIC Document Resumes on Educational Planning. Eugene, OR: University of Oregon, January 1971.
- Fantini, Mario D. "Community Control and Quality Education in Urban School Systems." In Community Control of Schools, edited by Henry M. Levin. New York: A Clarion Book, Simon and Schuster, 1970.
- Fantini, Mario D. "Community Participation: Many Faces, Many Directions." Educational Leadership (May 1972): 674-680.
- Fantini, Mario D. Foreword to <u>Participants and Participation</u>: A Study of <u>School Policy in New York City</u>, by Marilyn Gittell. New York: <u>Praeger</u>, 1967.
- Fein, Leonard J. "Community Schools and Social Theory: The Limits of Universalism." In Community Control of Schools, edited by Henry M. Levin. New York: A Clarion Book, Simon and Schuster, 1970.
- Fernandez, Happy. Parents Organizing to Improve Schools. Columbia, MD: A Parents' Network Publication of the National Committee for Citizens in Education, 1976.
- Fox, J. C. "Functions and Responsibilities of Community-Advisory Councils." Community Education Journal (May-June 1974).
- Geigle, Erwin K. Management Information Systems: A Review and Synthesis of Projects Funded During FY 1975 under the Vocational Education Amendments (P.L. 90-576, Section 131(a) of Part C). (Information Series No. 128.) Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, 1978.
- Halperin, Samuel. "What's Wrong with Vocational Education: Some Congressional Impressions." VocEd 53 (September 1978): 27.
- Hamlin, Roger E., and others. <u>Planning for Vocational Education</u>. East Lansing, MI: Michigan State University, Proaction Institute, January 1977.
- Holt, James. "Involving the Users in School Planning." School Review 82 (August 1974): •707-739.
- Indiana State Advisory Council on Vocational Education. Vocational Education:
 Local Advisory Committee Handbook. Indianapolis, IN: 1976.

- Motitute for State Education Agency Planners, Mankato State College. A Guide to Manning State Education Agency Programs. Mankato, MN: February 1971.
- King, Sam W. Organization and Effective Use of Advisory Committees. Washington, DC: U.S. Government Printing Office, 1960.
- Lamar, Carl S., ed. Comprehensive Planning for Vocational Education; A Guide for Administrators. Arlington, VA: American Vocational Association, 1978.
- Levin, Henry M., ed. Community Control of Schools. New York: A Glarion Book, Simon and Schuster, 1970.
- Maryland State Advisory Council on Vocational-Technical Education. Guidelines for Local Advisory Councils on Vocational-Technical Education. Annapolis, MD: May 1977.
- May, L. J. "Community Involvement: The Detroit Experience." Community Education Journal (May-June 1974).
- Midcoast Educational Development Center. Craft Committees (Occupational Advisory Committees) Can They Work? Buth, ME: 1977.
- Miller, Donald R. A System Approach to Planned Change in Education. Vol. II.

 A Strategy for Planned Change in Education. San Mateo County, CA: Operation PEP, September 1970.
- Missouri Advisory Council on Vocational Education. Handbook for Local Advisory Committees in Vocational Education: January 1977.
- Morphet, Edgar L.; Jesser, David L.; and Ludka, Arthur P. "Comprehensive Statewide Planning: The Promise and the Reality." In The Potential of Educational Futures edited by Michael Marien and Warren L. Ziegler. Worthington, OH: Charles A. Jones Publishing Company, 1972.
- Nerden, Joseph T. "Advisory Committees in Vocational Education; A Powerful Incentive to Program Improvement." American Vocational Journal 52 (January 1977): 27-29.
- New York State Education Department, Office of Occupational and Continuing Education, and The University of the State of New York. A Handbook for Members of Consultant Committees for Occupations. Albany, NY: n.d.
- North Carolina State Advisory Council on Vocational Education. Citizen Participation in Vocational Education Programs: A Handbook. Raleigh, NC: 1976.



- Nowrasten, Daryush M. Planning and Management Systems for State Programs of Vocational and Technical Education: An Application of Research. Columbus, OH: ERIC Clearinghouse on Vocational and Technical Education, The Center for Vocational and Technical Education, The Ohio State University, November 1971.
- O'Leary, Linda Schluter. "The School as Social Service Center." Notes on the Future of Education 3 (Summer 1972): 12-17.
- O'Reilly, Patrick A. The State Planning Process in Vocational Education:
 Project Baseline Supplemental Report. Flagstaff, AZ: Project Baseline,
 Northern Arizona University, December 1975.
- Pennsylvania State Advisory Council on Vocational Education. Advise for Action; A Handbook for Local Advisory Councils on Vocational Education: n.d.
- PREP Report No. 24: School-Community Relations and Educational Change.
 Washington, DC: U.S. Government Printing Office, 1970.
- Riendeau, Albert J. Advisory Committees for Occupational Education: A Guide to Organization and Operation. New York: Gregg Division/McGraw-Hill Book Company, 1976.
- Rodgers, Ronald C. Educational Planning in the Labor Market: Linking
 Occupational Education to Regional Economic Development. Vol. 1. A Study
 conducted jointly by the Graduate School of Management and School of
 Education, Northwestern University. Evanston, IL: Northwestern University,
 June 1976.
- Ross, Joel E. Management by Information System. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1970.
- San Francisco, Calif. Mayor's Office of Manpower. Community Planning for Human Resource Development: The San Francisco Job Training Interchange. Final Report. San Francisco, CA: 1975.
- San Mateo County Office of Education. Vocational Education Division. Model Program Statements for the 12 Functions of the California Vocational Education System. San Mateo County, CA: June 1972.
- Sarthory, Joseph A., ed. <u>Educational Leadership, Renewal and Planning: A</u>
 <u>Synthesis</u>. New York: MSS Information Corp., 1974.
- South Carolina Advisory Council on Vocational and Technical Education. The Little Book on Local Voc/Tech Education Advisory Councils: A Guide. Columbia, SC: March 1977.
- Stanton, Jim; Whittaker, Bobbi; and Zerchykov, Ross. Resource Guide and Bibliography on School Councils. Boston, MA: Institute for Responsive Education, 1977.

- Solution, Lois. Social Science Theory and Research on Participation and Solution, Associations. Boston, MA: Institute for Responsive Education, 1978.
- Stevens, David W. Personal Communication, 23 August 1978.
- Stevenson, William N.; Bowers, Ellen M.; and Morton, J.B. "Information Systems for Planning." In Comprehensive Planning for Vocational Education; A Guide for Administrators, edited by Carl S. Lamar. Arlington, VA: American Vocational Association, 1978.
- Sviridoff, Mitchell. Planning and Participation. New York: Ford Foundation, 1969.
- Virginia State Advisory Council on Vocational Education. Leadership Development Conference for Local Advisory Committees, May 23-25, 1976. Blacksburg, VA: 1976.
- Virginia State Advisory Council on Vocational Education. <u>Technical Assistance</u> to Local Advisory Councils on Vocational Education. Blacksburg, VA: February 1978.
- "Vocational Education, State Programs and Commissioner's Discretionary Programs." Federal Register (October 3, 1977): 53822-53891.
- Webster, Maureen M. "Converging Concerns of Futurists and Planners; Changing Viewpoints in Educational Planning in the OECD Area." In The Potential of Educational Futures, edited by Michael Marien and Warren L. Ziegler. Worthington, OH: Charles A. Jones Publishing Company, 1972.
- Wolvek, Joe. Comprehensive Planning in State Education Agencies; A Comprehensive Planning Process for the State Department of Public Instruction,
 Suitable for Application in Iowa Education Systems. Des Moines, IA:
 Department of Public Instruction, 1968.
- Young, Robert C.; Clive, William V.; and Miles, Benton E. Vocational Education Planning: Manpower, Priorities, and Dollars. Columbus, OH: The Center for Vocational and Technical Education, The Ohio State University, 1972.



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