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ABSTRACT

This first volume of the Master Plan for Education in Fresno, California, summarizes the activities of a 2-year planning project (PROJECT DESIGN) funded by ESEA Title III. PROJECT DESIGN has assessed current and projected educational needs in the Fresno area, and developed a planning model based on optimum interagency cooperation that offers alternative solutions for meeting these needs. The first two sections of this volume outline basic assumptions concerning the relationship between future educational objectives and community and individual development. The third section summarizes specific recommendations for change in the Fresno schools. The final section describes future responsibilities, management and accountability needs, management control options, and alternative models for education in Fresno. The document includes a diagram illustrating the interrelationships of significant components in the master plan and a listing of project publications and participants. Related documents are EA 002 855 and EA 002 856. (JH)

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EDUCATIONAL MASTER PLAN

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- A SUMMARY**
- B CONFIGURATIONS :
DESIGN FOR THE FUTURE**
- C IMPLEMENTATION :
PLANNED CHANGE**

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FRESNO, 1969


FOREWORD

PROJECT DESIGN (Interagency Planning for Urban Educational Needs) was organized as a two year project to develop a comprehensive long-range Master Plan of Education for the Fresno City Unified School District in California. Funded by the United States Office of Education from Title III provisions of the Elementary and Secondary Education Act, its intent was to bring under one umbrella current major problems of the schools, the relationship of the schools to the broader community, the impact of educational change now occurring throughout the nation, and a fresh view of the educational needs, goals and aspirations of our youth and adults. The ultimate purpose of the project was to weld into an integrated plan the best use of available resources to meet the totality of current and projected educational needs. Design and application of such a comprehensive urban, interagency, educational planning model was an innovative planning project far exceeding in scope any known prior education master plan.

The first year of the project was organized to assess current and projected needs in the urban area served by the Fresno City Schools with particular reference to certain identified major problems. Development of new interagency planning relationships with major governmental and community groups was an optimum goal.

Second year activity focused upon generating and evaluating practical alternate solutions and designing short-term, intermediate and long-range recommendations in harmony both with the predictable future and with current constraints and limitations.

Extensive studies by Task Force consultants and the project staff have been reported in thirty-six earlier project publications which are listed in the Appendix. Repetition of data and recommendations from these basic publications was intentionally avoided to the extent possible in the two major volumes (B and C) of the Educational Master Plan, and in its summary (volume A).

PREFACE

This is not a final master plan of education. Neither is it complete. Some will find a gap, a generality or a process substitute for the well-defined solution they seek. The format will appear rudimentary as other school systems begin to develop master plans of similar dimension. The product, format and techniques used in the project represent the built-in failure dimension of true innovation while they also demonstrate the risk which the U. S. Office of Education and the Fresno City Unified School District were willing to take in pioneering a first model for comprehensive long-range urban educational planning through interagency cooperation.

This is a system design for continuous planning which makes some significant recommendations for initiating and continuing orderly change toward a generally predictable future which will be dramatically different. It is a dynamic rather than a static plan, produced in a dynamic setting where significant change occurred during the planning period. It was produced in eighteen effective working months without prior research models for comparison. It created little stress and interruption to the school system and community — and perhaps too little interest and expectation. It represents a highly educational experience for the project staff and, by their volunteered expression, for many of the teachers, administrators and even external consultants associated with the project.

Both the appeal and the frustration of the project were rooted in its ambitious scope: to find answers for such universal problems confronting

education as how to meet the special and pervasive needs of the minorities and the disadvantaged, what the appropriate role of the school is in a complex and changing society, how to overcome massive internal and external communication gaps, and how to utilize new and expensive technology in a period of rising costs and shrinking resources.

It is truly impossible to adequately express appropriate gratitude to those community leaders and educators whose vision and service to the project exceeded any reasonable expectations. It is usually thus, it was so in Fresno, and their contribution was a major factor in whatever success may be credited to the project.

For the abundant opportunities to freely dig through this major urban school system by observation, data inspection, test and interview, to pull out of important assignments the key teachers and administrators we needed, and to chart our own way with recommendations, the project staff is most appreciative.



Edward E. Hawkins
Project Director

INTRODUCTION

Recommendations of the Educational Master Plan are fully developed in two major companion volumes, then summarized in a third volume.

Volume B is called CONFIGURATIONS: DESIGN FOR THE FUTURE. It contains a series of independent configurations of what education can and should be like in developing human potential for a future which is generally predictable. Perhaps the most significant recommendations of the Educational Master Plan are those related to considering, and then acting to select, major strategies which will provide consistent long-range direction for change and improvement toward the year 2000. Many of the configurations are relevant to other school systems as well.

Volume C is called IMPLEMENTATION: PLANNED CHANGE. First, it summarizes the systematic analysis of major current problems and challenges for the Fresno City Schools with criteria for adequate solutions. It then presents a number of activities recommended for immediate implementation. Many activities are arranged in time-related sets and extend into the intermediate future to about 1975. Each series of activities is independent so some can be initiated without others, but they are appropriately interfaced as there are many interrelated activities across the independent series. Third, some recommendations for further study are made.

Volume A is a SUMMARY. It includes highlights of the configurations and briefly reports the principal recommendations of the major Educational Master Plan volumes.

This is Volume A, SUMMARY.

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I. MAN IS NEVER ALONE - The Community

Future

Change

Accountability

Need

Applicability

"There are no distant points
in the world any longer....
Our thinking in the future
must be world-wide."

--Wendell L. Wilkie

I. MAN IS NEVER ALONE

- The Community

Future

Telemobility will be a characteristic of man. His corporeal body as well as his utterances will be immediately accessible to all other men. The task of organizing and relating facts, and in many cases, generating new facts, will be done by machines that have infinite patience as they perform their functions of classifying and recalling data. Wisdom, understanding and interpreting facts, will continue to be man's responsibility. Man will no longer "work" to produce things for in this he will not be able to compete with his machines. Man's "work" will be twofold. He will have the intellectual task of deciding how to share the products of his technology with all men, and he must learn to effectively use the "leisure time" he has created. In this "workless" society man's predominant vocations will be education and recreation.

Change

By the year 2000, the continuing exponential growth of both population and factual knowledge will have been accepted as a way of life. Change will no longer be a threat to an existing pattern, for the existing pattern will be recognized as one of change. That society will continue to change, and change at a constantly accelerating rate is inevitable. What those changes will be is totally dependent upon man's wisdom.

Accountability

The community of man is held accountable for its actions. If community decisions are wise, the community flourishes; if they are foolish, the community languishes or perishes. When man existed in small separated communities, he had the luxury of making foolish decisions, for each community could flourish or perish independently. Both technology and population growth are forcing man into living in a single world-wide community. This, however, does not alter the fact that it, too, will be held accountable and either flourish or perish, dependent on the wisdom of man and his decisions. Man no longer has the luxury of making foolish decisions for such decisions may result in the destruction of all. Planning wise decisions then becomes the prime function of man for his own preservation.

The Need

Interdependence and the complexity of urban society requires new methods of external and internal communications to bring consensus out of strongly divergent values so that it does not destroy itself by implementing contradictory decisions.

Applicability

Education must have goals set by the community as part of more comprehensive community development goals. The public school system is only one force operating to develop human potential and capitalize human resources, thus the community must monitor and coordinate all of its educational activities. New communications and governance structures are required by the public school for its role to be

matched to community need, coordinated with responsibilities of other agencies and be effectively discharged to the satisfaction of its citizens.

II. MAN IS ALWAYS ALONE - The Individual

Future

Change

Accountability

Need

Applicability

"Which of us has known his brother?
Which of us has looked into his
father's heart? Which of us has
not remained forever prison-pent?
Which of us is not forever a
stranger and alone?"

--Thomas Wolfe
Look Homeward, Angel, 1929

II. MAN IS ALWAYS ALONE

- The Individual

Future

In the future the individual man will be much the same as the individual man of the past and present. He will still be trying to answer the questions that have faced men in all times - "Who am I? Why am I here? and, What am I to do?" The answers to these questions will be based in the future, as in the past and present, upon his values; values he personally perceives as he relates himself to his surroundings.

Change

No fundamental change is foreseen in man. Any change that appears will be in his perception of his environment. As seen by us today he will live longer, go more places, use more and different things; but he will view himself in his current time, and, in turn, anticipate change for those who follow him.

Accountability

Individuals will be more accountable for actions that result from their decisions. Two factors indicate this increased responsibility for being accountable. Each will have readily available vast amounts of data on which to base decisions and because he will live in close proximity to his fellow man, his decisions will inevitable affect many others in addition to himself.

Need

There must be a major change in the formal education provided

youth. The critical content of any learning experience must be the method or process by which a student makes decisions. The accumulation of facts, as such, is a task better relegated to a machine. The value of a citizen is not in what he knows, but in what he can do with his knowledge.

Applicability

Schools must begin to truly individualize education. Methods of lecturing must be supplemented by discussion groups to develop the meaning of facts and ideas. The learner must be given greater independence and responsibility. The student and his parent will need to share in planning education with guidance from teachers who deal regularly and intimately with the individual.

III. MAN LIVES WITH MAN - Reconciliation

Applicability

Recommendations

"Unless we can provide schools where children, through a reasonable use of their capacities, can succeed, we will do little to solve the major problems of our country."

--William Glasser
Schools Without Failure, 1969

III. MAN LIVES WITH MAN

- Reconciliation

Unchanging man must continue to reconcile himself to a constantly changing environment of his own creation. The challenge facing Fresno City Schools is to assist the members of this community, young and old, in this task. Because man basically remains the same, it is the institutional role of school that must change if this reconciliation is to be accomplished. Relevance is achieved when the reconciliation is made.

Applicability

To understand this environment, the student must spend much more time in organized exploration of his community. He should render it some service as it serves him. The talents, the machinery, the space of the community should be used for education as well as for other purposes.

Recommendations

The recommendations on pages ten through sixteen are a part of a unified educational master plan. There are, therefore, no priorities other than the logical time related sequences shown in Volume C.

The reader is cautioned that the highlight activities summarized here may give a distorted impression of major impact to be implemented at once. The fact is that most of the changes are scheduled for extensive pilot use in few schools, followed by careful evaluation and revision prior to their implementation in all schools of the district.

DEVELOP EDUCATIONAL OBJECTIVES

- Define every current and proposed curriculum offering with behaviorally stated objectives so students and teachers know when they have been achieved.
- Define each district and school management function with behaviorally stated objectives.
- Create and maintain a reference register of district instructional goals and district management goals with their precise objectives.

ADOPT STAFFING PATTERNS TO MEET INDIVIDUAL SCHOOL NEEDS

- Convert all school positions, certificated and classified, into staffing units using the regular teacher as base one.
- Allocate to each school its staff allowance in "staffing units" rather than specific numbers of each type of personnel.
- Have every school determine its own staffing needs within the district allotment as the staffing plan portion of its total school development plan.
- Make the selection of individual personnel in schools a joint responsibility of the principal and the personnel division.

PUBLISH ACCURATE JOB DESCRIPTION FOR EACH POSITION IN THE DISTRICT

- Have individual employee work with supervisors to cooperatively develop and periodically review job descriptions so that each employee knows clearly what he is expected to do, and all tasks required to meet district goals and objectives are covered without duplication.

DEFINE FUNCTION OF SCHOOLS IN RELATION TO OTHER AGENCIES IN COMMUNITY EDUCATION

- Initiate a survey to describe educational activities of all public and private agencies in the community.
- Encourage utilization of identified resources in all agencies in developing community educational programs.

ORGANIZE CONTINUING SCHOOL ADVISORY COMMITTEES TO IMPROVE EXTERNAL COMMUNICATION

- Establish citizen advisory committees for each school to serve as liaison between that school and its immediate neighborhood, and to report periodically to the Board of Education their perception of school and community educational programs.

INVOLVE STUDENTS AND PARENTS IN CURRICULUM STUDY

- Establish citizen advisory committees for each (age-grade) developmental level to share responsibility with school staff for program evaluation and development.

MODIFY SCHOOL OPERATIONAL STRUCTURES TO FACILITATE INDIVIDUALIZED INSTRUCTION

- Have teachers design educational programs for individual students in cooperation with the student and his parents.
- Have students follow individual programs with concurrent evaluation rather than periodic grading determined by a calendar.

DEVELOP A COMPREHENSIVE COORDINATED PROGRAM OF IN-SERVICE EDUCATION

- Modify current ad hoc pattern of in-service education by providing centralized responsibility for an organized district-wide program based upon major needs and goals of the district.
- Initiate major in-service activity to prepare teaching staff to develop educational objectives, to understand the cultures and problems of minorities, and to utilize open space educational facilities.

DESIGN MECHANISMS TO EVALUATE PRECISE ACHIEVEMENT OF EDUCATIONAL OBJECTIVES

- Develop and standardize district mechanisms to test achievement of objectives as they are established.
- Use uniformly designed and standardized evaluative instruments at every age-grade level, preschool through high school.

PROVIDE A COMPREHENSIVE GUIDANCE PROGRAM WITH EMPHASIS ON DEVELOPMENTAL SERVICES FOR EVERY STUDENT

- Provide guidance services for all students from preschool through high school which emphasize student responsibility for decision making.

- Increase responsibility of teachers, who are immediately accessible to students and parents, to provide guidance service.
- Continue individual student program development as the responsibility of the teacher in cooperation with the student and his parents.
- Convert significant portions of guidance staff time to the functions of serving as resource personnel to teachers, and to group counseling with student and parent groups.

CREATE A NEW COMPREHENSIVE VOCATIONAL EDUCATION PROGRAM FOR EVERY STUDENT IN PARTNERSHIP WITH THE TOTAL COMMUNITY AND ITS COMMUNITY COLLEGE

- Develop a comprehensive world of work curriculum for all grades from kindergarten through grade 14.
- Expand out-of-school work experiences at the secondary level to include all students in occupational exploration, to increase understanding of community structure and interdependence, and to assume responsibility for some service to community.
- Expand cooperative work-experience programs to increase utilization of the community for terminal or partial training in business and service occupational fields.
- Place the responsibility for technical vocational education at one institution, preferable Fresno City College.

Work toward an interdistrict program of terminal vocational education.

DEVELOP A PROGRAM OF EFFECTIVE AND PRODUCTIVE PERSONNEL EVALUATION

- Modify personnel evaluation procedures as instructional and management objectives and more definitive job descriptions both become available.

MAINTAIN UP-TO-DATE EDUCATIONAL SPECIFICATIONS

- Continue the current staff group to maintain and refine educational specifications to which school facility improvements are addressed.

DEVELOP A COMPREHENSIVE PROGRAM FOR EARLY CHILDHOOD EDUCATION

- Accept as a district responsibility the initiation of interagency program of early childhood education, to be developed by professional staff of all agencies and be monitored by a citizens advisory board.

- Seek legislation that will allow and fund the schools to provide early childhood education for all children.
- Explore the concept of small satellite neighborhood schools built around a home atmosphere for early childhood education programs that will involve parents extensively with their children.

ADJUST SCHOOL ORGANIZATION PATTERNS TO FACILITATE CONTINUOUS PROGRESS EDUCATION

- Modify school organization to a four level pattern of elementary (primary through grade 5), middle (6 - 8), junior high (grade 9 only), and senior high (10 - 12).
- Convert from grade designations to continuous progress through developmental levels.
- Replace periodic report cards with more frequent and more objective reports of student progress at parent-student-teacher conferences.
- Move students to higher developmental levels and tasks as they mature rather than by annual promotion.
- Remove current time constraints of hours per day and the school year so that as programs develop school facilities may be available for use.

EXPAND RESEARCH AND DEVELOPMENT SERVICES

- Establish a research and development unit at the division level directly responsible to the superintendent.
- Assign this division the specific responsibility for evaluating present programs.
- Assign this division the responsibility for monitoring and evaluating implementation of this Educational Master Plan, and of extending its configurations, specificity and applications to become a continuing and dynamic long-range master planning vehicle.
- Assign this division the responsibility for organizing and supervising task forces of school staff and/or external consultants to solve a limited number of major special problems which are assigned by the superintendent.
- Include this division in cooperative planning for instructional or management development with other divisions generating such plans.

- Increase the scope of electronic data processing services to meet needs in evaluation, research, development, problem solving, management information and interagency data register as supplements to current services.

EXPAND FUNCTION OF BOARD OF EDUCATION IN POLICY DEVELOPMENT

- Increase the opportunity for the Board to listen to reports from citizens advisory groups by increasing the number of meetings and utilizing day as well as evening hours.
- Initiate the creation of a Council of Fresno Educational Agencies that has the responsibility of monitoring all educational services in the community.
- Consider providing board members with compensation for their services in similar fashion to that provided other elected community board representatives.

EXPEDITE DEVELOPMENT OF A COMMUNITY PLANNING DATA REGISTER

- Support tentative efforts to establish such a basic service with initial location in the County Library.

MODIFY SENIOR HIGH SCHOOL CURRICULUM TO BE COMPATIBLE WITH INDIVIDUALIZED INSTRUCTION AND CONTINUOUS PROGRESS EDUCATION

- Modify teacher role to one of diagnosing educational need, assisting in developing program based on specific objectives, designing means by which student achieves objectives, and evaluating student achievement.
- Provide every student with off campus community centered educational activities.
- Make present specialized classes at individual schools available to all students by expanding open enrollment opportunities and allowing attendance at more than one school.
- Publish annual district-wide catalog of all secondary offerings.
- Publish annual community-wide catalog of all educational opportunities available in agencies other than the public schools.

MAKE ADULT EDUCATION AN INTEGRAL PART OF THE TOTAL PUBLIC SCHOOL PROGRAM OF CONTINUOUS PROGRESS EDUCATION

- Expand each school to become a neighborhood education center that

provides adult services as well as youth services.

- Assign adult teaching the same degree of responsibility and compensation as assigned to those services provided for teaching youth.
- Expand curriculum available for adults in the area of cultural and recreation activities.

MEET THE EDUCATIONAL NEEDS OF MINORITIES

Many previous recommendations will benefit minorities although the focus is upon the needs of people, both students and adults.

- Implementation of "staffing unit" procedures gives emphasis to individual school needs, i.e., use of indigenous aides.
- Functional citizen advisory committees in each school will be responsible to recommend to the school and interpret the school back to the neighborhood.
- Personal parent involvement with teachers in planning will result from guidance recommendations.

Special recommendations are made for minority groups or schools.

- Continue efforts to build specially selected master teaching teams.
- Consider major change in the teacher transfer policy which allows a permissive evasion of responsibility and results in a low level of experience at minority schools.
- Continue to distribute minority staff throughout the district where their interests and preferences are considered along with the needs of all children to learn from competent professional models of many types.
- Maintain and expand the aggressive search for well qualified minority personnel, both for teaching and for administration, realizing that competitive salaries and quality working conditions in all Fresno schools are essential.
- Seek opportunities to qualify minority citizens for greater responsibility in school and district positions.
- Eliminate cultural bias on tests.
- Provide in-service education for all staff to develop real understanding of minority cultures.

- Explore the concept of small satellite neighborhood schools with a home atmosphere for early childhood education programs.

To improve school racial balances:

- Continue to support redevelopment activity of West Fresno and vigorously pursue interagency planning activity to avoid continued drift toward blight in other older central neighborhoods.
- Continue to explore, expand and evaluate voluntary movement focused upon magnet schools and magnet programs.
- Control balance of ninth grade junior high schools as they are implemented
- Initiate a program to prepare all citizens for accelerated racial balancing if mandated by legal action.

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IV CONFIGURATIONS

The Future

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"Another, yet the same."

"No one lives content with
his condition, whether reason
gave it to him, or chance
threw it in his way."

Horace, 65-8 B.C.

THE FUTURE

In the beginning of this century a handful of spectators watched visionary men enter a new environment using a contraption of sticks and fabric powered by an engine that had unpredictable performance at best. As the population in general became aware of this event, they viewed it with varying attitudes of amusement, amazement and scorn, then returned to the tasks necessary for survival in the rural environment.

In 1969 visionary men have again entered a new environment as they walk upon the moon. Here the simile ends, for the Wright brothers were part of the world of the past; today we are part of the future. The "contraption" that took men to the moon was mechanically perfect. The world's population watched as man first set his foot upon another sphere. Man was amazed, but neither amused nor scornful. Instead, the feeling was one of apprehension, not just for the astronaut, but for himself in a world suddenly become one with fiction.

What change can man foresee other than the inevitability of change itself? How can we effectively educate our youth to live in a world we have never known, knowing the futility of teaching them to live in world that no longer exists?

Implication for Education in Tomorrow's World

One of the most significant studies accomplished by educators in the field of future anticipation is that accomplished by the CASSA Committee on Education Now for Tomorrow's World. The publication,

resulting from the study by secondary administrators within the state of California, states fifteen responsibilities which must be faced by the education profession or by the process of education in the years approaching the year 2000. A simple listing of the fifteen responsibilities parallel the traditional seven cardinal principles of education. It is significant to note the tenor of the additional responsibilities, marked with an asterisk, listed by the CASSA Committee.

The fifteen responsibilities are:

- *1. To provide opportunities for understanding and appreciation of the need for individual flexibility in an atmosphere of change.
- *2. To develop in youth an attitude of inquiry; to teach the process of problem solving and decision making as distinguished from the storing of facts.
3. To continue training in the basic tools of learning.
- *4. To develop a curriculum where the criterion for priorities is based upon relevance to contemporary and future needs of youth.
5. To prepare youth for a changing world of work.
6. To prepare youth for responsible, participating citizenship.
7. To provide preparation for productive use of leisure time.
- *8. To extend and emphasize the teaching of the fine arts.
- *9. To teach civilized human relations.

- *10. To build bridges to an understanding of all the peoples of the world.
- 11. To assist youth in developing moral and ethical guidelines.
- *12. To prepare youth to understand and deal constructively with psychological tensions.
- *13. To assist youth in developing ways of insuring individual privacy and worth in a world of increasing group activity and social supervision.
- *14. To provide opportunities for study and understanding of urban life and problems.
- *15. To develop an instructional program in school that fully utilizes information sources and agencies outside of the classroom.

The Educational Master Plan in the volumes following is written in full recognition of the inevitable process of change. It is entirely possible that the basic premises upon which the Master Plan was constructed and the anticipation of future trends could be subject to drastic change as a result of a single technological breakthrough. The Futurists are quick to indicate an unanticipated development, or discovery could very well shift the course of human events in directions presently beyond our comprehension. It is the intent of the Educational Master Plan to provide a framework for change in which sufficient flexibility and room for adaptation is included to allow for significant eventualities.

A SYSTEM OF MANAGEMENT ACCOUNTABILITY

A Conceptual Framework for Management Accountability

Within the past five years, a number of concepts have emerged which call for a totally new approach in our established educational efforts. The ideas embedded in these concepts are not particularly new, but societal changes, developments in educational research, and fresh tools for schools. These concepts have profound implications for the programs, personnel and material resources of a school system.

Equality of Opportunity

A new perspective has emerged with regard to the meaning of equal educational opportunity. In contradistinction to the idea of providing a uniform type of experience for each pupil, a new and compelling realization of the need for diversity has recently been stated, as in a recent statewide study of education in Oregon:

But men are not equal in their natural endowments. Nor are they in their potentialities, and education is incapable of making them so. Hence we are faced with the interesting paradox. If we are to provide citizens with equal opportunity to develop their abilities to the limit of their capacities, we must offer them a variety of different and, in a real sense, unequal educational opportunities. For there is no greater inequality perpetrated in an educational sense, than when individuals of unequal ability are treated educationally as if they were equals.

This principle has profound implications for change in American education, not only in state apportionment laws and formulae, but for sweeping revisions in local district policies which affect individual schools and programs.

Basic Values and Purpose of Education

Philosophically, schools must be in harmony with the basic facts of pupil development and the value structure of American society. At least four key values need review, not because they are new, but because societal change calls for a re-emphasis of these values in the changes that are to come to education.

1. Each individual has worth

With few exceptions, every person is an asset — or may become an asset — to our society. The pivotal idea in the American value system is the supreme worth of each individual. Not only does our society count each person as an asset, but, indeed, the worth of this asset in terms of educational attainment may be assessed. Thus, a collective group of individuals — in a community, a state or a nation — may be collectively assessed in terms of value as expressed by educational attainment.

2. Education adds value to a person

Education is the process that enhances the knowledge, skills, habits, attitudes and styles of a person. Man becomes civilized through education, which calls for a disciplining of the individual in his relationships with others according to the habits, beliefs and rules of society. In this way education stimulates and shapes the individual unfolding of personality and intelligence. Thus, education is the means of increasing the value of an individual to society.

3. Each person has measurable potential for educational attainment

Recognition must be constantly given to the current exciting and significant research on human growth and intelligence. This research must be viewed in terms of ethnic, cultural, socie-economic and other factors of possible influence. The emerging results of this search may admittedly cause modifications from time to time in concepts and in means of measurement. Nevertheless, every individual has an apparent educational potential that may be generally determined during the earlier and later years of his formal school experiences. Tools presently available for assessing this potential are imperfect, but significant progress can be made by capitalizing on the present "state of the art".

4. Key responsibility rests with the state and local education authorities

It is legally and morally incumbent on the organized education authorities to assess as fully as possible each person in the realization of his apparent educational potential. This assistance includes helping individuals to overcome certain deficiencies and thus increase their apparent potentials.

Keystone Concepts of Pupil Success and Development

Important insights or principles concerning pupil development and success need to be constantly kept in mind as schools take on new directions and improvements.

1. Variability of pupils

The improved measurement of school operations involves a recognition of the great variability among pupils. This variation is measured in socio-economic status, intelligence quotients, prior school work, teacher judgment, and ability for sustained drive.

2. Success: a mosaic

School success is a mosaic of many small achievements rather than one overriding gain.

3. Prerequisite learnings

It appears advantageous to consider each pupil on the basis of longitudinally compiled data. Pupil records should reflect this kind of longitudinally measurement compiled data.

4. Simultaneous measurement

In measuring pupil attainment it is important that a totality of measures of many dimensions of pupil development take place simultaneously. This will show that a renewed emphasis on one dimension does not cause a deterioration in some other important dimension.

5. Structurally independent

The measurement system must be independent of a school structure so that it can properly assess the product of innovations.

The Challenge for Educational Measurement

New concepts are needed in terms of the classification of pupils, in terms of new types of pupil records, and in terms of the concept of absolute rather than relative standards for pupil achievement. New postulates of school management theory have been added, such as the development of a cost system that will permit cost-benefit effectiveness comparisons. For the determination of unit costs it is necessary to have some definable and measurable unit of production.

The Importance of Pupil Classification in Following the Development of Each Child

The classification of pupils by their important characteristics is vital for modern school management. Since each child is different, generalizations do not have enough precision to meet the modern challenge of educational assessment. The school management system must follow each child and report on his success and failure in meeting prespecified objectives. Evaluation of pupil development must be continuous with prompt, corrective actions as failure is noted. Because of the broad range of individual differences, the treatment that may be good for one pupil may be very harmful for another. Whenever possible, youngsters should be grouped by developmental stages.

The Use of Longitudinal Records

In order to fully evaluate any changes in the pupils' environment, one must necessarily make some kind of estimate of the longitudinal pattern of growth of the child. It is advantageous to have models of expectations

of individual pupils. When substantial portions of students are not developing satisfactorily, school management should feel under severe pressure to change school policies.

Use of Present Standardized Tests

Existing tests and resulting records are quite inadequate for modern management purposes because they are normed to show the relative class placement of pupils, rather than their actual capabilities.

The Need for Absolute Measures

Few measures are available that help establish landmarks for guidance purposes. Satisfactory school measurement must provide a clear determination of individual pupil progress, not distorted by what happens to other students. When measurement is on a truly individual and solid base, a child can be allowed to move at his own rate without disturbing the whole management measurement scheme. In order to establish reasonable goals for each child, different standards of progress must be set for children with different characteristics. The present standardization system which shows a relationship to the average must shift to specific, absolute, and verifiable objectives by kind and age of child.

School Management for Quality Assurance

Schools are operating under a complexity of many forces, thus they have failed to adopt scientific management methods. Following are useful concepts that can help schools to be brought under effective management control.

Management by Objectives

School systems need to give considerably more attention to the definition of objectives. The overriding objective is the development of the individual in accordance with his potential. One of the first requirements of an educational objective is to find a way of specifying potential or of obtaining some suitable device to serve the same purpose. An objective must be stated with a clear system of measurement in the light of known characteristics of pupil response in whatever is being measured. A very important concept dealing with management by objectives is the variability of human beings and the necessity of classification to adjust accordingly.

Management by Exception

This concept consists of finding all variations exceeding chance and eliminating or accounting for them with the result that the residuals always stay within chance limits. In a school situation, this means that from a total array of measures and judgments to be obtained on pupils in order to assess their development and attainment, the school manager must determine how much variability is allowable and which is merely due to chance factors operating. In establishing tolerance limits and activating assessment mechanisms, the school manager automatically defines the special cases that need unusual attention or treatment.

Quality Assurance Efforts

The essence of this program is the identification of all important forces operating and their suitable control. The fundamental element

in quality assurance is that it has a system of feedback that will promptly indicate when the quality of the output is fluctuating.

Identifying Causes of Variation

This operation is similar to trouble shooting. To identify causes of variation generally requires classification of records by time, by characteristics of persons involved (pupils and teachers), by school buildings, etc. It also requires one to identify where a departure from chance occurred and then to make a careful enumeration of the ways in which those affected and those not affected varied.

A Model Control System for Education

This model for education makes an effort to adapt to educational practice a quality assurance model based upon the findings and methods prevailing in modern industry.

Establish a System of Objectives

The first step in the development of a control model is to set up a system of objectives established by the governing body. A complete model would have a set of detailed objectives for every broad objective of the school. A unified model must cover all objectives.

Establish Levels of Individual Achievement Based on Absolute Scale Standards

Care should be taken to see that the standards are expressed as go/no-go gauges, that each level is defined as students having passed all

designated gauges, and units of learning are to be formulated for each type of child.

Patterns of Individual Pupil Development are Described by Levels

Any level under consideration has been achieved when the child can pass all gauges preceding the specified level. Furthermore in identifying patterns of individual pupil development, the following considerations must be made: identification of pupils by learning speed, recognition of individual changes in learning speed, recognition of slow learners with high ability, and identification of varying factors of general ability.

Utilizing School System Measures

A school or school system will have a substantial number of pupils at most I.Q. (intelligence quotient) or S.E.S. (socio-economic status) levels. With sizable samples, the school can compute the proportion of an I.Q. group at each level for whatever grades they are in. In general, about half the students should be above the expected level and half below. Exact expectations can be worked out from prior year's experience in the same school or from a combination of schools. These expectations become standards.

If the individual school is above the standard by more than chance variation, the indication is favorable — if below, unfavorable. In many cases, even if the result is favorable, management will want to know what should be done to get an even better result. The logical operation is to set up corresponding expectancies for each go/no-go gauge and identify the gauges that are the critical limiting factors in the attained

level. Efforts can be concentrated on these to make the favorable results even better.

Constant Focus Must be Maintained on the Individual Pupil

The schools' responsibility is to educate every child in accordance with his estimated potential.

Using the Model as a Master Plan Strategy

As a strategy, the management control model does not specify the shape of education in the future. Its major strength is that it can accommodate any configuration that education in the district may take. As a master plan strategy the model fosters creativity and experimentation, stimulates diversity or unity, serves as a kind of management accounting system that monitors the progress of each pupil toward his assumed and periodically measured and adjusted potential. Several illustrations of the model's use are described next.

Using the Model at the Classroom Level

Since instructional objectives are actually designed to show behavioral changes in individual pupils, they become the objectives toward which the student should strive. For the teacher this means he serves a kind of "management by objectives" role in providing the kind of environment and educational experiences that will help the student attain the objectives. The teacher also serves in a management role and exercises the principle of "management by exception". In short, he will be reasonably content as each student progresses satisfactorily toward his estimated potential.

Use at the Building Level: The Role of the Principal

His prime responsibility, and accountability, is for the optimum development and attainment of each child within his jurisdiction. The principal serves three major roles: to maintain the school program and organization, as a member of the district's administrative team, and as a member of the organized profession. The management of each school involves the development of a school philosophy and the establishment of attainable goals with teachers as well as with parents and pupils. It also entails the reporting to and receipt of direction from higher administrative levels on difficulties and successes. The principal sets tolerance limits, monitors the operation of the program, and localizes any departure from expectation by seeing which expectancy group of pupils is primarily affected. In terms of its master plan possibilities, it should be further noted that the management control model does not limit the role of the building principal to traditional assignment of one principal to one school. Rather, in its encouragement of diversity and creative experimentation, it opens up new realms of possibilities for redeploying principals within a given district where their professional experience and unique expertise can be brought to bear on the most serious problems of the district.

Use at the District Level: The Role of the Central Administrator

The management control model seems to be particularly well-suited for the assistant superintendent to be given a geographical sector of the district. It encourages a maximum diversity among different sectors

of the district, thus enhancing the maximum relevance of educational programs to fit the unique needs and aspirations of the various sectors of the district. The assistant superintendent's position is comprised of an assessment planning and support role, an operational role, and a role as a member of the district administrative team.

The assistant superintendent can consolidate within his assigned sector the kinds of information that were reported by the various area school groups and these can be compiled into summary statements for the sector. Comparisons can be made from school to school in order to locate exceptions to the characteristic responses. Where a single school forges ahead of other schools in the sector, it should be used as a model or paragon for other schools to emulate or surpass.

The compiled data from the various schools within a sector can also be used for the localization of problems and hence the most advantageous allocation of supervisory time to those elements or localities where concentrated administrative attention gives promise of making the biggest differences. The management control model also opens up possibilities of the allocation of budget funds so they can be related to specific objectives as stated in the framework of the model.

ALTERNATIVE FUTURES FOR EDUCATION IN FRESNO

If really significant and thoroughgoing changes are to occur in education there must be some carefully planned preliminary steps. For example, changing institutions entails changing behavior of

employees and modifying the pupils. There must be developed a state of readiness for change in order to overcome the natural and built-in inertia that characterizes the type of bureaucracy that is inevitably associated with schools as public institutions. The key concept for bringing about significant changes in education, however, is planning.

The needs assessment conducted in Fresno identified a number of important improvements that should be made. For the most part, these are improvements in the existing structural organization and do not represent any deep-rooted, significant or sweeping changes in education. In addition, all of these important, though relatively minor, improvements can — for the most part — be brought about prior to the 1975-76 school year.

The strong recommendation, therefore, is for the Board of Education to use the few short years between 1969-70 and 1975-76 as a period of planning, building staff and public readiness, and piloting tryouts of significant new patterns of education. This would allow a major breakthrough for educational improvement to be launched after the 1975-76 school year. It is suggested that making a commitment for review and possible major change in 1975-76 is the first step. Conducting pilot trials and gathering data for the decisions to be made will take the five-year period. In addition, channels of communication and avenues for participation must be opened up for obtaining a public that can intelligently express itself on the alternatives considered in 1975-76.

A summary of the 8 alternative models — or futures — for education in Fresno is presented in the accompanying table. From the table it may be seen that four of the models are:

- Model A: Status Quo
- Model B: Technological
- Model C: Vocademic
- Model D: Human Resource Accounting

The accompanying table summarizes the characteristics of each in terms of its orientation, basic philosophy, facilities, personnel, curriculum, methodology, finance, scope and administration.

Four other models were presented. They constitute "trade-offs" or combinations of the original four models. Model E-1 combines technological and vocademic; Model E-2 combines vocademic and human resource accounting; Model E-3 combines technological and human resource accounting.

Obviously more research and refinement on these and other models must be undertaken before they can serve effectively as the basis for long-range planning and decision making. Nevertheless, it is emphasized that such decision making should be possible by the year 1975-76.

ALTERNATIVE FUTURES OF

Model	Orientation	Philosophy	Facilities	Personnel
Model A Status quo	World Contribution Genius - local control, has transformed and unified a nation	Unique for each district individual excel. College prep.	4 walls 12 years Extra curricular Grades	Teacher ratio 1/30 and department counselors
Model B Technological	Change - University oriented - Subject matter - Grades & credit - Favors upper economic and intellect group	Utilize technology to improve schools. Do better job of "A"	Flexible room carrells TV Team teacher Stations	New needs - aides - consultants - counselors - teams - technicians
Model C Vocademic	Present Education obsolete and irrelevant Youth has no role in our society	Education for all equal opportunity Educate total person Work - education Education continuous	Comm-wide no imitation Real & less simulation	On job supvr. & teachers Teacher role changes to coordinate foreman
Model D Human Resource accounting	Most education is not even recognized Public vs. private Establish. vs non-establishment Formal vs. informal	Life-long education GPE Total human resource development	All encompassing	Every producer

EDUCATION IN FRESNO

Curriculum	Methodology	Scope	Admin.
3'Rs subject matter Social promotion Univ. Oriented Fringe Vcc.Ed.	Lecture Memory tests	Formal Establishment In-doors Credit Ladder	Faculty Principal Supt.
"A" in new dress New gadgets To purvey A	Individual study New grouping Flex. scheduling Computer assist. Visual aid Tapes - TV	Same as A	More Centralized Control
Skills in schools combine with world of work Prescribed sequences of experiences	Productivity Hand & head Experience-Assessment Experience Not all off-campus	Widens to all community activities	New roles - Liaison
Greatly expanded Home - Job - TV - Life	Limitless Variety	All encompassing	Monitoring Accounting Supervising Management

COMMUNITY EDUCATIONAL PLANNING

A predominant characteristic of the urban age in which we live is the constant redefinition of the working relationships between governmental institutions. Instead of a single frame of reference, today there is an entire pyramid of planning jurisdictions surmounted by the growing influence of the national government. Within this context, planning no longer can be effectively carried out in the confines of a single agency even in medium-sized urban areas such as Fresno. In a contemporary urban framework, such as the Fresno-Clovis Metropolitan Area, no single jurisdiction can make any significant decision without affecting another. It cannot be overlooked that the Fresno City Unified School District is a body of elected officials with the same degree of autonomy as the cities and county and responds to the same decision-making process. In today's society, with its complicated and conflicting sets of values, participation by the school board as well as other elected officials is not only necessary but essential.

Planning focused solely on the physical dimensions of Fresno is no longer adequate. The basis for integrative and comprehensive interagency decision making would be a unified set of several primary goals which identify Fresno's aspirations in critical areas of concern such as education, employment, housing, poverty, orderly development and environmental quality. Policy planning is a justified process in educational planning. Inherent in policy planning are the elements of

"where are we going" and "how do we get there." Basically, policy planning is the establishment at the very beginning of broad, primary goals reached by consensus of the legislative bodies, the interacting agencies and the private sector. These goals are then refined and made progressively more specific as action programs are developed.

Goals, once established, lead to policies which become the basis upon which governmental agencies structure their activities. Traditional planning process has not been an effective mechanism to bring about explicit goals necessary for a proper foundation to decision making. Policy planning sets the broad interagency framework for action and forms the basis upon which more detailed, comprehensive plans and decision are made. Policies are the link between general goals and the more specific recommendations. Interagency decision making would be aided further by the policies plan concept because it is politically less difficult to secure intergovernmental agreement on principles than on potentially controversial proposals that are part of the traditional plan approach.

There is now, in Fresno, a large and diverse number of agencies and groups involved in data collection. A formal attempt needs to be made to accumulate information about all of these data elements into a central register that could then be used to aid in the retrieval of data by the cooperating agencies. If the policies plan approach to decision making is adopted, the need for a data register and, in fact, a central data system becomes imperative. A centralized system using electronic data processing (EDP) would satisfy this particular

need. Equipment could be located centrally with data storage, processing and retrieval handled at one location, or data storage could remain in the various agencies which would each have equipment capable of being plugged into an "information central" to serve as a collection and dispersal point for all agencies.

ELEMENTS OF A MODEL EDUCATIONAL MASTER PLAN

The community produces and is a product of its own Gross Product of Education (GPE). The GPE consists of the sum of experiences in the combined informal and formal community, including schools. Schools are only one of many agencies contributing to the GPE; the full development of human resources depends upon the identification and utilization of all community educational potential.

The several significant components in producing the Gross Product of Education are shown on the Educational Master Plan model which is diagrammed at the end of this section.

The community, with both its formal and informal structure, is the environment where learning takes place. The Board of Education, which oversees operations of the public school system, is shown to have two other major role responsibilities. One is the participation with other agencies in planning and implementing community development. The other is to encourage and monitor activity of the total community in assessing human resource development. The first is a shared responsibility of major governance agencies. The second is a direct responsibility that the board must assume as the community's educational leader.

PROJECT PUBLICATIONS

PHASE I — NEEDS ASSESSMENT

Staff Research Reports

1. Brainstorm — Needs Perceived by School Staff
2. Speak-Up — Needs Perceived by Community
3. Student Speak-Up — Needs Perceived by Secondary Students
4. School Staffing
5. Analysis of Achievement
6. Problems Perceived by Educational Leadership

County Schools Survey

7. Vocational Occupational Needs Survey (published by County Regional Planning and Evaluation Center - EDICT)
8. > Other County School Needs Survey Reports (EDICT)
9. >

TASK FORCE

Educational Content Fields

10. Reading
11. Language
12. Mathematics
13. Science
14. Foreign Language
15. Cultural Arts
16. Social Science
17. Physical Education

Other Educational Areas

18. Teaching/Learning Process
19. Special Education
20. Guidance
21. Health
22. Student Personnel
23. Adult Education
24. Vocational Education

Urban Physical Factors

25. Urban Physical Factors

Urban Social and Human Factors

26. Relevance and Quality of Education for Minorities
27. Special Needs of Mexican-Americans
28. Special Needs of Negroes

PROJECT PUBLICATIONS

PHASE II — MASTER PLAN DEVELOPMENT

29. Conclusions from Needs Assessment Publications
30. Summary — Fresno Educational Needs Assessment
31. The Process of Educational Planning
32. Mission Objectives
33. School Organization Patterns
The Educational Park
The Middle School
34. Interagency Educational Planning
Community Planning Process
35. Interagency Educational Planning
Community Planning Register
36. Long-Range School Site Location Plan

EDUCATIONAL MASTER PLAN

volume A	SUMMARY
volume B	CONFIGURATIONS: DESIGN FOR THE FUTURE
volume C	IMPLEMENTATION: PLANNED CHANGE

PROJECT ADVISORY COMMITTEE

Community

Fresno Council of Parent-Teachers Association (President)	Betty Tackett (1967-68) Goldie Farris (1968-69)
Fresno Council of Churches	Rev. W. B. Yinger (1967-68) Eva Richards (1968-69)
Fresno City and County Chamber of Commerce	L. S. Weber
Fresno Junior Chamber of Commerce	Kenneth W. Scott Bob Rathbone
Central Labor Council	William T. O'Rear
Building and Construction Trades Council	Manuel M. Lopez
National Association for the Advancement of Colored People	Alma Sterling (1967) Dorothy Ethridge (1968) Rev. Julius Brooks (1969)
Fresno County Economic Opportunities Commission	Frank Rodriguez
Mexican-American Political Association	Peter Caudillo
Taxpayers' Association of Fresno County	Joseph O. Mueller
Community Service Organization	Richard Torres
League of Women Voters	Carol Slinkard

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Fresno City College	Robert Kelly
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Fresno City Manager	John Taylor (1967-68) Neil Goedhard (1968-69)
Fresno Assistant City Manager	John Simmons
Fresno Deputy City Manager (Model Cities)	James E. Aldredge
Redevelopment Agency	James Hendricks Stafford Parker
Fresno County Administrator's Office	Terry Roberts

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William Lyles	Dr. Noel J. Smith	Arturo Tirado
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Ramon C. Cortines	Covina and South Hills High School	Student Personnel
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Dr. Elliot W. Eisner	Stanford University	Cultural Arts
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Dr. Merville C. Shaw	Chico State College	Guidance
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Carl Trieb	Occidental College (Retired)	Physical Education
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Dr. Stanley E. Williamson	Oregon State University	Science

FRESNO CITY UNIFIED SCHOOL DISTRICT

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H. M. Ginsburg, M.D.
**Ann M. Leavenworth, Ph.D.
William C. Meux
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