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AUTHOR   Landry, Leonard P.
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ABSTRACT
              This report explains accreditation by contract and
sets forth procedures for implementing such a contract. An
accreditation contract is executed when a comprehensive, continuous,
long-range plan for meeting the educational needs of students is
adopted and formulated into a contract between a local board of
education and the Colorado State Board of Education. General goals,
restated as specific objectives, and an accompanying action plan are
incorporated into a contract. Procedures for local board development
of an accreditation contract include commitment, preplanning,
planning, approval, and implementation. (JF)

A SCHOOL IMP

ACCREDITA

A SCHOOL IMPROVEMENT PROCESS

ACCREDITATION by CONTRACT

Prepared by the Planning Unit

Leonard P. Landry, Director

COLORADO DEPARTMENT OF EDUCATION

Office of Planning and Evaluation

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PREFACE

The purpose of this publication is to present an overview of the concept of accreditation by contract as proposed by the Colorado Department of Education. A secondary purpose of the monograph is to identify a range of appropriate procedures for use by school districts in their development of plans for 1) improving their educational services and 2) achieving state accreditation by contract.

Organization

The monograph is divided into two major sections. The first section treats the WHAT and WHY of contract accreditation.

What is involved in comprehensive educational planning

and contract accreditation?

Why should a school district become involved in comprehensive

educational planning and contract accreditation?

The second section treats a range of procedures appropriate for local district use in the development of school improvement contracts -- the HOW.

How does a school district go about comprehensive planning and

developing a school improvement contract?

Whenever appropriate, charts and diagrams are utilized to highlight the basic concepts of this overview monograph. Rather than present exhaustive inventories of feasible procedures, suggested check lists are employed to reinforce the concept that limitless alternative solutions to school problems exist. These check lists are presented only as aids and can be revised to meet individual circumstances as the user sees fit.

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SECTION I: THE SCOPE AND PURPOSE OF ACCREDITATION BY CONTRACT

What Is Accreditation by Contract?

Granting accreditation on the basis of a local district's commitment to comprehensive, continuous, long-range planning is a new concept in the accrediting of Colorado's school systems. The key to contract accreditation is the development and implementation of an action plan for better meeting the educational needs of students. Under the new format, accreditation is granted when such a plan is entered into as a contract between the local board of education and the Colorado State Board of Education.

The new accreditation program offers local agencies the opportunity to be accredited on the basis of developing specific objectives uniquely suited to the educational needs of their students and then carrying out a planned sequence of activities designed to attain those stated objectives. The focus is on the requirements of the future, not the standards of the past. The emphasis is changed from measuring inputs to measuring results and from meeting minimal standards to striving for self-developed objectives which reflect the needs, aspirations, and capabilities of the individual district. General goals, restated as specific objectives, plus an accompanying action plan are incorporated into a contract. Agreement to the contract and its subsequent implementation constitute continued accreditation by contract.

Characteristics. The action plan, which is the heart of accreditation by contract, has been characterized as comprehensive, continuous, and long-range.

To be comprehensive, educational planning must first be based upon broad and intensive school-community involvement. What parents, students, school personnel, school board members, and concerned citizens say about quality education is crucial in the development of any contract-accreditation plan. Second, to develop and implement a comprehensive plan for quality education, the interrelationship and interdependence of every educational need, goal, objective, program, practice,

service, and resource must be thoroughly studied and questioned. The following

check list of representative questions is suggested as one way to approach

educational planning comprehensively. The interrelationship of these questions,

individually and as groups, is crucial to comprehensive planning.

BASIC ELEMENTS OF AN ACCREDITATION CONTRACT

1. What Student Needs?

    Learning to Learn?
    Learning to Earn?
    Learning to Relate to Self?
    Learning to Relate to Others?

2. What General Goals?

    To Make Life Rewarding and Satisfying?
    To Prepare People for the World of Work?
    To Discover and Nurture Creative Talent?
    To Strengthen the Moral Fabric of Society?
    To Deal Constructively with Psychological Tensions?
    To Keep Democracy Working?
    To Make Intelligent Use of Natural Resources?
    To Make the Best Use of Leisure Time?
    To Work with Other Peoples of the World for Human
        Betterment?*

3. What Specific Objectives?

    What Knowledge?
    What Skills?
    What Attitudes?

4. What Programs, Practices, Services?

    What Teaching-Learning Practices?
    What Curricular Programs?
    What Cocurricular Programs?
    What Supporting Services for Students?
    What Supporting Services for the Community?
    What Supporting Services for Staff?
    What School Policies and Practices?
    What Management Practices?

5. What Resources?

    What School-Community Involvement?
    What Personnel?
    What Facilities?
    What Funding?

In summary, student needs should be identified by broad and intensive school-community involvement. General goals should then be designed to meet these needs; specific objectives are designed to reach these goals; school programs, practices, and services should be designed to attain these objectives; and all available school-community resources should be utilized to support these activities. Constant attention to the interrelationship and interdependence of means and ends is the essence of comprehensive planning.

Planning is continuous when a series of appraisal checkpoints is built into the plan to insure that the means selected are achieving the ends desired. These checkpoints should be built in 1) during the identification of needs, goals, and objectives, 2) during the development of an action plan to meet those needs, and 3) during the implementation of the plan. Continuous planning is a matter of constantly double checking -- to determine if in fact the "foot-bone" (resources) is connected to the "leg-bone" (school programs, practices, services) is connected to the "hip-bone" (specific objective) is connected to the "chest-bone" (goals) is connected to the "head-bone" (student needs). Were all voices heard in the identification of student needs? Does each statement relate directly to one or more of these needs? Has each goal been restated in terms of specific, measurable objectives? Have all programs, practices, and services of the school system been directly related to these objectives? Are all available resources being used to support the plan? Are students benefiting and to what extent? Are corrective changes necessary to improve the plan? The essence of continuous planning is continuous evaluation.

Long-range planning is usually considered to be for a period of at least five years. More exactly, whether or not a plan is long-range or short-range depends upon the purpose for which it was designed. A five-year plan for a school building program would be short-range planning; ten to twenty years would be more

appropriate. A ten-year plan for expanding the supporting services of a school

system would appear to be overly long; five years would be more appropriate. By

planning ahead for a sufficient amount of time, much desirable change can be

brought about and much undesirable change can be prevented. In education,

planning only one year at a time encourages day-to-day brush-fire tactics and

crash programs. A five-year plan, updated one year each year, provides an

operational guide for each of its successive years and a systematic way of coping

with the inevitability and acceleration of change. Taking the necessary steps on

time is the essence of long-range planning.

What Is the Purpose of Accreditation by Contract?

Better education through better planning is the central purpose of

accreditation by contract. More specifically, accreditation by contract is

proposed as --

1. A way to individualize school-district accreditation by basing it
   on the particular needs of the students in each district.

2. A way to implement comprehensive, continuous, long-range planning
   by establishing specific staff responsibilities and district-wide
   procedures.

3. A way to make the best possible use of all available resources by
   better relating a) school and community, b) needs, goals, and
   objectives c) programs, practices, and services, d) program planning
   and budgeting, e) inputs, processes, outputs, and f) costs and
   benefits.

4. A way to determine results by establishing measurable objectives.

5. A way to take timely action by charting a long-range operational
   plan of who is to do what at what time.

SECTION II: PROCEDURES FOR DEVELOPING AN ACCREDITATION CONTRACT

What Are the Basic Steps?

Contracts should be individually tailored to recognize differences in needs,
philosophies. and resources existing among local school districts. However,
certain basic steps leading to the development of the contract are common.

BASIC STEPS OF ACCREDITATION BY CONTRACT

WHAT?	HOW?	WHO?
I. Commitment	Letter of Intent	School Board
II. Pre-Planning	Involvement	School Staff, Patrons, Students
III. Planning A. Where Are We? B. Where Do We Want To Go? C. How Do We Get There? D. How Will We Know?	Identify Needs Select Goals, Objectives Develop Programs Design Evaluation	School Staff, Patrons Students; assistance by Dept. of Education and Others
IV. Approval	Contract	School Board, State Board
V. Implementation Are We Getting There?	Management by Objectives Continuous Evaluation	School Staff School Staff, Dept. of Education, & Others.

Step I: Commitment. The first step to be taken should be a letter sent by the
local school board to the State Commissioner of Education indicating the district's
intent to enter into the planning activities leading to accreditation by contract.
This step is necessary to plan ahead for the type and extent of consultant services
which participating districts may wish to ask of the State Department of Education.
To provide those services as quickly and efficiently as possible, two staff
members of the Department will be assigned to each participating district to serve
in a liaison role, if the district so desires.

Step 11:   Pre-Planning. Before launching into the great variety of activities involved in developing a district-wide plan for education, a pre-planning phase is necessary to decide how to go about those activities. Many people in many roles will be necessary. School staff and school patrons will almost certainly have been involved in the decision of the board of education to participate in the contract accreditation program. If this has not been the case, the pre-planning stage is the time for such consultation and involvement to begin. Immediate and continuous involvement of all interested parties is crucial in the development of long-range plans for education. Parents, teachers, students, school administrators, school board members, concerned citizens -- all should be involved, representing every social, economic, racial and ethnic group of the community.

A coordinating or steering committee is usually given the responsibility for answering such pre-planning questions as:

1.   What public information procedures will be necessary to bring about the involvement of all groups in the community?

2.   What jobs will need to be done, and how will they be shared? Checking /☑/ a chart such as the following is suggested as one way of analyzing who needs to do what and developing an organizational structure.

3.   Are any changes necessary in the present assignments of school staff? What outside consultant services may be necessary?

4.   Should assignments and committees be organized district-wide, by groupings of schools, by individual schools, or by a combination of these?
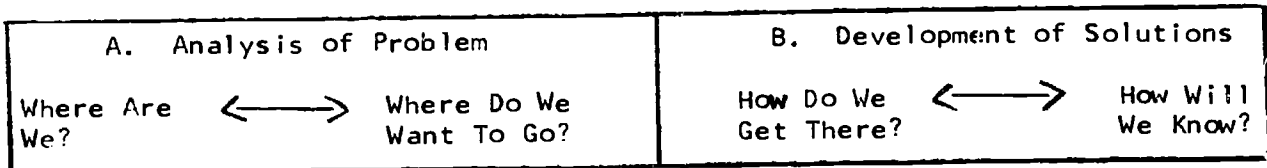
PRE-PLANNING

ORGANIZATION

What People, How Many, In What Combinations, Are Necessary For What Jobs?	Parents	Students	Teachers	Administrators	Board Members	Concerned Citizens	Other	Other
1. Express concerns about education								
2. Review concerns about education								
3. Provide facts about education								
4. Review facts about education								
5. Identify range of student needs								
6. Review range of student needs								
7. Establish priority of student needs								
8. Develop range of general goals for students								
9. Review range of general goals for students								
10. Establish priority of student goals								
11. Develop range of specific objectives for students								
12. Review range of specific objectives for students								
13. Establish priority of student objectives								
14. Develop alternative plans or "mixes" of -- a. Curricular and co-curricular activities b. Teaching practices and management practices c. Supporting services for students, staff, and community d. Available resources of people, places, things, and dollars								
15. Review alternative plans								
16. Propose range of selected plans								
17. Complete the selection of operational plans								
18. Implement the plans								
19. Oversee the plans								
20. Make necessary adjustments								
21. Evaluate the results								
22. Report the results								
23. Improve the plan								
24. Other								

Step III: Planning. The major steps of developing a plan of action can be analyzed as follows:

PLANNING

A. Analysis of Problem	B. Development of Solutions
Where Are $\longleftrightarrow$ Where Do We We? Want To Go?	How Do We $\longleftrightarrow$ How Will Get There? We Know?

The first half of the planning procedure is to analyze the problem. Before developing a solution to any problem, the problem or needs should be thoroughly analyzed. Needs can be defined as the difference or distance between 1) where we are and 2) where we would like to be. Once this difference is determined, solutions can be developed for closing the gap.

The second half of the planning procedure is to develop a solution to the problem. Once the problem or need has been identified, the development of a solution is a matter of deciding upon 1) ways to close the gap as well as 2) ways to measure the extent to which the gap is being closed.

A. Where Are We? Where Do We Want To Go?

The first step in educational planning is to analyze both the present status and the future aspirations of the given school district. Looking at where one is in the light of where one would like to be, and vice versa, are mutually helpful ways of analyzing the problem. Analyzing the facts about where one is can bring to light previously undiscovered student needs and therefore necessitates a change of goals and objectives. Analyzing concerns about where one wants to go can make apparent the necessity for collecting facts about the present which were not previously considered important.

The educational hopes and aspirations of a community are likely to be as varied as the groups involved -- parent, student, teacher, administrator, school board member, concerned citizen. The students' goals for themselves and the

parents' goals for their children do not always coincide. The parent's goals for

the child and the teacher's goals for the student may not coincide. The hopes and

aspirations of parent, student, teacher, etc., their concerns and their beliefs

about what education should mean and do for students can be determined by a variety

of fact-finding and opinion surveys.

At this point planners have a choice of the order in which they wish to take

the following steps. The choice is more a matter of emphasis than it is an

either-or decision.

1. The school district can choose to ask first "Where Are We" and study

    the basic facts about students, community and school.

2. Or the school district can choose to ask first "Where Do We Want To

    Go" and poll community and school opinion about educational needs and

    educational goals.

3. Or the school district can choose to combine these two steps by

    constantly checking future aspirations against present facts

    and vice versa.

Starting with the emphasis on future aspirations or goals stimulates a fresh, sky-

is-the-limit approach; starting with an emphasis on the present tends to make it

difficult to free oneself from the status quo.

The advantages are mixed. The logical first step is to start with the facts

about the present. A psychological first step would be to start with aspirations

about the future. Fortunately, in practice, the two approaches tend to merge.

Facts about the present soon become the basis of projections about the future, and

aspirations for the future begin with concerns about present needs.

1. Student Needs and Goals Analysis

Goals are derived from the felt needs that people have. Completion of the

following charts on student needs and student goals is suggested as a way to

analyze the similarities and differences of opinion expressed by the participating

groups.   The needs or the goals cited by parents, students, teachers, etc., should

be written in at the top of the chart.   A check ☑ in a space below will indicate

which need or goal was cited by which group.

STUDENT NEEDS: OPINION SUMMARY

In your opinion what are the most important needs of students?	Need 1:	Need 2:	Need 3:	Need 4:	Need 5:	Need 6:	Need 7:	Need 8:	Need 9:	Need 10:	Need 11:	Need 12:	etc.
Parents Students Teachers Administrators Board Members Concerned Citizens Other													

Note: This question, concerning the needs of students, is not limited
to educational needs.   The question below, concerning goals for
students, is limited to educational goals.

EDUCATIONAL GOALS FOR STUDENTS: OPINION SUMMARY

In your opinion what are the most important educational goals for students?	Goal 1:	Goal 2:	Goal 3:	Goal 4:	Goal 5:	Goal 6:	Etc.
Parents Students Teachers Administrators Board Members Concerned Citizens Other							

The pattern of goals which emerges will provide a framework for arriving at a

consensus about common major goals and any associated sub-goals.   Such a graphic

summary will also facilitate the analysis of goals and sub-goals for purposes of

putting them in priority order. These proposed goals and their order of priority should then be considered tentative until thoroughly checked against factual surveys of student and community needs, and further checked as information about present school programs, staffing, facilities, and finance is compiled. It is likely that as facts are analyzed, it will be necessary to revise certain goal statements, to combine or add others, and to change the order of priority. Until all the facts about student, community, and school have been weighed, the proposed goals should be considered tentative and subject to revision.

2.   Quality Education Analysis

Before taking up the more quantifiable facts about students, community, programs, staff, facilities, and finance, three areas which are basic to the quality of an educational system need attention. The three areas are 1) school policies and practices 2) instructional practices, and 3) program management practices. More specifically, the quality of an educational system depends upon 1) a school environment which encourages learning, 2) the teacher's skill in reaching students, and 3) the administrator's skill in program planning and evaluation. Using the right approach, with the right student, at the right time is the ultimate measure of quality education. Although quality is extremely difficult to measure, a range of practices can be observed in each of the three areas mentioned.

(1) School Policies and Practices. To what extent do present school policies and practices encourage such personal and social qualities as self-confidence, self-discipline, and self-direction? In view of proposed future goals, will changes in practice be necessary? To what extent do school policies and practices emphasize -- physical, emotional, social, and cultural development; democratic student and staff relationships; student leadership and service; student involvement in school planning?

To what extent do school policies and practices emphasize -- skills of inquiry and critical judgment; creativity and constructive use of leisure time; student out-of-school achievements?

What provisions are there for -- students with learning

disabilities; students with special abilities, aptitudes, and interests; employed youth?

What provisions are there for -- individualized diagnosis of student needs; individualized instruction; individualized learning activities; individualized student use of materials and equipment; and individualized student-teacher relationships?

What curriculum provisions are there for -- exploratory studies, studies in depth, and inter-discipline studies; for on-the-job training, summer programs, and continuing education programs?

What provisions are there for -- attendance services, financial aid services, career guidance services?

(2)   Instructional Practices. To what extent are multiple techniques presently being used to reach students? Again, in view of proposed future goals, will changes in present practices be necessary?
What are the principal methods of instruction?

Lecture	Student demonstrations
Drill	Problem solving activities
Teacher questions	Individual projects
Student questions	Group projects
Teacher answers	Experimentation
Student answers	Laboratory work
Teacher-led discussions	Shop work
Student-led discussions	Field trips
Teacher demonstrations	Field experience

On-the-job training

What are the principal student-teacher contacts?

Single teacher	Television course
Team teaching	Self-teaching device
Small group (10 or less)	Aide supervision
Large group (30 or more)	Student supervision
Sequence of teachers	On-the-job supervision
Correspondence course	

What are the principal instructional materials?

Basic text	Newspapers, magazines
Workbooks	Teacher prepared materials
Multiple texts	Audio-visual materials
Library references	Programmed materials

(3)   Program Management Practices. To what extent do present program management practices include the following? Will changes be necessary?
School-community planning; school-home planning; school-student planning; administrator-staff planning; teacher-teacher planning; teacher-student planning; student-student planning; school-school planning?

Coordination with community college or four-year colleges; with such related agencies as health and welfare, employment, law enforcement, and recreation?

Assigned responsibilities for planning and evaluation?
Designated procedures for planning and evaluation?

Formal procedures for --
    Maintaining a district-wide information base?
    Identifying problems and educational needs?
    Establishing priorities of goals and objectives?
    Developing and improving programs?
    Evaluating programs?
    Reporting results?

Staff development programs for --
    Understanding student attitudes?
    Diagnosing student learning difficulties?
    Planning learning activities?
    Correlating activities in curricular and cocurricular areas?

3.   Student Information Analysis

The following check list suggests a range of district-wide information about students and their backgrounds. Such facts as these have significance not only for supporting changes in student goals and objectives but also for decisions about school programs, staffing, facilities, and finance.

How many students are designated as economically handicapped?
How many students are designated as special education students?
How many students are from non-English speaking families?
How many students are from migrant-worker families?
How many students have special abilities or aptitudes?

What is the projected dropout rate, grades 7-12?
What percent of 9th graders complete high school?
What percent of graduates continue their education?
What percent of students enter a 2-year college or technical school?
What percent of students complete a 2-year college or technical school?
What percent of students enter a 4-year college?
What percent of students graduate from a 4-year college?
What percent of students (by grade) are reading 1 year or more below
   grade level?
What other achievement test results are available?

What special instructional services are necessary?
What special guidance services are necessary?
What special social services are necessary?
What special health services are necessary?
What special psychological services are necessary?
What special food services are necessary?
What special transportation services are necessary?

Number and rate of change of welfare recipients?
Amount and rate of change of welfare expenditures?
Amount and rate of change of public health expenditures?
Amount and rate of change of job-training expenditures?
Amount and rate of change of police expenditures?

Percent of eligible voters registered?
Percent of registered voters casting ballots in last general election?
Numbers and rate of change of infant (1-5) deaths?
Number and rate of change of juvenile first arrests?
Number and rate of change of Class I crimes?
Number and rate of change of Class II crimes?
Number and rate of change of illegitimate births?

Estimated total resident population?
Rate of change of total resident population?
Racial and ethnic composition of resident population?
Percent of households with incomes under $2,500 per year?
Percent of households with incomes over $10,000 per year?
Per capita personal income as percent of state average?
Rate of change of per capita personal income?

Principal occupation groups: fathers?
Principal occupation groups: mothers?
Average education (grade level): fathers?
Average education (grade level): mothers?

Estimated school-age (5-17) population?
Rate of change of school-age population?
Fall enrollment- Elementary - Secondary - last 10 years?
Fall enrollment as percent of total school-age population - last ten years?
Student's previous place of residence?
Average daily attendance - Elementary - Secondary - last 10 years?
Projected average daily attendance - Elementary - Secondary - next 10 years?

4.   Program Information Analysis

Checking ☑ the following charts is suggested as a way of analyzing the

existing educational programs presently available to students of the district.   In

addition, for purposes of identifying not only the existence but the extent of the

programs, the number of students participating and the length of time should be

noted when appropriate.   In the spaces labeled Goal A, Objective 1,2,3,4 etc., all

participating schools should indicate the general goals and specific objectives

presently designated for their students.   A check mark entered in the spaces below

would indicate that the program so checked supports the goals and objectives under

which it is entered.

The user may wish to subdivide the curricular programs into particular courses

and thus make a more detailed analysis of the relationship of courses to programs,

and programs to goals and objectives.

Relating present programs to present goals may reveal ways to combine existing programs for greater effectiveness. Such analysis may also refine further the proposed list of future goals. In turn, using the same charts again, but this time relating present programs to the list of proposed future goals may reveal the need for revising certain existing programs, for dropping some, or for adding others. The following charts can, therefore, be used to analyze both present and future program requirements -- both where you are and where you want to go.

PROGRAM ANALYSIS: PRE-ELEMENTARY

Pre-Elementary Programs	A. Goal:	Objective 1:	Objective 2:	Objective 3:	Etc.	B. Goal:	Objective 1:	Objective 2:	Etc.	C. Goal - etc.

Curricular Programs
  Communication Skills
  Number Skills
  Social Concepts
  Science Concepts
  Arts and Crafts
  Health and Safety
  Other										

Supportive Programs
  Library Services
  Audio-visual Services
  Guidance Services
  Social Services
  Health Services
  Food Services
  Transportation
  Other										

PROGRAM ANALYSIS: ELEMENTARY SCHOOLS

Elementary School Programs	A. Goal	Objective 1:	Objective 2:	Objective 3:	Etc.	B. Goal	Objective 1:	Objective 2:	Etc.	C. Goal - etc.
Curricular Programs Communication skills Mathematics Social Studies Science Arts (incl. Performing Arts), Crafts Health, Safety, Physical Ed. Foreign Language Occupational Ed. Orientation Other										
Co-Curricular Programs _____ _____ _____ _____ etc.										
Supportive Programs Library Services Audio-visual Services Guidance Services Social Services Psychological Services Health Services Food Services Transportation Other										

PROGRAM ANALYSIS: JUNIOR HIGH or MIDDLE SCHOOLS

Junior High or Middle School Programs	A. Goal	Objective 1:	Objective 2:	Objective 3:	Etc.	B. Goal	Objective 1:	Objective 2:	Etc.	C. Goal - etc.
Curricular Programs Communication Skills Humanities Mathematics Social Studies Science Fine Arts (incl. Performing Arts) Practical Arts, Crafts Health, Safety, Physical Ed. Foreign Language Occupational Ed. Orientation Home Economics Other										
Co-curricular Programs _____ _____ _____ _____ . etc.										
Supportive Programs Library Services Audio-visual Services Guidance Services Social Services Psychological Services Health Services Food Services Transportation Other										

PROGRAM ANALYSIS: SENIOR HIGH SCHOOLS

Senior High School Programs	A. Goal	Objective 1:	Objective 2:	Objective 3:	Etc.	B. Goal	Objective 1:	Objective 2:	Etc.	C. Goal - etc.
Curricular Programs										
Communication Skills										
Humanities										
Social Studies										
Science										
Fine Arts (incl. Performing Arts)										
Practical Arts, Crafts										
Health, Safety, Physical Ed.										
Foreign Language										
Occupational Education										
Home Economics										
Driver Education										
Other										
Co-curricular Programs										
_____										
_____										
_____										
_____										
etc.										
Supportive Programs										
Library Services										
Audio-visual Services										
Guidance Services										
Social Services										
Psychological Services										
Health Services										
Food Services										
Transportation										
Other										

PROGRAM ANALYSIS: CONTINUING EDUCATION

Continuing Education Programs	A. Goal	Objective 1:	Objective 2:	Objective 3:	Etc.	B. Goal	Objective 1:	Objective 2:	Etc.	C. Goal - etc.
Curricular Programs Adult Basic Education High School Diploma Program General Education Development Vocational-Technical Education Other										
Supportive Programs Library Services Audio-Visual Services Guidance Services Social Services Psychological Services Health Services Transportation Other										

Other facts pertinent to program analysis are --

    Extent of programs for students designated as economically disadvantaged?
    Extent of programs for students designated as handicapped?
    Extent of programs for students learning English as a second language?
    Extent of programs for students of migrant-worker families?
    Extent of programs for students with special abilities and aptitudes?

    Extent of required courses?
    Extent of elective courses?
    Extent of on-the-job training programs?
    Extent of home-bound education programs?

5. Staff Information Analysis

The following checklists are suggested as ways to analyze the staffing requirements of a school system. Without enough of the right people in the right place, at the right time, the best intentioned programs will fail. The following facts about assignments, work loads, turnover rates, and salaries are necessary for 1) analyzing the strengths and weaknesses of staffing present programs and 2) projecting the kinds and numbers of personnel necessary to implement revised or new programs. This section deals with the quantifiable aspects of staffing. For a qualitative as well as quantitative analysis, the findings of this section should be combined with the findings about staff practices treated in the previous section entitled "Quality Education."

NUMBER OF STAFF AND PER PUPIL RATIO
BY POSITION AND LEVEL

	Elementary		Secondary	
	Num- ber	Per Pupil Ratio	Num- ber	Per Pupil Ratio
Administrative Staff Principal Assistant Principal Supervisor Other				
Instructional Staff Teachers Aides Other				
Supportive Staff Library Services Audio-Visual Services Guidance Services Social Services Psychological Services Health Services Food Services Transportation Services Other				

Note: A valuable extension of this chart would be to determine the per pupil ratio for each instructional program and course.

Other information about the number of staff should include --
  The number and per pupil ratio of pre-elementary staff.
  The number and per pupil ratio of the adult education staff.
  The number and per pupil ratio of the special education staff.

PLANNING: STAFF INFORMATION ANALYSIS

TURNOVER RATE AND ANNUAL SALARY
BY POSITION AND LEVEL

	Elementary		Secondary	
	Turnover Rate	Annual Salary	Turnover Rate	Annual Salary
Administrative Staff Superintendents Principals Assistant Principals Supervisors Other				
Instructional Staff Teachers Aides Other				
Supportive Staff Librarians Audio-Visual Specialists Guidance Specialists Social Services Specialists School Psychologists School Nurses School Cooks School Bus Drivers Other				

Other important salary information would be --
Percent increase in average annual salaries for past five years.
Average salary as percent of state average for that position.

NUMBER OF HOURS AND PERCENT OF INSTRUCTIONAL TIME PER WEEK

	Elementary		Secondary	
	Hours	%	Hours	%
Instruction Supervising Duties Planning Activities				

NUMBER OF DAYS AND PERCENT OF STAFF PER YEAR RECEIVING INSERVICE TRAINING

	Elementary		Secondary	
	Days	%	Days	%
Administrative Staff Instructional Staff Supportive Staff				

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STAFF EXPERIENCE AND EDUCATION

	Elemen- tary	Second- ary
1. Average number of years experience for administrative staff.		
2. Percent of administrative staff having completed a graduate program in school administration.		
3. Average number of years experience for instructional staff.		
4. Average highest level of education for the instructional staff.		
5. Percent of instructional staff having a Masters Degree.		
6. Percent of administrative staff presently engaged in an advanced degree program.		
7. Percent of instructional staff presently engaged in an advanced degree program.		
8. Percent of administrative staff certificated for their present position.		
9. Percent of instructional staff certificated for their present position.		
10. Percent of instructional staff teaching the major part of their time in their major field of preparation.		

For each supportive staff position the same type of information should be
determined, taking into account the preparation required for each position.

6. Facilities Information Analysis

Short and long-range planning necessitate careful analysis of present and projected space requirements. Present and projected instructional or supportive programs depend upon appropriate facilities which, in time, have major significance for budgeting. The following chart may suggest some requirements for needed short-range renovations or long-range building plans.

BUILDINGS ANALYSIS

For each building unit record the following information. (If 2 or more levels are combined, so indicate.)	Pupil Capacity	Current Enrollment	Projected Enrollment	Current Ratio of Students Per Instructional Area	Age of Building

Pre-Elementary Schools
  Name of School _____
  Name of School _____
  etc.					

Elementary Schools
  Name of School _____
  Name of School _____
  etc.					

Junior High/Middle Sch.
  Name of School _____
  Name of School _____
  etc.					

Secondary Schools
  Name of School _____
  Name of School _____
  etc.					

What types of facilities in the present schools are lacking or need renovation? List, by school, in following chart.

Examples --
  classroom   library
  small-group instructional area   audio-visual area
  large-group instructional area   independent study area
  art room   outdoor education area
  music room   auditorium
  business education room   gymnasium
  home economics room   lunchroom
  shop area   student lounge
  laboratory area   book store
  facilities for handicapped   multi-purpose room

PLANNING: FINANCIAL INFORMATION ANALYSIS

playground area   toilet facilities
playing-field area   office space
locker facilities   nurse's room
shower facilities   parking space
storage facilities   school bus zone

SPACE ANALYSIS

	Lacking	Needing Renovation
Pre-Elementary Schools Name of School _____ Facility _____ Facility _____ etc.		
Elementary Schools Name of School _____ Facility _____ Facility _____ etc.		
Junior High or Middle Schools Name of School _____ Facility _____ Facility _____ etc.		
Senior High Schools Name of School _____ Facility _____ Facility _____ etc.		

7.   Financial Information Analysis

The following questions are suggested for the purpose of analyzing the present

and projected financial resources of the school district. Comparisons with state

averages and facts about rates of change will help put the present financial

status of the school system in perspective.

Revenues and Expenditures:

Total revenue per student in average daily attendance?
Current District Figure _____ Current State Average _____
Percent change in district figure for last 5-10 years? _____

Local and county revenue per student in average daily attendance?
Current District Figure _____ Current State Average _____
Percent change in district figure for last 5-10 years? _____

State revenue per student in average daily attendance?
Current District Figure _____ Current State Average _____
Percent change in district figure for last 5-10 years? _____

Federal revenue per student in average daily attendance?
Current District Figure _____ Current State Average _____
Percent change in district figure for last 5-10 years? _____

Assessed valuation per pupil in average daily attendance?
Current District Figure _____ Current State Average _____
Percent change in district figure for last 5-10 years? _____

Current expenditures per pupil in average daily attendance?
Current District Figure _____ Current State Average _____
Percent change in district figure for last 5-10 years? _____

Current mill levy?
Current District Figure _____ Current State Average _____
Percent change in district figure for last 5-10 years? _____

Current bonded indebtedness? _____
Percent change in last 5-10 years? _____

Projected retirement dates?
Date   Figure

_____   _____
_____   _____
_____   _____
etc.

ANTICIPATED CURRENT ANNUAL EXPENDITURES

Annual Expenditures	Pre-Elem.	Elem.	Junior High	Senior High	Cont. Ed.	Totals
Administration						
Curricular Programs						
Cocurricular Programs						
Supportive Programs						
For Students						
For Community						
For Staff						
Totals						

Assessed Valuation Data:
    Percent of privately-owned land in the district?
    Percent of state-owned land in the district?
    Percent of federally-owned land in the district?

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      Percent of residential land in the district?
      Percent of agricultural land in the district?
      Percent of commercial land in the district?
      Percent of industrial land in the district?

VALUATION AND PERCENT CHANGE IN BUILDING PERMITS

	Valuation	% Change Last 5 Years				
Residential Building Permits						
Commercial Building Permits						
Industrial Building Permits						

VALUATION AND PERCENT CHANGE IN ASSESSED VALUATION CATEGORIES

	Valuation	% Change in Last 5 Years			
Residential					
Commercial					
Industrial					
Agriculture					
Oil or Gas					
Mining and Mineral					
Public Utilities and Railroads					

Summary

The two questions "Where Are We" and "Where Do We Want To Go" should now be
answered. Future goals, proposed tentatively at the outset, should have
been checked against factual surveys of student and community needs, and
these needs further checked against the current school practices, programs,
and resources. Goal statements should now be in their final form, ready for
the development of implementation plans. The factual analysis of school
practices, programs, and resources will provide the basis for the development
of those action plans necessary to make up differences between where the
school and community finds itself and where it expects to go.

B. How Do We Get There? How Will We Know?

     The community and school which has decided to change its present educational
destination or to reach its present destination by a new route will have to

develop new plans or revise old plans to do so.   New or revised goals for students

will require new or revised plans to reach them.   The development of plans is

equally necessary if the decision is to retain present goals but to try to reach

them by a different mix of school practices, programs, and resources.   A change

of educational goals for students or a change of approach by the staff will

necessitate the development of new operational plans.

Program Development

Goal statements are general in nature, expressing broad expectations about

what education should mean and do for the student -- for example: to help the

student lead a rewarding and satisfying life: to help the student prepare for the

world of work; to help the student understand man and society; to help the

student understand himself; to help the student define problems and think for

himself.

Because goal statements present such broad and general targets, it is

difficult to "zero-in" on them.   However, general goal areas can be subdivided

into specific, measurable objectives which can be zeroed-in as measurable

targets with their bull's eye, 4-ring, 3-ring, etc.   The accuracy with which

these specific targets are hit measures the extent to which the general goal is

reached.   Goals, then, are general statements; objectives are specific statements

saying who is to do what and how well.   Measurable objectives are the key to

measuring student progress and evaluating programs.

Writing measurable objectives is made easier if a "formula" or set pattern

is followed.   One such formula is made up of the following five parts:

1. The Rationale: To achieve such and such an objective,
   (To collect the full reward,)

2. The Performer: The individual, organization, or group,
   (the bounty hunter,)

3. The Conditions: Under such and such "controlled" conditions,
   (without the aid of a second party,)

4. Performance: Will do such and such,
                        (will bring in Bad Bill)

5. The Standards: Attainment to be measured by such and such standards.
                        (dead or alive, by July 4, 1846.)

The objective may be put in two or more sentences to avoid awkwardness. The parts
of the "formula" need not appear in any set order, though it is helpful to establish
a pattern. Not all parts need to be stated in every instance; however, parts (2)
The Performer, (4) The Performance, and (5) The Standards should always be
included if the objective is to be measurable.

The verb or verbal expression in the performance statement (#4) is the key to
stating an objective in observable, measurable terms. If performance is not
directly or indirectly observable it is not measurable. Following are two lists
of contrasting verbs or verbal expressions. Those on the left are directly
observable. Those on the right are not, by themselves, observable. For such
verbs or verbal expressions to be observable, a modifying expression must be
added -- for example: he "is interested" in the subject as demonstrated by the
number of questions he asks, the number of positive responses on an interest
inventory, the number of articles and books he reads about the subject, the extent
to which he participates in class discussions about the subject, the extent to which
he continues to study the subject on his own, etc.

Directly Observable		Indirectly Observable
Identify	Read, Write	Be interested, have an interest in
Name	Add, Subtract	Appreciate, be appreciative
State a rule	Weigh, Measure	Know, be knowledgeable about
Distinguish	Give, Take	Understand, have an understanding of
Demonstrate	Run, Jump	Be aware of, have an awareness of
Apply a rule	Build, Paint	Be motivated to
Order	Smile, Frown	Be able to
Describe	Argue, Agree	Be capable of
Construct	Ask, Answer	Be satisfied with
Interpret	Join, Share	Think, See, Hear, Listen

The distinction between "goal" and "objective" is essential when developing
implementation plans. Each general goal is subdivided into specific, measurable

objectives. Plans are then designed to achieve those specific objectives. The
interrelationship of goals, main objectives, and sub-objectives can be likened to
a "ladder" of means and ends.

MEANS-ENDS "LADDER"

To accomplish Z,
Y must be done.

To accomplish Y,
X must be done.

To accomplish X,
W must be done.

To accomplish W
V must be done.

etc.

A general goal may be subdivided into one or more main objectives as follows:

| General Goal |

| Main Objective | Main Objective | Main Objective | Main Objective | Main Objective | Main Objective |
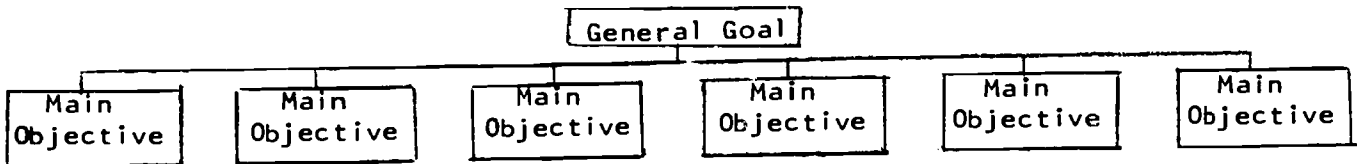
In turn, main objectives can be subdivided into specific sub-objectives which
contribute to the achievement of the main objective and should also be put in
measurable terms.

| Main Objective |

| Sub Objective | Sub Objective | Sub Objective | Sub Objective | Sub Objective | Sub Objective |
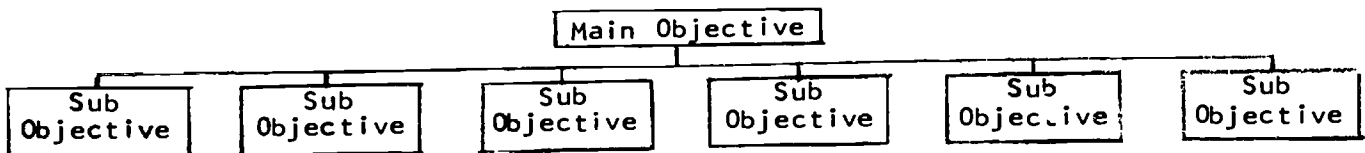
Implementation plans consist of specifying what general goal is to be implemented
by what main objectives which are to be implemented by what sub-objectives.

```
                              ┌─────────────┐
                              │General Goal │
                              └─────────────┘
   ┌────────┬──────────┬──────────┼──────────┬──────────┬──────────┐
┌──────┐  ┌──────┐   ┌──────┐   ┌──────┐   ┌──────┐   ┌──────┐
│ Main │  │ Main │   │ Main │   │ Main │   │ Main │   │ Main │
│Object│  │Object│   │Object│   │Object│   │Object│   │Object│
│ive   │  │ive   │   │ive   │   │ive   │   │ive   │   │ive   │
└──────┘  └──────┘   └──────┘   └──────┘   └──────┘   └──────┘
┌──────┐  ┌──────┐   ┌──────┐   ┌──────┐   ┌──────┐   ┌──────┐
│ Sub  │  │ Sub  │   │ Sub  │   │ Sub  │   │ Sub  │   │ Sub  │
│Object│  │Object│   │Object│   │Object│   │Object│   │Object│
│ive   │  │ive   │   │ive   │   │ive   │   │ive   │   │ive   │
└──────┘  └──────┘   └──────┘   └──────┘   └──────┘   └──────┘
┌──────┐  ┌──────┐   ┌──────┐   ┌──────┐   ┌──────┐   ┌──────┐
│ Sub  │  │ Sub  │   │ Sub  │   │ Sub  │   │ Sub  │   │ Sub  │
│Object│  │Object│   │Object│   │Object│   │Object│   │Object│
│ive   │  │ive   │   │ive   │   │ive   │   │ive   │   │ive   │
└──────┘  └──────┘   └──────┘   └──────┘   └──────┘   └──────┘
┌──────┐  ┌──────┐   ┌──────┐   ┌──────┐   ┌──────┐   ┌──────┐
│ Sub  │  │ Sub  │   │ Sub  │   │ Sub  │   │ Sub  │   │ Sub  │
│Object│  │Object│   │Object│   │Object│   │Object│   │Object│
│ive   │  │ive   │   │ive   │   │ive   │   │ive   │   │ive   │
└──────┘  └──────┘   └──────┘   └──────┘   └──────┘   └──────┘
```

The development of such a ladder or ladders of means and ends applies equally to what must be accomplished by students and what must be accomplished by the school staff to enable students to accomplish their objectives. For purposes of distinguishing between student objectives and staff objectives, two terms are suggested:

```
┌─────────────────────────────────────────────┐
│        BEHAVIORAL OBJECTIVES for Students.   │
│        What students are expected to do      │
│     as evidence of attaining a stated goal.  │
└─────────────────────────────────────────────┘
```

```
┌─────────────────────────────────────────────┐
│        OPERATIONAL OBJECTIVES for Staff.     │
│      What the staff is expected to do        │
│     to help students attain their objectives.│
└─────────────────────────────────────────────┘
```

Listed below are examples of typical behavioral objectives for students. Note that all of the examples include specifics about how achievement is to be measured and that most of them include specifics about what level of achievement would be considered satisfactory. Particular levels of achievement designated in a progression of learning experiences will necessarily vary from one student to another and from one group of students to another. While the designation of a desired level of achievement is a crucial issue for educational decision-makers, the most important application of measuring attainment is that it guides the

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continuous progress of the least as well as the most capable student from one

measurable objective to the next.   Typical behavioral objectives for students:

Given a reading selection and a list of incomplete sentences based upon
it, the student will complete each sentence by filling in the appropriate
detail from the selection.*

Given a division problem with dividends up to 99 with one-digit divisors,
the student will write the quotient.*

The student will orally explain to the class a process or subject of his
choice according to pre-specified criteria. (For example, 1) Explains in
chronological steps. 2) Speaks loudly enough to be heard. 3) Speaks
slowly. 4) Explains any unfamiliar words to class.)*

Given the opportunity to choose weekly from a variety of open-choice
activities, the student will demonstrate a willingness to involve himself
in new learning experiences by selecting and participating in at least
two such activities per month which are new to him.

The student will demonstrate his ability to coordinate his eyes and hands
simultaneously and to control them independently by performing specific
tasks involving catching. (For example, 1) The student is to catch a
bean bag thrown to him from 6 feet away each time it is accurately thrown.
2) The student is to catch a slightly inflated 12 inch ball on the fly
thrown from 8 feet away. 3) The student is to catch a softball thrown
overhead from 30 feet away.)*

The student will demonstrate his understanding of the concept of
metropolitan expansion into surrounding areas. (For example, the
student will list 3 of the following: 1) Need for more land on which
to build industry and homes. 2) Stores wanted to be closer to the
source of their revenue. 3) Areas of the city became outmoded and
instead of renovating, the people moved to new areas. 4) Trans-
portation and communication has improved so that... 5) People wanted to
live in new homes and...)*

The student will demonstrate that he feels he is a worthy contributor
to the class by the number of times he volunteers his help in group
problem-solving activities.

Given a list of contractions, the student will pronounce each of the
contractions and state the two base words from which it was built.*

The student will demonstrate, with or without equipment, motor skills
in space which use the entire body or its various parts at once by
performing specific tasks in tumbling. (For example, 1) The student
is to perform three out of four forward roles. 2) The student is to
perform three out of five cartwheels.)*

The student will demonstrate a trust in others by volunteering to
receive aid from classmates who offer assistance in teacher-
structured situations involving one student helping another.

---

*From Instructional Objectives Exchange, a project of The Center for the
Study of Evaluation. Marvin C. Alkin, Director. UCLA Graduate School
of Education, Los Angeles, California 90024.

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Given an instance in which man has altered his environment, the student
will name positive and negative effects of the alteration.*

Given an amount of money and the price of an item to be purchased, the
student will state the amount of change he should receive after the
purchase.*

The following are examples of typical operational objectives for school staff

members.

To increase student involvement in the teaching-learning process and to
help students to improve their mathematics skills, each math teacher
will, within six weeks after the beginning of school, train ten or more
interested students in each class to assist on a one-to-one basis other
students in the class who desire special assistance in learning math.

To keep programs current in terms of student needs, school-community
study groups chaired by school curriculum staff personnel will produce,
revise, or update at least two curricular programs per year.

To encourage students to share common interests, members of the school
staff will during the first month of the school year, implement for
student participation ten or more after-school hobby clubs which
represent student choices as determined by a student survey of their
interests.

To orient students entering junior high school, the guidance counselor(s)
will, during the first three days of school, carry out a sequence of
activities introducing new students to 1) "old" students, 2) the
physical layout of the school, 3) the school time schedules, 4) the
curricular and cocurricular programs, 5) use of the library, 6) student
government procedures, and 7) school policies concerning student rights
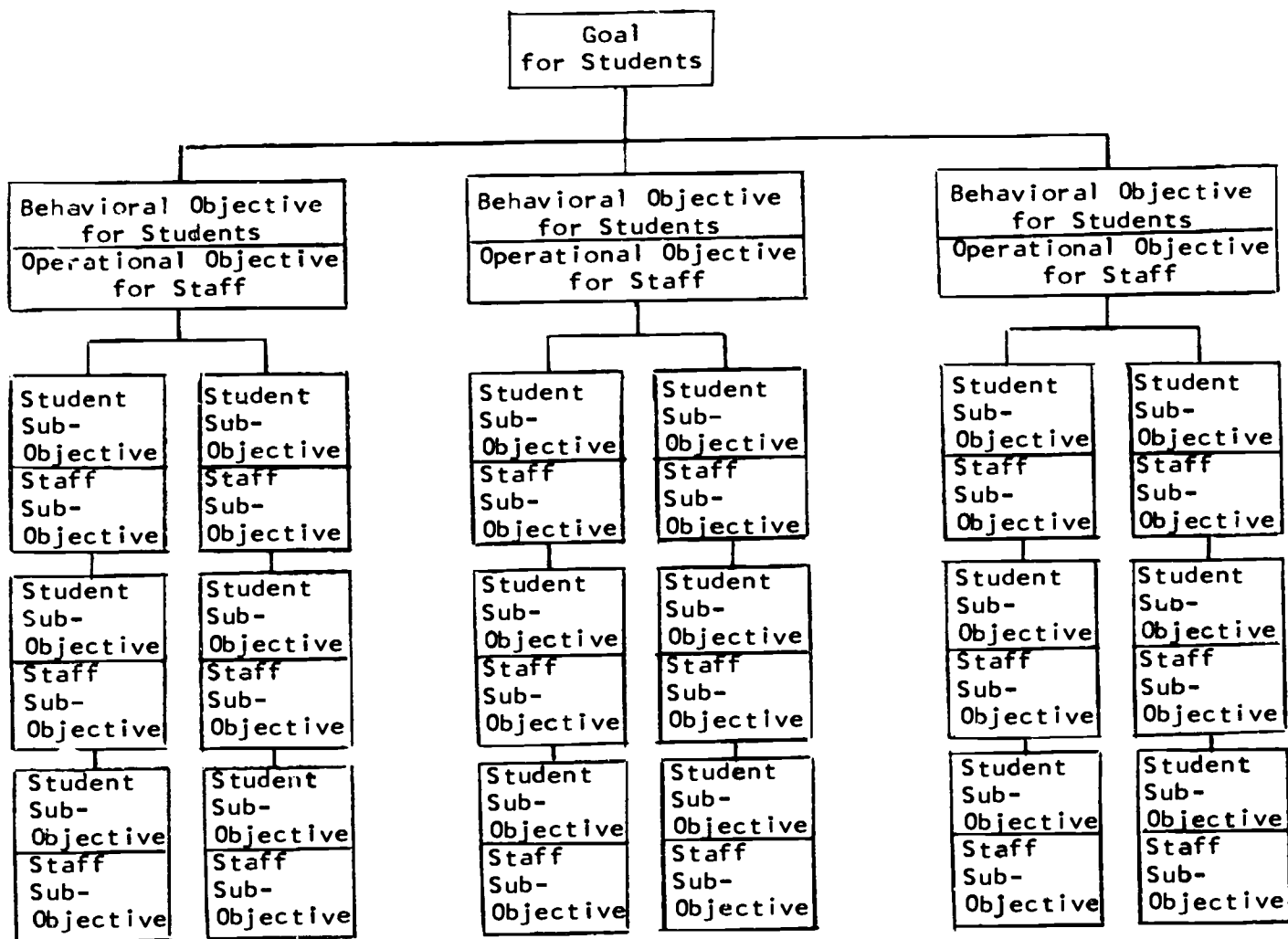and responsibilities.

To encourage the spread of promising educational practices, the
principal of each school unit will schedule at least two mutually
agreeable out-of-district visitations per year for each instructional
staff member.

To inform community residents of continuing educational opportunities,
designated school personnel will announce monthly by mail, newspaper,
radio, and television the schedule for all such opportunities available
to the community.

To provide more opportunities for students to explore their vocational
interests, the school administration will make it possible, on a
three-year phased basis, for each student to take at least one different
vocational course during each semester of his attendance.

To improve programs for all students with special disabilities, the
superintendent of schools will assign responsibilities for developing
and implementing, within one year, a plan for the continuous evaluation
of all special education programs in the district.

At every rung of the ladder of means and ends it should be asked, "If

students are expected to do such and such, what should the staff be expected to

do?" In terms of behavioral objectives for students and operational objectives

for staff, the ladder or ladders of means and ends would look as follows:

```
                              ┌─────────────┐
                              │    Goal     │
                              │ for Students│
                              └──────┬──────┘
        ┌────────────────────────────┼────────────────────────────┐
┌───────────────────────┐  ┌───────────────────────┐  ┌───────────────────────┐
│ Behavioral Objective  │  │ Behavioral Objective  │  │ Behavioral Objective  │
│    for Students       │  │    for Students       │  │    for Students       │
├───────────────────────┤  ├───────────────────────┤  ├───────────────────────┤
│ Operational Objective │  │ Operational Objective │  │ Operational Objective │
│      for Staff        │  │      for Staff        │  │      for Staff        │
└───────────────────────┘  └───────────────────────┘  └───────────────────────┘
```

| Student Sub-Objective / Staff Sub-Objective | Student Sub-Objective / Staff Sub-Objective | Student Sub-Objective / Staff Sub-Objective | Student Sub-Objective / Staff Sub-Objective | Student Sub-Objective / Staff Sub-Objective | Student Sub-Objective / Staff Sub-Objective |

For example, to develop a plan to arrive at a designated goal for the student,

the following checklist of questions could be asked and plans for appropriate

staff actions be made. This approach can be used at any level of grade or

student development.

┌─────────────────────┐
│   Student Goal   │
│ (Grade or Level X)   │
└─────────────────────┘

Behavioral Objectives for Students

1. What knowledge should be displayed by the student which would help him
   to achieve this goal?

2. What skills should the student be able to perform which would help him
   to achieve this goal?

3. What attitudes should the student evidence which would help him
   to achieve this goal?

Operational Objectives for Staff

1. What mix of existing and/or new instructional practices and learning
   activities would be most effective for helping the student to acquire
   the knowledge, skills, and attitudes stated in the behavioral objective
   above? See page 13 for the analysis of present practices and for a
   more complete listing of such alternatives as:

        lecture, student-led discussions, problem solving activities,
        shop-work, field experience, team teaching, large and small
        group instruction, teacher aides, self-teaching devices, on-
        the-job supervision, basic texts, multiple texts, newspapers
        and magazines, teacher-prepared materials, programmed materials,
        etc.

2. What mix of existing and/or new curricular offerings would be most
   effective for helping the student to acquire the knowledge, skills, and
   attitudes stated in the behavioral objective above? See pages 16 to
   20 for the analysis of the following program offerings and their relation-
   ship to present and proposed goals and objectives.

        communications   practical arts
        humanities   health and safety
        mathematics   physical education
        social studies   foreign languages
        science   occupational education
        fine arts   etc.

3. What mix of existing and/or new cocurricular offerings and school-sponsored
   activities would be most appropriate for helping the student to acquire the
   knowledge, skills, and attitudes stated in the behavioral objective above?

Student Government	Social Studies Club	Basketball
Student Activity Ctr.	Internat. Relations	Football
Sch. Services Club	Current Events Club	Baseball
Traffic Safety Program	Sch. Social Activities	Track
Junior Red Cross		Wrestling
Sch. Assistants	Science Club	Gymnastics
Nat. Honor Society		Swimming
Girls Nation	Concert Band	Softball
Boys Nation	Marching Band	Bowling
	Dance Band	Tennis
Drama Club	Combo	Golf
Speech Club	Orchestra	Cheerleading
Debate Club	Ensemble	Girls Athletic Ass'n.
Journalism Club	Choir	
Literary Club	Chorus	Foreign Languages
	Vocal Ensemble	
Music Club		Future Farmers
Art Club	Photography Club	Future Teachers
	Car Club	Business Leaders
Math Club	Crafts Club	Student Nurses

4. What mix of existing and/or new supportive services for students would
    be most effective for helping the student to acquire the knowledge,
    skills, and attitudes stated in the behavioral objective above? See
    pages 16 to 20 for the analysis of the following supportive programs
    and their relationship to present and proposed goals and objectives.

    Library Services   Psychological Services
    Audio-Visual Services   Health Services
    Guidance Services   Food Services
    Social Services   Transportation

5. What mix of existing and/or new supportive services for staff would
    be most effective for helping the student to acquire the knowledge,
    skills, and attitudes stated in the behavioral objective above?

    Library Services   A-V Services   Professional Library
       Ordering   Ordering   Curriculum Library
       Consultation   Consultation   Work Room
       Reference   Circulation   Duplication Services
       Circulation   Production

    Teacher Aides   Student Aides   Secretarial Help

    Workshops   Group Study Activities
    Seminars   Group Project Activities
    Conferences   Sabbatical Leave
    Demonstrations   Leave without Pay
    Visitations   Paid Expenses to Professional Meeting
    College Courses   Released Time for Professional Meeting

6. What mix of existing and/or new supportive services for the community
    would be most effective for helping the student to acquire the
    knowledge, skills, and attitudes stated in the behavioral objective
    above?

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School-community educational information services.
Parental counseling services.
Occupational guidance services.
Continuing education services.
Library services to the public.
Homework and tutorial services.
Civic activities and facilities services.
Community recreation programs for parents and students.

7. For the student to acquire the knowledge, skills, and attitudes stated
    in the behavioral objective above, are there any changes necessary
    in existing school policies, rules, regulations, or practices. See
    pages 12-13 for the analysis of existing school policies and
    practices as they relate to the following:

The physical development of all students.
The emotional development of all students.
The social development of all students.
The cultural development of all students.

Democratic student-staff relationships for all students.
Student leadership and service opportunities for all students.
Involvement of all students in school planning.

Problem-solving and critical judgment activities for all students.
Creative and constructive leisure time activities for all students.
Recognition of out-of-school achievements of all students.

Provisions for all students with particular disabilities.
Provisions for all students with particular abilities.
Provisions for those students who are employed.

Individualized diagnosis of student needs.
Individualized instruction.
Individualized learning activities.
Individualized student use of materials and equipment.
Individualized student-teacher relationships.

Exploratory studies for all students.
Studies in depth for all students desiring them.
Inter-discipline studies for all students desiring them.
On-the-job training for all students desiring it.
Continuing-education programs for all desiring them.

Effective attendance services for all students.
Effective financial aid services for all students.
Effective career-guidance services for all students.

8. What mix of existing and/or new management practices would be most
    effective for helping the student to acquire the knowledge, skills,
    and attitudes stated in the behavioral objective above? See
    pages 13-14 for the analysis of existing program-management
    practices as they relate to the following:

Cooperative planning between--
    school and community   teacher and teacher
    school and home   teacher and student
    school and student   student and student
    administrator and staff   school and school

Coordination of programs and services with--
    community colleges   health and welfare agencies
    vocational-technical schools employment agencies
    four-year colleges   law enforcement agencies
    universities   recreational agencies

Assigned responsibilities and designated procedures for
continuous planning and evaluation--
    maintaining a district-wide information base
    identifying problems and educational needs
    establishing priorities of goals and objectives
    developing, evaluating, and improving programs
    reporting results

Staff development programs for--
    understanding student attitudes
    diagnosing student learning difficulties
    planning learning activities
    correlating activities in various curricular
        and cocurricular areas

Summary. A plan is made up of a sequence of minor objectives designed to achieve a major objective. An objective is a selected, measurable target which can be scored. To be hit-able and score-able, each target or objective for student and staff should include specific identification of 1) who (the performer, 2) is to do what (the performance), and 3) how attainment is to be measured (the standards). All staff objectives -- all actions taken in the areas of instructional and management practices, curricular and cocurricular offerings, supporting services, and school policies -- are means to achieve the major objective. That major objective is a favorable behavioral change on the part of the student, dependent upon a favorable change of knowledge, skills, or attitudes. Being specific about the desired levels of attainment for students and staff accomplishes two purposes: 1) it spells out "how we are to get from where we are to where we want to go" and 2) it specifies "how we will know" whether or not progress is being made. Measurable objectives for students and staff are thus built into the development of the action plan. They constitute the evaluation design for the plan.

Evaluation

Student evaluation is the process of gathering, recording, and interpreting
data which will indicate the extent to which stated behavioral objectives for
students have been attained. Staff evaluation is the process of gathering,
recording, and interpreting data which will indicate the extent to which stated
operational objectives for staff have been carried out.

Basically, it is programs that are evaluated, not students. Specifically,
the extent to which a student succeeds or fails 's a measure of the extent to
which a given program has succeeded or failed for him. Programs and courses are
successful when they help students to acquire the knowledge, skills, and
attitudes necessary to meet their needs. When a course fails to meet student
needs, it is more exact to say that the course has failed the student than it is
to say that the student has failed the course.

Evaluation is a means for determining the extent to which desired results
and actual results coincide. Each stated objective for student and staff is
an evaluation checkpoint for determining progress to that point. Checking the
accomplishment of both intermediate and terminal objectives results in a system
of continuous evaluation. Such continuous evaluation of student and staff
performance provides the "feedback" necessary for making timely revision in the
program to meet the needs of students.

Matching objectives and appropriate measurement techniques is a crucial
decision for planners and evaluators. The examples of objectives given in these
guidelines have involved direct observation of performance by students. This
type of objective-referenced evaluation does not depend upon norms indicating
the average or median achievement of the group concerned. Objective-referenced
evaluation determines the "can-do" or "can't do" achievement of the individual
or group being evaluated. Norm-referenced evaluation determines the average
achievement of the group being evaluated, and the individual's score is then

reported in relation to a national or local norm.   A combination of objective-referenced and norm-referenced measurement can be used.   In either case, evaluation depends upon establishing a standard of measurement for reporting and comparing gains or losses.

The number of evaluation techniques and instruments is extensive.   The range of choices includes standardized achievement and aptitude tests to measure knowledge, skills, and abilities.   To measure attitude and creativity, there are attitude scales, creativity scales, social interaction scales, motivation scales, personality inventories, and self-concept rating instruments.   Other techniques for analyzing attitude and self-expression are word-association exercises, sentence completion, story completion, and role-playing.   Cumulative records, anecdotal records, case studies, parent conferences, home visitations, interviews, questionnaires, and opinion polls all have a part to play in evaluation.   Surveys and follow-up studies of dropouts, job and college success, delinquent students, the number of students participating in cocurricular and school social events, truancies, etc., also play a part in a comprehensive evaluation system.   The method of measurement will vary depending upon the objective.   To measure reading skills, a standardized achievement test may be used; to determine interest in reading -- an interest inventory or a count of the number and types of books read; to analyze a student's attitude toward books and libraries, a rating scale or role-playing situation would be appropriate.

Again, student evaluation is the basis of program evaluation.   Unless evaluation is used to further the student's educational achievement by improving existing programs or bringing about needed programs, it has not gone far enough. The evaluation design itself can be evaluated in terms of the extent to which it results in improved teaching-learning practices; curricular and cocurricular programs; supporting services for student, staff, and community; school policies and practices; and management practices.   In turn, improvement in these operational

areas is determined by the extent to which the student's achievement is improved

and his educational needs are met.

Step IV: Approval. The questions "Where Are We," "Where Do We Want To Go,"

"How Do We Get There," and "How Will We Know" have been answered. Needs have

been identified, goals and objectives have been selected, implementation programs

have been developed, and evaluation procedures have been designed. The tasks

necessary for developing a comprehensive, continuous, and long-range educational

plan have been completed.

A contract committing the school district to implementing the plan should

now be drawn up by the local board of education and submitted to the Colorado

Department of Education, in care of the Assistant Commissioner of Education,

Office of Planning and Evaluation, who will be responsible for the Department's

review of the contract and its submission to the Commissioner of Education and the

State Board of Education. The contract-accreditation review committee will

evaluate proposed contracts on the basis of the following check list:

1. The extent of school-community involvement in the development
    of the improvement plan.

2. The thoroughness with which present needs were analyzed.

3. The thoroughness with which future goals and objectives
    were determined.

4. The thoroughness with which improvement plans were
    developed.

5. The thoroughness with which evaluation procedures were
    developed.

Agreement to the contract and the subsequent implementation of its commitments

constitute accreditation by contract.

IMPLEMENTATION

Step V: Implementation. An action plan for educational improvement based upon specific, measurable objectives makes it possible to take timely action on the basis of measured progress towards those objectives. That is, a plan based upon measurable objectives makes it possible to manage the plan on the basis of those objectives. Management-by-objectives is at the heart of implementing the type of contractual plan for educational improvement proposed here. Each objective for student and staff constitutes a checkpoint for the implementation of the plan. In turn, the action taken at each checkpoint is dependent upon continuous feedback or evaluation concerning progress to that point. Continuous evaluation and management-by-objectives are therefore inseparable. Commitment to accreditation by contract is, then, a commitment to the implementation of planned educational improvement based on continuous evaluation and management by student and staff objectives.