PROGRAMMING FOR EFFECTIVE PROBLEM SOLVING

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The assigned title and some indications of content of this discussion are listed in your program. The actual title and content are something else. Being requested to be on such a program and subsequently going to the time and trouble to develop an outline and comments as assigned should give the participant the privilege of discussing other points in addition to those indicated by the program organizer. Assuming this privilege, I wish to make a few additional comments regarding certain aspects of management as follows:

1. Let's bury the notion that managers in the public sector are inferior to those in the private sector, although there are many who subscribe to that point of view. The management inadequacies and bureaucratic bunglings are as great in private industry, business, professional associations, and voluntary groups as in government - - - they are just more visible in government because of the necessity of public accountability.

2. Government will respond to modern management techniques just as well, but perhaps not as fast, as private enterprise. Governmental managers have additional hurdles and points of endorsement or approval in order to change within the democratic process.

3. Being a competent professional manager does not depend on mastering a particular technical system, but is based on

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understanding and systematically applying the work of management
in the areas of planning, organizing, leading and controlling.
This is perhaps one of the most important and critical concepts
to master. Most "managers" have become managers after being
successful technicians and have frequently been "selected out"
because of their proficiency as technicians. This system of
promotion to management ranks may not be the best but is quite
common. Those managers who continue to ply their technical
skills and continue to act as specialists instead of developing
skills in terms of planning, organizing, leading, and controlling
may never master the management arts. However, they may continue
to be managers to the detriment of their agencies, programs,
objectives, personnel, and the public.

4. A simple definition of management is "getting things done through
other people". The manager who attempts to carry out every
function or review every detail of his organization's function
may find that he cannot see the forest for the trees, and, in
fact, does not have time to be a manager.

5. Managers should be willing to create, innovate, and propose new
organizations or methods where needed instead of being slaves
to tradition and routine. Many managers become so intent on
defending tradition and their own territory that they do not
have the time or talents to plan and promote necessary changes.

6. Managers must make every effort to recruit and retain the best
talent available even if this means recruiting personnel better
qualified than the top manager. I have frequently observed a
management fear of such well-qualified personnel.

7. Managers must delegate freely and effectively in order to have
time to carry out the most important management functions. This

also prevents the manager from becoming a bottle neck and improves the functions, value and morale of subordinates.

8. Decision making may well be the most important managerment function. But decisions must be made on the basis of the best facts available at this time. Some managers are so concerned about doing the right thing that they do nothing - - - they simply study the problem to death. Frequently, there is more than one good answer to a problem - - - and the manager must make the decision in order for his organization to get on with the job.

9. Considering all reasonable alternatives leading to resolving perceived problems sometimes seems to be a lost art. Alternatives to problem solving may vary from consciously choosing an alternative to do nothing, through studying fresh and unusual approaches, to immediately getting locked into single solution alternatives which lead to a pre-selected method of attempting to solve problems. As examples - - - a few years ago there seemed to be a problem of rapid transportation in that commercial airliners could not fly from New York to London in two hours. A single solution alternative was chosen to design and produce the SST. Later, and based on better information and a different perception of the problem, the choice of the SST alternative was reversed and an alternative decision made to do nothing about the problem. But, the public, legislators, and governmental managers are constantly faced with the question of identifying and choosing alternative solutions to problems. Frequently, we find that all reasonable alternatives have not been considered and that, in fact, we have by-passed the opportunity to consider all viable alternatives due to single solution decisions having already been

made by those interests which stand to profit the most from the
action rather than the decision having been made on the basis
of providing the greatest good for the largest number over the
longest period of time.

Examples: (a) Being allowed the opportunity to vote on a
flood control project instead of considering
the alternatives of different types of land-use,
retarding population growth, developing recreational
areas in the flood area, or channeling growth into
more dense residential developments.

(b) Controversy over the location of a freeway
instead of rationally considering other alternatives
of no freeway, changing land-use patterns, retarding
population growth, or rapid mass transportation.

(c) The continuing problem and controversy regarding
the nation's energy supply. In this case we are
repeatedly led past the level of realistically
considering the development of energy sources other
than those desired by the fossil fuel industry so
we continually lose the opportunity to develop
solar or other more viable energy sources.

10. Developing mature, productive, effective, knowledgable employees
and associates make the manager look good. Give credit where
credit is due. Utilize the principal that each of your employees
should know more about his specific responsibilities than you do
or the organization is a failure.

11. The duties of every level of management and each employee should
be specific and reasonably discrete. A manager's duties and

responsibilities are not the sum total of that of his staff. A serious managerial and organizational problem exists when more than one person in an organization is perceived to have the same responsibilities in whole or in part.

In a little different manner, I visualize a director's function as insuring that his agency functions properly through creating the necessary organizational structure; defining the organization's goals and mission; identifying problems and prioritizing them; recommending necessary programs and activities; balancing budgetary needs; assessing manpower problems and utilization; insuring public information; being accessible to staff; communicating well with staff; delegating effectively; not routinely getting involved in the work process; ceasing being a specialist; arbitrating staff differences; promoting staff morale; insuring coordination with external groups; evaluating programs, personnel and the organization; working through select national groups in order to affect national policy and legislation; maintaining sufficient flexibility to be responsive to requests and delegate tasks from the Executive Director or Governor; and reserving time for worrying, planning, creating and being paranoid.

(Different types of organization charts, transparencies A,B,& C)

In order to attempt to have a uniform basis of understanding, I would like to offer my definitions of certain terminology. I view a "goal" as being a distant and possibly unattainable situation toward which our programs, activities, and objectives should be directed. It provides a constant sense of program direction and is necessary for that reason.

I view a "mission" as an agreed-upon statement concerning the constituency which the agency purports to be serving. For example, certain agencies or governmental functions are clearly created to promote and protect a given industry or business. Others are allegedly created to protect the

consumer or the public at large.   To attempt to effect both missions within

the same agencies involved creates a blatant conflict of interest situation

resulting in damage to the interests of one of the constituencies.   It is

my observation that many agencies created with a mission of consumer protection

have lost sight of this mission and have, in fact, become instruments for

protecting another constituency instead of the public at large.

A "problem" might be defined as a reasonably discrete environmental,

social, or health factor having an undesirable impact on man's health, safety,

comfort, or well-being.   Problems should not be confused with programs, which

I will redefine in a moment.   Nor should environmental, health and social

problems be confused with management problems if we are to do coherent and

rational planning and management.

A "program" is a rational grouping of activities or methods designed

to solve one or more problems.   For example, Occupational Health and Safety

or Food Quality are programs not problems.

"Tools and resources" are such things as manpower, budgets, legislation,

equipment and facilities which are necessary to effect programs.

"Objectives" relate to a specified amount of change within a given

time frame.   For example, improving a food sanitation rating by 10% within

one year, reducing the number or rate of tuberculosis cases by a given number

within a given time frame, improving x miles of stream to meet stream standards

within two years, etc.

Perhaps governmental agencies have failed to identify and utilize a

full spectrum of program methods when developing programs.   Inspecting,

sampling, surveillance, analyses, enforcement, hearings, consultation,

training, design, research, demonstrations, education, financial and social

incentives undoubtedly comprise a terribly incomplete list of useful program

methods.   However, even these have not been fully defined and attempted by most

governmental agencies.   There remains a terrific challenge in really identifying, developing and demonstrating the effectiveness of various programs methods instead of continuing the customary and comfortable.

Following the identification and development of program methods, it becomes logical to attempt to group these methods or activities into rational, effective programs.   Perhaps innovative ideas in terms of program development are not always best accomplished by program personnel inasmuch as such personnel tend to defend current efforts and patterns.   In theory, planning groups external to the program process provide the best hope for improving program methodology.   In practice, such groups as Comprehensive Health Planning and Councils on Environmental Quality and other such specially annointed groups have really not faced up to the need.   In practice and in the real world, as it continues to exist, programs are typically developed in a rather intuitive, irrational, shortsighted basis by a group of "experts" who usually have a bad case of tunnelitis visionosis at various levels of government.   For example, let us consider a facility in which it is determined that problems of air pollution, water pollution, solid wastes, environmental injuries, biological insults, environmental chemicals, food protection, radiation, noise pollution, and shelter exist or may exist.   It was further determined that program methods such as inspection, sampling, surveillance, analyses, regulation, consultation, training and design would be useful in attempting to solve the environmental problems in this facility.   This grouping of program methods designed to solve the previously listed environmental problems became known as the Food Quality Program.   But later, another group of "experts" determined that another type of facility had problems of air pollution, water pollution, solid wastes, environmental injuries, biological insults, environmental chemicals, food protection, radiation, noise pollution and shelter.   It was further determined that program methods such as inspection, sampling, surveillance, analyses,

regulation, consultation, training and design would be useful in attempting to solve the environmental problems in this facility.   This group of program methods designed to solve the previously listed environmental problems became known as the "Occupational Safety and Health Program".

At some other time and place, another group of experts determined that another type of facility again included exactly the same type of problems as previously listed and suggested that these problems could be solved by the same type of program methods as previously listed, but this time the program was labeled "Institutional Environmental Control".
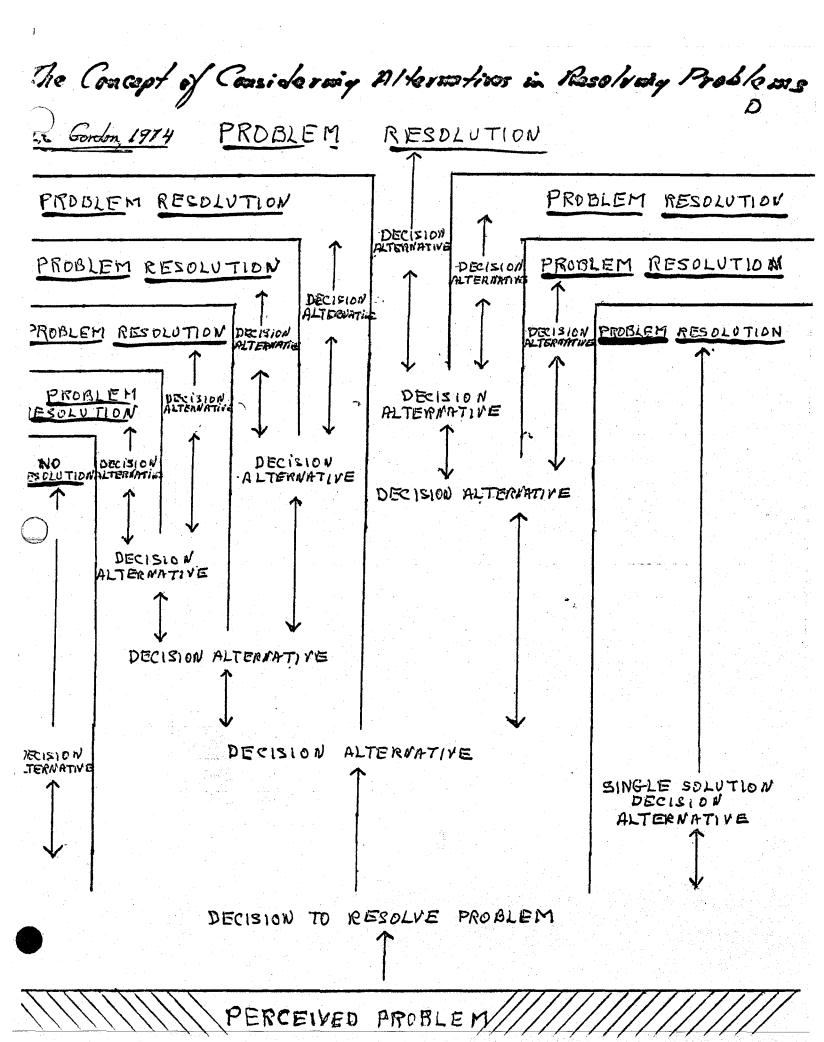
The differences between the previously listed program examples are not those of problems and methods but rather those of priority or weight given the various problems within each facility.   Therefore, it might be better if the labels were removed from all these programs, the programs combined into one, and that the program simply be labeled something like, "Program A".   Subsequently, the program manager is in the position of adjusting the emphasis given to the solution of the various problems in accordance with the method of determining priorities suggested in the previous paper presented by Mr. Hottenroth.

(The foregoing is further exemplified by Transparency E, copy attached.)

For purposes of this particular management training program, I have also attempted to develop a transparency (Transparency F) which purports to indicate some of the relationships, interdigitations, or commonalities between H&SS support activities and a broad grouping of problems with which H&SS is charged with resolving.

Transparency G is a first attempt to relate H&SS "grouped" programs to the solution of H&SS "grouped" problems.   This transparency indicates that the departmental programs are, in fact, interrelated and mutually supportive in solving the various social, health, welfare, and environmental problems with which the department is charged.

And finally, a few notes about the problem of "manpower". Totemism in the utilization and assignment of manpower has been particularly well-developed in the health and environmental program areas and, I suspect, it has also been well-utilized in the social and welfare program areas. Few studies have ever been made in these program areas to attempt to actually relate types or quality of manpower to the needs of programs. In the absence of such studies, we have continued to utilize totemism by assuming that a physician, an engineer, an environmentalist, a scientist, a social worker, or a case worker automatically has the talents necessary to effectively engage in specific program activities. In some cases, I am convinced that professionals are not being utilized effectively or in consonance with their talents and professional levels. In many cases, we are specifying a given type of professional based on 1 to 5% of the program requirements rather than on the 95 to 99% of the program requirements which might indicate a different type of employee. This problem of effectively utilizing and addressing manpower to program needs deserves all of our continuing attention in an effort to solve problems most effectively and get the most out of our budget dollars.

The Concept of Considering Alternatives in Resolving Problems

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Gordon 1974   PROBLEM   RESOLUTION

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DECISION ALTERNATIVE

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DECISION ALTERNATIVE

NO RESOLUTION

DECISION ALTERNATIVE

DECISION ALTERNATIVE

DECISION ALTERNATIVE

DECISION ALTERNATIVE

SINGLE SOLUTION DECISION ALTERNATIVE

DECISION TO RESOLVE PROBLEM

PERCEIVED PROBLEM

PROGRAM EXAMPLES

X = Aids in Solving Problems

PROGRAM EXAMPLES	Population. Nos. & Dist.	Energy Needs	Land-use	Transportation	Air Pollution	Water Pollution	Solid Wastes	Env. Injuries	Biol. Insults	Env. Chemicals	Food Safety	Radiation	Noise Pollution	Shelter	Etc.
Air Quality	X	X	X	X	X	X	X	X		X	.				
Food Quality					X	X	X	X	X	X	X	X	X	X	
Radiation Protection		X					:	X				X			
Solid Waste Mgmt		X	X		X	X	X	X	X	X					
OSHA					X	X	X	X	X	X	X	X	X	X	
Insect & Rodent Control							X		X		X				
Water Supply						X	X		X	X		X			
Noise Control			X										X		
Env. Cont. of Rec. Areas					X	X	X	X	X						
Institutional Env. Control					X	X	X	X	X	X	X	X	X	X	
Housing Cons. & Rehab.					X	X	X	X	X	X	X		X	X	
Hazardous Substances & Product Safety								X	X	X					
Subdivision Control	X	X	X	X	X	X	X								
Water Quality	X		X			X	X	X	X	X	X	X			

NOTES

SUPPORT ACTIVITIES

	Health	Welfare	Soc. Services	Laboratory	Environment	
Litigation	X	X	X	X	X	
Employee Relations Office	X	X	X	X	X	
Equal Employment Opportunity	X	X	X	X	X	
Purchasing	X	X	X	X	X	
Auditing	X	X	X	X	X	
Budgeting	X	X	X	X	X	
Payroll	X	X	X	X	X	
Personnel	X	X	X	X	X	
Public Information	X	X	X	X	X	
Laboratory	X	X	O	X	X	
Training	X	X	X	X	X	
Contracts	X	X	X	X	X	
Data Processing	X	X	X	X	X	
Quality Control	O	X	?	O	O	
Property Management	X	X	X	X	X	
Graphic Services	X	X	X	X	X	
Management Analysis	X	X	X	X	X	

X = Aids in Solving Problems

O = No obvious support

X = Aids in Solving Problems

	Lab	S.S.A.	Welfare	Env.	Health	
		X	X		X	social and economic protection and promotion for the underprivileged
		X	X	X	X	prevent hunger
		X	X	X		provide shelter and utilities
	X	X		X		environmental protection
	X	X		X		consumer protection
	X	X	X	X	X	"Disease" prevention and health promotion
	X	X	X		X	provision of health care

"GROUPED" PROBLEMS