ABSTRACT
        Because desired output goals should be the ruling
criteria for the deployment of resources (inputs) and the selection
of goal attainment strategies (processes), specific goal expectations
and goal achievement evaluative methods must be determined. These
output goals may be classified in two categories, quantitative
(numbers of graduates, grade point averages, etc.) and qualitative
(knowledge, skills, personal growth). In education, the
input-process-output model has limitations and must be used with care
to avoid mechanistic approaches. A sensitive feedback system
utilizing followup studies is needed to continually refine goals.
Colleges' first priority should be growth in people: developing human
potential, decision-making skills, and recognizing the values of
individualism. A second priority is the acquisition of knowledge.
This implies the need to analyze curriculum and its applicability to
real decision-making situations so that knowledge is relevant. The
third priority is the development of skills, requiring first the
development of efficacious teaching methods. (NJK)

DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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DIRECTIONS FOR A COMMUNITY COLLEGE

by

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Massachusetts

August, 1972

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FOREWARD

Most people are committed to the philosphy that a person needs "to get away from it all" upon occasion to take a breath, to get a view from another perspective, or to reexamine his own commitments and his own philosophy. Those persons who work in the field of education have traditionally used the "sabbatical" period for this purpose. Dr. Lewis O. Turner, President, Greenfield Community College in Massachusetts was granted an in service fellowship during his "sabbatical" from the W. K. Kellogg supported Center for State and Regional Leadership at the request of Dr. William G. Dwyer, President, Massachusetts Board of Regional Community Colleges. Dr. Turner's study was centered around the redefinition of the Community College model using the systems concept approach. He found himself using new language to describe older concepts; he found new perspectives in looking at older procedures; he found new commitments growing from older philosophy.

Dr. Louis W. Bender, Professor of Higher Education at Florida State University, and I both enjoyed and benefited from the time Dr. Turner spent in Tallahassee and Gainesville. We present this report as a way in which other staff working with the problems of community college development will be able to benefit from Dr. Turner's experience.

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A POINT OF REFERENCE

Community colleges have been established to help realize certain community and regional educational goals. A discussion of the enterprise starts with its mission or goal expectations and *goal achievements*. Once these goals can be specified, other factors require consideration, such as how the job can be done. This aspect of the discussion deals with strategy and *process achievements*. Specified goals and processes are detailed and the need for resources looms paramount. Available resources might be called *input achievements*. The following diagram should help to visualize the process.

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│ Mission       │ · · · · · · · · · · · · · · · · · ·│→│Goal Expectations│
└ ─ ─ ─ ─ ─ ─ ─ ┘                                    └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
      ↑                                                      ↑
      |                                                      |
    ┌──────────────┐    ┌──────────────┐    ┌──────────────┐
    │ Resources    │    │  Program     │    │ Objectives   │
    │    or        │    │ Strategies   │    │    or        │
    │  Input       │ →  │    or        │─ ─→│  Output      │
    │ Achievements │    │  Process     │    │ Achievements │
    │              │    │ Achievements │    │              │
    └──────────────┘    └──────────────┘    └──────────────┘
          ↑                   ↑                     ↓
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———————————→   Direction of Action

– – – – – – – –→   Direction of Feedback

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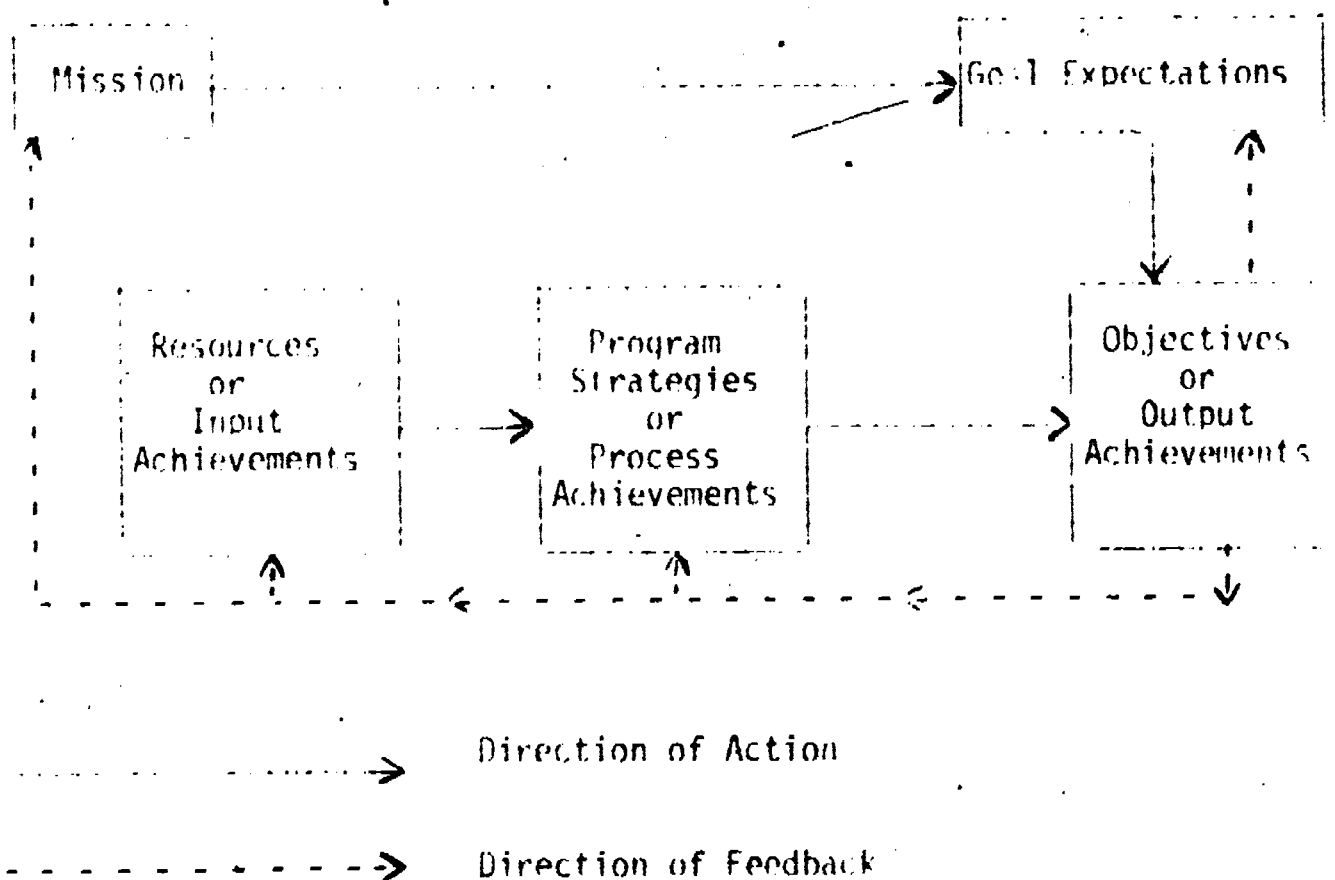
THE MISSION

The community college is many things to many people. Some students are looking for the first two years of a four year liberal arts education which they can get close to home and at bargain prices; others will work through their identity crisis and then go out and get the kind of job they could have gotten right out of high school; some will choose a community college to find remedial help and atone for the academic sins of their high school days; others will seek the technical skills to enter a career when they graduate; still others will seek in middle life to learn new skills for a second career. These students might better be termed "clients" and they vary in age, vocational needs, academic goals, and life styles.

But whatever their goal, the students will be hoping for some kind of achievement--some recognizable accomplishment of their goals. This variety of goals necessitates a broad spectrum of educational and related services.

The educational program is the most obvious service of the community college, but not so obvious is the form this program must take: programs for part-time as well as full-time students, programs for those seeking a career upon graduation, for those planning to transfer to four-year institutions, and for those needing remedial help are all components of the community college's educational package.

The community college must also provide personal, vocational, and educational counseling: personal counseling because mental health is a precondition for effective learning, vocational counseling because many

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students will be entering careers directly after graduation, and educational

counseling because the academic program should be fitted to the student,

avoiding the Procrustean Bed philosophy.

In addition to the formal educational program and counseling services

for regularly enrolled students, the community college must provide such

community services as workshops, seminars, consultations, and surveys for

both the public and private sectors of the community. An effective delivery

system must be results-oriented, concerned with output achievements that

are qualitative as well as quantitative.

INPUT ACHIEVEMENTS

The effectiveness of a community college cannot be measured by its

input achievements. Typical *input achievements*, highly touted in the

reports of college presidents, are:

- Upgrading the faculty, administrative staff and support people
  ("Sixty-five percent of our faculty have the PhD!")

- Developing the physical plant ("Since I became President, the
  value of our physical plant has increased by $25 million!")

- Increasing the enrollment of students and the number of other
  clients served ("Our student body has tripled in the past
  ten years and we are doing contract research for six major
  corporations!")

- Developing and exploiting community support ("Our fund drive
  went over the top again this year!")

Though college presidents can be rightfully proud of their input

achievements, they must continually ask themselves--and be asked by their

boards of trustees--if these proud input achievements are really contri-

buting to the realization of institutional goals--and to what extent. The

urge to focus on academic and executive status symbols is a symptom of

educational impotence.

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A careful inventory of resources should follow the development of the mission statement and goal expectations. **Input needs** are those resources required to do the job, and here a determination should be made as to requirements for optimum goal achievements. **Input achievements** below a certain level necessarily require a decrease in goal expectations. Strong input-output relationships should not be assumed, however, as false idols continue to be found in educational circles (class size, faculty-student ratio, square feet per student, etc.).

Input achievements or resource may be categorized as those which fall within the control of the college and those under the influence but not under direct control. Examples are:

Category I Resources

Space
Faculty and Staff
Equipment and Materials

Category II Resources

Students
Advising Committees
Volunteers
Donated space and equipment
Clinical facilities
Cooperating agencies

Increasing goal expectations may require bringing additional resources within the control or influence of the colleges; therefore, it is essential that sources of support be identified and cultivated. Targets for such efforts should include:

- Major funding sources (state and local bodies)

- Supplementary sources of funds (federal government, foundations, alumni, local and regional donors)

- Cooperating agencies(community action groups, welfare agencies, hospitals, YMCA's, labor unions, businesses, industries, chambers of commerce, AAUW, League of Women Voters, etc.)

- Individual resource people (many talented and able people are ready and willing to serve--most only need to be asked)

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While private institutions are pressing to acquire more and more public money, public institutions should consider fair game resources in the private sector.

PROCESS ACHIEVEMENTS

The servicing of the great variety of needs of students and of the community at large constitutes the mission of the community college; however, for many years the emphasis in education has been on process-- how we proceed, **not where we are going**, was the issue. Especially since Sputnik terrorized and intimidated American higher education, emphasis has been placed and considerable progress made in breaking free of traditional modes of instruction and in finding new and better ways to **put the material across:** programmed learning, closed-circuit TV, audio-tutorial programs, and the systems approach have all had their hour in the limelight. Too often it has been "old wine in new wine skins."

Improvement in educational methodology and the development of more effective learning strategies are agreeable starting points. The process that works and works well is the one to be used and this is likely to be subject to variations in learner, content, skill and teacher. More effective strategies are over the horizon and they must be developed to serve increasing numbers in times of tightening financial support.

As the end does not justify the means, so neither do the means necessarily create an end: a process which does not yield the desired result is the essence of futility. Process achievements must be goal directed.

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College professors have generally given their allegiance to their discipline. Innovative teachers have developed new procedures and some have even made major revisions in content. Results or achievement expectations have been content-oriented. Too often the student is not sure of what he must specifically do to earn a certain grade. The development of objectives stated as desired student behavior holds much promise but is slow to be implemented. A student, a college, or a system of colleges should know what it is about. **Output expectations** and **output achievements** must be specific. the more limited in scope and time, the more specific the objectives must be.

Effective allocation of resources and the selection of efficient strategies can be made only when desired results are specified. It follows then that desired output achievements hold first priority and determine the deployment of resources and the selection of processes. The attention to input and process, rather than to output, indicates that output achievements are more difficult to recognize and evaluate.

Educators must pick up the gauntlet. The goals of the enterprise must be carefully developed and clearly stated. Output expectations must not be vague and general, but stated operationally as objectives toward which the institutions can work and for which evaluation procedures can be implemented.

In the formulation of goals, objectives, or output expectations, trustees and other policy makers should attend to the following questions:

- Is the college an agent for change?

- Is the college an instrument of national or state policy?

- How will priorities be determined?

- Who shall be served?

- How and by whom will criteria for evaluation of output
    achievements be determined?

- What should be the relationship between cost and service
    rendered?

The quality of the service rendered can be determined only by the
quality of the results or *output achievements*.

OUTPUT GOALS DEFINED

Desired results of a college enterprise are those objectives it
hopes to reach as a result of spending its resources. The allocation
of sparse reserves and the development and execution of specific strateqies
and processes are aimed at well identified targets. These output goals
may be classified in two categories, quantitative and qualitative.
Quantitative goals are those that are the results of counting, those
that can be easily identified and put into quantitative terms, such as
the number of graduates, the number of course registrations, the cumula-
tive grade averages of students, etc. Qualitative goals are those which
can be described, but do not lend themselves to measurement.

Defining output goals is difficult, and there are many questions that
need to be asked as one sets down to perform this task.

- What should be the results of a college operation?

- What should students be able to do when they finish college
    that they cannot do when they enter?

- What contributions should students be able to make to
    society when they complete college that they could not
    perform when they entered?

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- What impact does the college desire to have on the external community?

- What impact does the college desire to have upon the campus community?

Some assumptions made in the past concerning the value of a college education have been:

- Going to college prepares one to earn a better living.

- A college degree gives one a certain amount of social grace and poise.

- A college education helps one to relate himself to the broader world.

- A college education enables one to discipline his mind.

The nub of the question seems to be, however: Why do we establish colleges and devote so much in the way of resources to their operation? What do we hope to gain as a result of the enterprise? In a pluralistic society, such as America's, it is difficult even to decide who is going to determine what the college should be trying to do. Harder questions still are: Who will determine what the college does this well? How the evaluation will be done?

In order for the community/junior college to fulfill its mission, it must know what its mission is in considerable detail. The responsibility for defining and justifying this mission rests upon the college, its trustees and the larger community.

The output goals or desired results must be stated in terms all will understand. They must be stated in a way that leads the participants to better strategies for goal realization, and they must be acceptable to some type of evaluation and appraisal. The Western Interstate Council on Higher Education (WICHE) has proposed an accounting structure for the output

of higher education which lists four broad areas of output: instructional outputs, institutional and environment outputs, research outputs, and public service outputs. These were developed for the use of universities as well as smaller colleges. They give the variables and the sources of measure. This is a comprehensive proposal and covers many things taking place on various college and university campuses. Accounting for what is being done is important, but the criteria for determining what should be done and the basis for goal-setting also deserve attention.

For the community/junior college, output goals should be defined in a limited scope, realizing there are both negative and positive results from the enterprise that cannot be measured or even described with any degree of accuracy. These spinoffs sometimes conceal from view the central mission of the college; however, a college would not likely be established to produce this spinoff result. Therefore, it is essential to focus attention on output goals arranged according to priority.

CLASSES OF OUTPUT GOALS

Output goals worthy of our efforts and our resources should be defined as those goals which lead to positive growth changes in the people participating in the enterprise with the result that these participants develop as individuals and make positive contributions to the community.

The comprehensive community/junior college with open admissions policies is a college of the people and, therefore, is not an elitist institution. The students (better identified as clients) of the

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community/junior college seek help from the college to pursue a way of life which they think is better. These clients bring varying value systems, aspirations and backgrounds to the campus, and yet, all expect to find what they need in order to realize their goals. As the college conceives of its program, it must plan to meet the varying aspirations of its clients and of society at large. It is fair to say that the community/junior college is a utility college, striving for certain desirable and definable results.

Output goals can be simply categorized as knowledge, skill, and personal growth.

1. Knowledge.

   The most traditionally acceptable output goal. The dogma of Knowledge is Power has been tested and transmitted with a fervor. The client must have knowledge available. He must be able to organize this knowledge and apply it in real situations, in settings that promote his ability to enhance his life and that of his society.

2. Skills.

   The client needs to develop skills--physical skills, mental skills, personal skills, the ability to manipulate things and ideas so that he can operate in his world for the benefit of himself and his society.

3. Personal Growth.

   The client must grow as a person; the community/junior college has placed this as one of its important functions. Personal growth involves developing a true concept of self, the under-standing of one's role, aspirations, limitations, talents and

abilities, the dev lopment of emotional strength and social skill. Personal growth must parallel the acquisition of knowledge. A strategy for promoting personal growth requires a place in the program of the college alongside courses in literature, science, and other disciplines and vocations.

A WORD ABOUT PRIORITIES

Ranking goals according to some criteria is necessary, but whose goals shall be ranked and according to whose criteria? Society has implied goals for the community/junior college. Trustees, faculty and administrators have goals for their college; clients arrive with their individual goals. Seldom are the goals of either group well defined and articulated.

In American society today certain assumptions can and must be made. Examples are:

- Our society is changing. Colleges must help its clients adapt to change and to direct change in positive ways.

- Clients come from various backgrounds or sub-cultures and represent varied value systems. Colleges must provide experiences that develop understanding and appreciation of this pluralism.

- Clients have varied abilities and goals that require more individual attention and service than have traditionally been provided. For many clients, a clinical approach is necessary if the individual is to prosper from his college experience.

The message today from the American public seems to include some rather definite priorities.

All citizens beyond high school age should be assisted to further develop their potential for (a) economic survival (intelligent producers and consumers); (b) social service and citizenship

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responsibilities, and (c) personal development, sense of
personal worth and responsibility.

Clients seem to be saying:

1. "I want to be treated as a person, an individual. I must have choices and be free to make them."

2. "I need courses that are relevant, that meet my needs, not just the professors'."

3. "I want an opportunity to do something, to get involved, but I'm not sure how to go about it or that I really can."

4. "I need to get away from home, to try my hand at being independent and I need a job or financial help in order to make it."

5. "I need to get a better job and earn more money."

6. "I am bored and need something worthwhile to turn me on."

Considering these observations, the creation of priorities will have a distinct effect on the allocation of resources and the selection of processes and strategies for their realization.

THE INPUT-PROCESS-OUTPUT MODEL: (A CAUTION)

When applied to education, the input-output-model has limitations and must be used with considerable caution. The educational process is as important as the goal. In considering knowledge as an output goal, the process used in helping the student to acquire this knowledge may be crucial to the understanding and use of the knowledge. The methodology or the strategy used in helping the student acquire knowledge influences his ability and his attitude in using the knowledge, applying the knowledge, and the value judgments he develops towards the knowledge.

A sensitive feedback mechanism is needed to insure that what happens in the process is fed back into the input cycle so that adjustments can

be made. An example of this would be follow-up studies of graduates and
dropouts to determine how they are performing, what attitudes they have
and what they feel were the strengths and weaknesses of their college
experiences. This type of feedback is invaluable in adjusting the
mechanisms so that the institution does not atrophy.

Advances in technology have outpaced the advances made in curriculum
development and in educational theory. There is an inherent danger in
developing an educational program inhibited by the various support systems
designed to provide it with flexibility and freedom.

A POINT OF VIEW

This paper would be incomplete without a positive statement concerning
goals and priorities. While these conclusions are tentative, the time is
now: activity on campus is frenetic; everybody seeks a feeling of
direction and ultimate purpose.

Priority I.

Growth in people. The college exists to serve people and must
promote growth in individuals and, through them, in the larger society.
The collegiate atmosphere must promote the wholesome development of all
individuals on campus: students, faculty, administrators, clerks,
custodians. Growth implies movement, goal oriented activity and posi-
tive changes in behavior as a result of learning.

Implications:

1. Select staff, professional and non-professional, who
value people and like people, who are secure and self-directing,
and who have the knowledge and skill to perform well.

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2. Individual and group counseling and informal campus activities should be first-line services and not dependent on what is left over after academic programs are staffed.

3. Development of human potential and skill-building activities should be included as vital elements where needed.

4. Decision-making should be a central theme. The process of problem identification, collection of information and the weighing of alternatives should appear early in the student's college career and improved at every opportunity. Faculty and staff will need to be experts in problem solving techniques.

5. Experiences for further developing the competence of professional and non-professional staff should be an integral part of the college program. A common and significant theme for the college can be learning, personal improvement, and service to others.

6. Policies, regulations and procedures should recognize that values held by members of the college community and the community at large will vary considerably. Recognition of the pluralistic nature of American society is essential if all citizens are to have equal opportunity.

Priority II.

The acquisition of knowledge. The college serves as a repository and deliverer of knowledge; knowledge of the past and the present, knowledge of fact, theory, process, trends, comparisons, people, places and things. If education is concerned with acquiring knowledge, skills, and the ability to make discerning judgments, then each instructor must

analyze the content of his course and break out the different kinds of knowledge, the various skills, and the judgments his students must demonstrate.

Implications:

1. Since only limited bodies of knowledge can be taught, the selection of knowledge must be made according to criteria established for a particular college. All things cannot be taught to all men. These criteria should consider the needs of society and students, personal and vocational requirements. Courses should not be taught primarily to satisfy the ego needs and interests of teachers and administrators. Tradition is a rather weak reason to offer a course.

2. The instructional program is concerned with helping the student to acquire knowledge and to use this knowledge to the benefit of himself and society. Procedures used must recognize that people learn in a variety of ways and at varying rates.

If a student must learn a certain body of knowledge, how best can the college help him to acquire this knowledge in an effective way with a minimum of resources? The use of lectures in large groups, taped lectures for individual use (media and TV), individual projects, both on and off campus, examination of performance, appropriate work experience, community service, tutors, skill models and techniques and strategies not yet developed should be considered.

3. The discovery of knowledge and the application of knowledge in real situations can be powerful motivating and satisfying experiences. The campus and the community should be utilized whenever possible for such laboratory experiences.

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Priority III.

The development of skills. An individual's ability to improve the quality of life for himself and the larger society is enhanced by the development of various skills. Some skills are basic to survival in modern society, others are required for vocational or social mobility, and still others for personal enrichment and satisfaction.

Implications:

1. Skill development is quite different from learning abstract subject matter and requires teaching strategies and resources that are significantly different. Initial instruction, supervised practice, self-directed practice, good models, applications in "real" situations, evaluation, and specialized facilities and equipment require considerations quite different from the traditional lecture and discussion with an occasional quiz and examination.

2. Skill development is closely related to the learning of subject matter, but is so different that the development of skills cannot be left to incidental teaching. Skills are best learned when teaching is direct and the result of careful, specific planning.

3. Training of the mind and cultivation of the intellect are necessary; but even these involve supporting skills. The total personality of the student requires the development of a capability for leisure time activity, vocational competence, and community service. Some of the types of skills are: the use of tools, office machines, arts and crafts, sports (tennis, golf, bowling, etc.), sewing, cooking, camping, sailing, swimming, delivering a speech, leading a discussion, chairing a committee, organizing a group,

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first aid, preparing a budget, writing a business letter, and
preparing a resume for employment purposes. Many of these cannot
and should not be "courses" but organized as activities outside
the academic program. However, they are important and must
receive adequate financial and other support.

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